				DMS-500 Features - NCS05-							
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Issue 2					NCS	Enh	Repl Ord				
			Order Code Name	Order Code Description	RIs	RIs	MD RIs Code	PCID	ACTID		Feature Description
		ABS00001	ABS Alternate Billing Service ABS Alternate Billing Service	This feature provides the switch TOPS software that allows calls to be billed to caling cards, credit cards, or third parties without operator involvement. This feature includes the U.S. and Canadian versions of Exchange Alternate Billing Service (EABS) and TOPS Expanded Calling Card Formatting and CCS7 Validation.	5				NC0342		This feature, which supports LIDB requirements as defined in revised OSSGR specifications, enables operating companies to make more informed decisions as to whether to permit call completion in cases where the billing cannot be verified (e.g., database link outage), thus protecting toll revenues. This package enhances the existing TOPS Exchange Alternate Billing Service (EABS) capabilities by allowing operating companies to set parameters (such as "send called number") on a per-card issuer basis for both CCITT and 14-digit calling cards. (The existing offering allows such parameters to be set on a card issuer basis only for the expanded calling-card format.) This feature provides the following: • The ability to perform Global Title Translations (GTTs) for LIDB queries on an NPA- This feature allows the TOPS position to use the CCS7 signaling protocol to query th database for calling card validation for the expanded 23-digit calling card format.
				cards, or third parties without operator involvement. This feature includes the U.S. and Canadian versions of Exchange Alternate Billing Service (EABS) and TOPS Expanded Calling Card Formatting and CCS7 Validation.							Used in conjunction with TOPS Expanded Calling Card Format, this feature allows all TOPS positions to accept and to validate calling card numbers up to 23 digits in length.
			ABS Alternate Billing Service	This feature provides the switch TOPS software that allows calls to be billed to calling cards, credit cards, or third parties without operator involvement. This feature includes the U.S. and Canadian versions of Exchange Alternate Billing Service (EABS) and TOPS Expanded Calling Card Formatting and CCS7 Validation.	5				AF2017	Expanded Calling Card	This feature provides the screen display for the TOPS MP position that allows it to receive the expanded 23-digit calling card number. In addition, it provides for the AMA recording of the calling card.
	30		ABS Automatic Alternate Billing Service	This feature provides the switch TOPS software that allows calls to be billed to calling cards, credit cards, or third parties without operator involvement. This function includes Calling Card Validation, Automating Collect Calls, and Automating Calls Billed to Third Parties.	5				AF1530	AABS Protocol Implementation & VSN SW Alarms	By constructing and interpreting messages sent over a datalink, this feature allows two-way communication between the DMS switch and the Voice Service Node (VSN including the communication of VSN alarm conditions to the DMS from the VSN. The AABS protocol utility enables the DMS switch to construct a message for the VSN upon request from call processing. This function is performed by a compose utility, which obtains the applicable data and updates the VSN message. In addition, the protocol utility allows the DMS to identify and interpret incoming messages from the VSN and to update call processing data appropriately. If the DMS detects an error in the conversation between itself and the VSN, it generates an VSN100 log that provides information on the protocol error.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name ABS Automatic Alternate Billing Service	Order Code Description This feature provides the switch TOPS software that allows calls to be billed to calling cards, credit cards, or third parties without operator involvement. This function includes Calling Card Validation, Automating Collect Calls, and Automating Calls Billed to Third Parties.	RIs 5	RIs	MD RIS	Code	PCID		Feature Name Billing Method Collection	Feature Description This feature provides the "front-end" call processing capabilities for AABS, which entail: determining whether a call should be routed to a Voice Service Node (VSN); establishing the appropriate links for handling of the call, including: selecting a voice link to a VSN, connecting the calling party with the voice link through the network, and initiating communication between the DMS switch and the VSN over a datalink; and determining the validity of a billing number that is specified by the calling party and passed to the DMS switch.
	30	ABS00002	ABS Automatic Alternate Billing Service	This feature provides the switch TOPS software that allows calls to be billed to calling cards, credit cards, or third parties without operator involvement. This function includes Calling Card Validation, Automating Collect Calls, and Automating Calls Billed to Third Parties.	5					AF1529	Billing Verification	This feature provides the "back-end" call processing capabilities for AABS, which fall into three basic areas. This feature allows the Voice Service Node (VSN): to request network actions, to end its interaction with the DMS switch, and to refer calls to operators. The VSN may request network actions of the DMS switch in order to complete network actions and/or to change existing connections. For AABS, such network actions may include VSN connection to or release from a called or third party, VSN release from the calling party, or changing a connection to two-way, one- way, or zero-way. Once the VSN has initiated call handling, its interaction with the DMS switch can be terminated in three ways: the call can be floated; the call can be aborted; or an operator can be requested. An operator may be required to intercede if: a billing verification attempt indicates that manual validation is required; collect billing subscriber's name for collect or third number billing acceptance; or the VSN is unsuccessful in obtaining billing acceptance from the
	30	ABS00003	ABS Operator Hand-Off to AABS	This feature provides the support for calls that begin as 0- and are transferred to the Automatic Alternate Billing System (AABS). With this software, the switch will screen the calls and determine if a call is eligible for AABS treatment and will pass the call to the voice-processing peripheral.	5					NC0013	Operator Hand-off to AABS	This feature provides the capability for 0- collect, bill-to-third party, and calling card calls going to a TOPS operator to be passed to a TOPS Voice Service Node (VSN) for billing acceptance and call completion. The operator collects the service selection (Collect or Third) and the billing number from the calling party. The CC side then validates the call information and, if appropriate, indicates to the operator that the call is to be passed to the VSN. The VSN then uses the predetermined service selection to initiate the call handling to complete the billing acceptance and call connection.
	30	ABS00004	ABS Account Code Billing	This feature allows the tracking of long distance telephone charges by account for business and residential customers.	5					NC0035	Account Code Billing	This feature enhances automated calling services by enabling the TOPS switch to organize IntraLATA calls by customer-defined account codes on the subscriber's telephone bill. Interworking with Automated Alternate Billing Service (AABS), Mechanized Calling Card Service (MCCS), and Exchange Alternate Billing Service (EABS), Account Code Billing (ACB) enables the subscriber to enter an account code with the called number. The account code is then entered into the AMA billing record for the call, and the subscriber's subsequent billing is arranged with all account codings grouped together. This feature can be quite useful in small business offices (such as lawyers, accountants, etc.) where calls are billed back to an appropriate client, or in situations where roommates share a telephone and want to separate who made which calls. Although ACB calls are billed at a 1+ station-paid rate, the subscriber dials these calls as 0+ calls. The caller enters a service identifier of "15" after the bong tone, followed by a two- to four-digit account code of his choice. Offices using AABS that wish to implement ACB must install supporting software in the
	30	ABS00006	ABS AABS Call Screening	This feature provides additional call screening capabilities for AABS required in the Canadian market. The called number is checked to see if the call is a domestic or international call, to determine what type of call screening applies.	5						AABS Call Screening	This feature provides additional call screening capabilities for AABS required in the Canadian market. The called number is checked to see if the call is a domestic or international call, to determine what type of call screening applies. The system supports a separate screening table for each scenario. Both tables have a Calling Card Screening field, which indicates whether or not calls to that country or region are to be checked for screening. If so, the system checks another screening table for called numbers (terminating codes) to see if the called number has associated billing restrictions. If so, the call is routed to an operator for alternate billing.

Change In Issue 2	_				1st NCS	Enh	Repl Ord				
			Order Code Name	Order Code Description	RIs	RIs	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
	30	ABS00007	ABS TOPS DN Call Screening	This feature expands Directory Number screening by using three tables in the switch to provide special treatment or restrictions to lines such as university dormitory phones, customer- owned coin telephones, and prison phone lines, etc. The three table structure enables additional levels of call screening.	5				AN0324	Enhanced TOPS Call Screening — Phase 1	This software greatly expands the call screening capabilities of the DMS TOPS switch by using three tables that enable screening for up to 8 million directory numbers (DNs). The first table, DNSCRN, permits the craftsperson to datafill up to 8 million DNs requiring special handling and to assign TOPSDB index numbers to each DN. The TOPSDB index number from table DNSCRN is used in the second table, TOPS Directory Number Database (TOPSDB). Table TOPSDB maps the index from table DNSCRN to an index into table TDBCLASS. The third table, TDBCLASS, contains information for restricted and special directory numbers. The data fields in table TDBCLASS largely resemble those in the Special Directory Number Identification table (SPLDNID). This software also provides the ability to override the standard ANI spill to carrier by datafill in table TDBCLASS. A new CI command DNSCRNCI simplifies the addition, modification, or deletion of a large number of Directory Numbers in table DNSCRN. Currently, the SPLDNID table performs DN screening. The three tables in this feature not only offer virtually equivalent functionality to that now
	30	ABS00008	ABS TOPS Commercial Credit Card	This feature supports the billing of toll cards and services to commercial credit cards	5				AN0409	TOPS Acceptance of Commercial Credit Card	This feature allows subscribers to charge the billing for their toll calls to commercial credit cards. This billing option is included in those available through Automated Alternate Billing Services (AABS).Rather than entering a calling card number, the subscriber enters a commercial credit card number. The system then launches a query via CCS7 signaling to the validation database for the appropriate credit card vendor.
	30	ABS00008	ABS TOPS Commercial Credit Card	This feature supports the billing of toil cards and services to commercial credit cards	5	9			AF6956, AF6957, AF6958,	TOPS Commercial Credit Card Enhancements	This feature provides faster and more accurate billing of calls paid by commercial credit cards. This enhancement provides a record of exact call charges at the termination of a call and eliminates the time lag experienced previously. This feature also records on the AMA record the credit card validation code received from the card issuer.
	30	ABS00009	ABS Auto Rm & Auth Number	This feature allows hotel calls requiring room number or authorization number recording to be handled via an automated system, specifically the Automated Alternate Billing Service (AABS). This feature will allow institution traffic (e.g. law firms, hospitals) to be prompted for an authorization number on 1+ dialed calls.	7				AN0819	Automated Room and Authorization Number (ARAN)	This feature allows hotel calls requiring room number or authorization number recording to be handled via an automated system, specifically the Automated Alternate Billing Service (AABS). This feature will allow institution traffic (e.g. law firms, hospitals) to be prompted for an authorization number on 1+ dialed calls.
	30	ABS00010	ABS ClgCard Den Reas Disp & Ann	This feature provides additional information to operators in the form of screen displays as to why a calling card is being refused. A calling card is refused when the card number or the PIN is denied.	7				AN0820	Calling Card Denial Reasons Displays and Announcements	This feature provides additional information to operators in the form of screen displays as to why a calling card is being refused. A calling card is refused when the card number or the PIN is denied.
	30	ABS00012	ABS Originating Line Number Screening	This feature provides the TOPS Originating Line Number Screening (OLNS) interface to provide connection between the TOPS switch and an external OLNS database, as defined by Bellcore specifications, to enable expanded call screening flexibility for operator services switches.	7				AN1830, AN1841	TOPS OLNS Interface	The TOPS Originating Line Number Screening (OLNS) interface provides connection between the TOPS switch and an external OLNS database, as defined by Bellcore specifications, to enable expanded call screening flexibility for operator services switches. Capabilities planned for inclusion in OLNS include the ability to: • Control Automatic Directory Assistance Call Completion (ADACC) processing (for example, a subscriber might choose to allow ADACC for all calls, allow ADACC for local calls only, or block ADACC). • Retrieve the Primary Interexchange Carrier (PIC) associated with a calling directory number (DN) and to use it if a 0- call becomes an interLATA call. • Restrict billing options available for calls from specific DNs.
	30	ABS00013	ABS TOPS Authorization Code Billing	This feature provides restrictions on long distance calling to casual users but does not prohibit toll calls altogether.	7				AN1579	ABS TOPS Authorization Code Billing	This feature allows authorized subscribers to dial direct long-distance calls over directory numbers that have toll restrictions enabled. Although all local calls can be completed from the set, any direct distance dialed (DDD) call requires the calling party to enter a code which is defined by the service provider. Without this code, the call is dropped.

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	30	ABS00013	Order Code Name ABS TOPS Authorization Code Billing	Order Code Description This feature provides restrictions on long distance calling to casual users but does not prohibit toll calls altogether.	7	RIS	MD RIS	Code	PCID	AF6340	TOPS Authorization Code Enhancement	Feature Description This enhancement expands the supported number range to permit toll calling only by authorized personnel who enter a feature code.
	30	ABS00014	ABS TOPS Disallowed Card Issue	This feature restricts the use of certain calling cards on a per-directory number (DN) basis for customers using Originating Line Number Screening (OLNS). It also identifies disallowed cards on a per-trunk basis for non-OLNS customers.	7					AN1843	TOPS Disallowed Card Issue	This software implements support of Disallowed Card Issuer Codes, which restricts the use of certain calling cards on a per-directory number (DN) basis for customers using Originating Line Number Screening (OLNS). It also identifies disallowed cards on a per-trunk basis for non-OLNS customers. ABS00014 enables a network provider to offer service on behalf of other companies whose subscribers may have different calling card privileges from its own subscribers.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD2128	ACD Call Forcing Tone	When Call Forcing is activated, the ACD agent hears an alert tone before each call is presented. This feature allows the presentation of the alert tone through both PJ-327 and RJ-11-type headsets. Currently, this alert tone is provided only over the external speaker on the agent's telephone set. With this feature, the tone is provided either to the headset or to the handset, depending on which device is being used.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions.	5					AD2895	ACD Call Transfer with Time	This feature allows a call that has been answered by an ACD agent and then transferred to another ACD group to be inserted in the new group's highest priority queue based on the total time the call has previously been enqueued and talking in the original group. For example, if a call was enqueued for 10 seconds and talking to an agent for 20 seconds, it would be placed in queue for the new group with calls that have been enqueued for 30 seconds
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5	9				AF7227	ACD Called About Number	This feature enhances the functionality of an ACD network by enabling the display of the "called-about-number" rather than the currently displayed "called number". This feature eliminates having to request from the calling party repeatedly the "called-about number" in a repair bureau environment.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD1131	ACD Called Name/Number Displa	This feature displays the terminating ACD directory number or an associated name for calls arriving on the Meridian ACD agent's Electronic Business Set with display, allowing agents to respond appropriately when answering calls to multiple ACD directory numbers or when providing a variety of services. ACD Called Name/–Number Display works in conjunction with Calling Name/–Number Display when provided.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions.	5	9				AF7225	ACD Elastic Queue	Currently, a call presented to a ACD agent who does not answer in time is inserted back into the queue. As a result, customers receive ring-no-answer treatment, and agents are unaware that these calls are waiting because they receive no indicators. This feature improves the handling of these calls in an ACD office by improving the handling of calls in queues.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD1129	ACD Multistage Queue Status Display	This feature provides a display of incoming call queue status on the agent's Electronic Business Set display or on wall-mounted lamps at the end user's premises. A particular ACD group can select its displays to show either the length of time calls have been enqueued or the number of calls enqueued.

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		Order Code ACD00001	Order Code Name ACD Base	Order Code Description This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	RIs 5	RIs	MD RIs Code	PCID		Feature Name ACD Observe Agent Enhanced	Feature Description This feature allows ACD supervisors to observe agents on both primary and secondary directory numbers and to follow agents from one line to the other as they move from the ACD line to the secondary line. Thus, supervisors can maintain continuous observation as the agent moves from line to line.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5				AG1950	ACD Observe Agent/Three-Way Calling	This feature further extends the Observe Agent feature capability by allowing a supervisor to monitor three-way calls in which an ACD agent is participating. Active calls both on the ACD Incalls key and on the secondary directory number can be monitored. The supervisor can also monitor without interruption as the agent moves to a three-way call, having previously been active on the Incalls key or other call modes.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5				NC0185	ACD on 2500 Sets	ACD on 2500 Sets extends a limited number of Meridian ACD features to the single line set. Agents with 2500 sets can log into the ACD group and use ACD features by dialing access and feature activation codes, and distinctive ringing allows the agents to distinguish between ACD and non-ACD calls. Supervisors can administer and monitor 2500 sets in the same way they do the full featured Electronic Business Set (EBS). Many of the Meridian ACD features available for the EBS can be used by 2500 sets. However, lacking the feature keys and display of an EBS, a 2500 set cannot access key- or display-dependent features. Nor can the set be used as a full fledged supervisor position, because the supervisor requires the key/lamp pairs to observe the agents and to monitor the call queue status.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5				AD2238	ACD Overflow of Enqueued Calls	This feature enhances the existing call overflow capability by providing for overflow of calls that have been enqueued for excessive amounts of time. In addition to the present overflow thresholds for newly arriving calls, this feature establishes new thresholds to provide overflow routing for enqueued calls. When an enqueued call has overflowed based on time thresholds, it is enqueued against the new target queue, as well as the original queue, to ensure efficient response.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5				NC0262	ACD Station Maintenance and Configuration Enhancements	This feature provides several enhancements for ACD stations: Optional Not Ready capability—makes the Not Ready feature optional on a per-ACD-group basis. The feature is designed to serve ACD groups with high call volumes and short holding times. Currently, activating the Not Ready feature is one of the steps required in the log-in procedure, and it is a required feature on all ACD agent positions. Automatic Not Ready capability—allows the agent to enter the Not Ready state automatically by pressing a secondary DN key. ACD Station Ringer test—allows technicians to test the set by activating the ringer test on the secondary directory number. Emergency Key (EMK) back-up tracking—provides a call-event message whenever the Emergency Key is pressed. Previously, only successful EMK activations were tracked. In addition, the feature introduces new call-event messages that affect the datastream to management information System (MIS) downstream processors. Therefore, if MIS tracking information is desired, the software that runs the MIS downstream processor must be enhanced to support this new feature. Consult the der
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions.	5				AD1609	ACD Status Lamp Enhancement	When this feature is assigned to an ACD supervisor's set, each agent status lamp lights when the agent is active on either an ACD call or a call on a secondary directory number. By pressing the key associated with the agent status lamp, the supervisor is able to display the exact status of the agent. The display reports that the agent is active on an incoming ACD call, an incoming call to a secondary directory number, or an outgoing call on a secondary directory number.

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1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
		ACD00001		This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					NC0269	ACD/Switch Maintenance	This feature provides several enhancements for ACD stations: Optional Not Ready capability—makes the Not Ready feature optional on a per-ACD-group basis. The feature is designed to serve ACD groups with high call volumes and short holding times. Currently, activating the Not Ready feature is one of the steps required in the log-in procedure, and it is a required feature on all ACD agent positions. Automatic Not Ready capability—allows the agent to enter the Not Ready state automatically by pressing a secondary DN key. ACD Station Ringer test—allows technicians to test the set by activating the ringer test on the secondary directory number. Emergency Key (EMK) back-up tracking—provides a call-event message whenever the Emergency Key is pressed. Previously, only successful EMK activations were tracked. In addition, the feature introduces new call-event messages that affect the datastream to management information is desired, the software that runs the MIS downstream processor must be enhanced to support this new feature. Consult the de datastream processor must be enhanced to support this new feature.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD2239	ACD—Limited Enhanced Agent Features	These features are ACD Status of Secondary Directory Numbers and Observe Agent Enhanced . The initial offering of ACD Status of Secondary Directory Numbers allows the agent status lamp on the supervisor's set to indicate when an agent is active on either an ACD call or a call on a secondary directory number. Before this feature, the status lamp only indicated when an agent was active on an ACD call. The initial offering of Observe Agent Enhanced allows supervisors to observe secondary directory numbers. Currently, supervisors can observe only primary directory numbers.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD2130	ACD—Queue Slot/Recorded Announcement Allocation	This feature allows the telephone operating company to control the number of queue slots available to each ACD customer group and to control the recorded announcements (i.e., Audio Table entries) that can be accessed by each ACD customer group. Both of these limitations are imposed through table control. This capability allows telephone operating companies to provide queue slots as a tariffable item and to maintain recorded announcements that are specific to and accessible by a particular end user. Currently, all ACD groups on a switching system have access to all 512 queue slots and all 512 recorded announcements. This feature affects the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if this feature is used in conjunction with MIS, the MIS downstream processor must be enhanced to support this new switch feature.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5	6					Agent Expansion	This feature increases the maximum number of data-filled ACD agents from 4,000 to 5,000 per DMS switch.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions.	5					AF6054	Call Forcing Tone Optionality	This function enhances Call Forcing, a Meridian ACD feature that speeds up call handling by automatically presenting incoming calls to ACD agents. This feature provides alternatives for alerting an agent that a call has arrived. Using datafill associated with an agent's PIN to determine individual preference, Meridian ACD will deliver the call forcing tone to either the agent's set base or to the headset/handset.

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		ACD00001		This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5						Call Park by ACD Agent	This feature provides several enhancements for ACD stations: Optional Not Ready capability—makes the Not Ready feature optional on a per-ACD-group basis. The feature is designed to serve ACD groups with high call volumes and short holding times. Currently, activating the Not Ready feature is one of the steps required in the log-in procedure, and it is a required feature on all ACD agent positions. Automatic Not Ready capability—allows the agent to enter the Not Ready state automatically by pressing a secondary DN key. ACD Station Ringer test—allows technicians to test the set by activating the ringer test on the secondary directory number. Emergency Key (EMK) back-up tracking—provides a call-event message whenever the Emergency Key is pressed. Previously, only successful EMK activations were tracked. In addition, the feature introduces new call-event messages that affect the datastream to management information System (MIS) downstream processors. Therefore, if MIS tracking information is desired, the software that runs the MIS downstream processor must be enhanced to support this new feature.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					NC0289	Call Supervisor Back-Up	This feature allows for the termination of an agent's call to a supervisor via the "Call Supervisor" key on an alternate supervisory position if the original Supervisor is already occupied. This feature provides two back-up alternatives for routing of calls activated by means of the Call Supervisor key to supervisors whose lines are busy. The first alternate route is the same as the one provided for Emergency Key back-up, and the second performs Call Forward Busy (CFB) to another directory number within the customer group. Before this feature, if several ACD agents activated the Call Supervisor key simultaneously, one agent was connected with the supervisor and other attempts were disallowed. This feature introduces new call event messages that affect the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if MIS tracking information is desired for this
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD1612	Controlled Interflow	This feature provides for a Controlled Interflow Key on the supervisor set, which, when activated, directs any new incoming calls to a route defined by the customer in Table ACDGROUP. The ACD end user can manipulate the Controlled Interflow route via Load Management. Any calls already enqueued are presented to the agents as normal. This feature affects the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if this feature is used in conjunction with MIS, the MIS downstream processor must be enhanced to support this new switch feature.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD2445	Display Agents Key	With this feature, the ACD supervisor can quickly check the overall status of all ACD agent positions assigned to the group. After the supervisor presses the Display Agents Summary key on his/her Electronic Business Set, information is displayed showing the number of agents who are: Busy on ACD and non-ACD calls, Waiting for calls (Idle), Not Ready, and Not Occupied (Make Set Busy).
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					NC0094	Emergency Key Backup	This feature alleviates the considerable frustration agents experience when unable to obtain assistance with difficult calls. It also helps protect the call center against improper handling of difficult calls which can result in unnecessarily losing customer good will and revenue. This feature achieves these objectives by providing a method for redirecting Emergency Key (EMK) calls made from an ACD agent position to a supervisor set Answer Emergency Key (AEMK) when the supervisor set is already active on an AEMK call or when the supervisor set is unavailable (i.e., supervisor does not answer the EMK call). Redirection is accomplished by placing ACD supervisor AEMK directory numbers in a hunt group. This feature introduces new call event messages that affect the datastream to Management Information System (MIS) downstream processors. Therefore, if MIS tracking information is desired, the software that runs the MIS downstream processor must be enhanced to support this new switch feature. Consult the development schedule of your MIS vendor to assure that this feature is supported in the MIS processor.

Change In Issue 2					1st NCS	Enh		Repl Ord				
	Ann	Order Code	Order Code Name	Order Code Description	Ris		MD RIs		PCID	ACTID	Feature Name	Feature Description
		ACD00001		This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5	1113		odue			Forced Agent Availability	This feature allows the ACD supervisor to deactivate Not Ready on a specific line. The feature is key-activated on an individual-agent basis.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					NC0104	Forced Announcement for New and Overflowed Calls	This feature delivers two new capabilities that further enhance the announcement capabilities of DMS Meridian ACD: An optional capability to deliver an immediate announcement to all newly arriving calls regardless of current queue length. (Users typically choose this capability when the application requires that the caller be prepared with specific pieces of information before a live agent answers or when there is a need to deliver an advertisement.) The ability to deliver announcements from the original target queue when a call has been overflowed to a secondary queue because of unavailable resources in the original queue. (This capability avoids confusing callers by delivering announcements from the group they originally intended to reach, rather than from the group to which they were redirected.) This feature introduces new call event messages that affect the datastream to Management Information System (MIS) downstream processors. Therefore, if MIS tracking information is desired for this feature, the software that runs the MIS downstream processor must be enhanced to support this new switch feature.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					NC0096	Log-in Identification (ID) by Customer Group	This feature allows the use of the same log-in identification (ID) code by multiple members of a customer group, thus simplifying system administration. Currently, each log-in ID code can be used only one time in a DMS switching system. With the new feature, partitions are created that allow log-in ID to be assigned by customer group. This feature affects the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if this feature is used in conjunction with MIS, the MIS downstream processor must be enhanced to support this new switch feature.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					NC0363	Multi Stage Queue Status Key/Lamp	This feature provides a visual indication of an ACD Group's queue status via a lamp on the agent or supervisor Meridian Business Set. This enhancement to the Multistage Queue Status Display feature provides lamp indication of the four possible queue states by the four following lamp states. T1, T2, T3 represent either Queue Wait time in seconds or Queue size in number of calls. These parameters are defined by the user on a per ACD group basis and T1<=T2<=T3.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					NC0363	Multistage Queue Status Key/Lamp	This feature provides a visual indication of an ACD group's queue status via a lamp on the agent or supervisor Meridian Business Set. This enhancement to the Multistage Queue Status Display feature (AD1129) provides lamp indication of the four possible queue states by the four following lamp states. Lamp Status Queue Status Off Less than or equal to T1 On Greater than T1 and less than or equal to T2 Flash Greater than T2 and less than or equal to T3

Change In Issue 2					1st NCS	Enh		Repl Ord				
	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD1607	Night Recorded Announcement and Forward	This feature enhances the currently available Night Service capability. Out-of-hours callers can be presented with a specialized recorded announcement before being directed to the specified Night Service treatment. Each ACD group can have its own unique datafilled message. For example, if the Night Service treatment is transfer to another location, the announcement might advise the caller to hold while the transfer is made. This feature introduces new call event messages that affect the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if MIS tracking information is desired for this feature, the software that runs the MIS downstream processor must be enhanced to support this new switch feature. Consult the development schedule of your MIS vendor to assure that this feature is supported in the MIS processor.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD3993	Night Service Clear Call Queues	When all agents in a DMS Meridian ACD group have manually activated Make Set Busy, or when the last available agent fails to answer within the Ring Threshold Timer period and is forcibly logged off by the DMS switch, the ACD group is considered to be in Night Service and all queued calls are rerouted to a Night Service number. Prior to this enhancement, callers would remain in queue until they disconnected.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					NC0185	Observe Agent from 2500 Set	This feature makes the basic supervisory capability of Agent Observation available on a 2500 set. With this feature, supervisors can listen to agent calls using a 2500 set and are not required to perform this function on an ACD Meridian Business Set.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD1704	Overflow of Enqueued Call to Directory Number (DN)	This feature provides an additional, customer-defined timer and route. When a time delay overflow occurs, the new time delay threshold timer is started. Upon expiration of the new timer, the call is removed from the queues of the original and the overflow group and routed instead to the newly specified destination route. In addition, this feature also provides immediate overflow to the time delay threshold route when the time delay overflow is unsuccessful. Current implementation of time delayed overflow of enqueued calls allows an ACD group to overflow ACD calls to another ACD group based upon a datafillable timer. Once a call has been overflowed and enqueued at the overflow group, it can be answered by an agent in the original or in the overflow group, it can be answered by an agent in the overflow group until it is answered or abandoned. This feature introduces new call event messages that affect the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if MIS tracking information is desired for this feature, the software that runs the MIS downstream processor must be enhanced to support this n
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5					AD2591	Queue Status Display Refresh	This feature, an enhancement to the Multistage Queue Status Display feature , updates the display at datafillable intervals. Incoming queue information is displayed every time a new call is presented, or by key activation. With this new feature, information relating to queue size and waiting time are available on a near real-time basis.
	2	ACD00001	ACD Base	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5	-				NC0095	Recorded Announcement for Re- Enqueued Calls	When an enqueued call has been transferred to an agent position and left unanswered, this feature provides a caller with a recorded announcement when the call is re-enqueued. Currently, the call unanswered by the first agent position is re- enqueued at the top of the incoming call queue to ensure quick response; however, no announcement is made.

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Change In Issue 2					1st NCS	Enh	Repl Ord				
		Order Code ACD00001	Order Code Name ACD Base	Order Code Description This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	<u>RIs</u> 5	RIS	MD Ris Code	PCID		Feature Name Transfer to Incalls Key	Feature Description This feature allows an agent to transfer an ACD call to another agent's Incalls key within the same customer group. The transferred call is presented directly to the second agent's Incalls key if that agent is idle at the time; otherwise, the transferred call is enqueued in a new and highest priority Call Transfer Queue. Calls in the call transfer queue are presented to the second agent as soon as he or she becomes available. This feature introduces new call event messages that affect the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if MIS tracking information is desired for this feature, the software that runs the MIS downstream processor must be enhanced to support this new switch feature. Consult the development schedule of your MIS vendor to assure that this feature is supported in the MIS processor. For the RT-100 processor, consult the Perimeter Technology, Inc.
	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queuing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5				NC0022	Variable Wrap-Up Time	Through Load Management, this feature gives the ACD user the flexibility to vary the interval between call completion and the presentation of a new incoming call to an agent position on an individual-agent and per-group basis. Agents in training can be given more time between calls for completing standard tasks than experienced agents receive. The specified intervals apply in both the Call Forcing and non-Call Forcing modes when calls are enqueued. This feature introduces new call-event messages that affect the datastream to Management Information System (MIS) downstream processors. Therefore, if MIS tracking information is desired, the software that runs
Added & Changed the Feature Name	2	ACD00001	ACD BASE	This feature provides the Meridian Automatic Call Distribution Base for the basic operation, call distribution, and call queeiing software required for Meridian Business Sets and 2500 sets to serve as ACD answering positions. This feature also supports basic supervisory functions	5	10		13279	AF7483	During Imaging	This feature had the name of "Agent Log-In" in the previous FPG. This feature enables Centrex ACD supervisors to activate ACD Remote Load Management commands, using Centrex ACD Management Information System (MIS), during system administration processes that would ordinarily prevent remote management. The following two commands can now be executed remotely during an image dump of a DMS SuperNode system by the network provider: Reassign Agent Position Change Overflow Route This new feature to ACD00001 provides more timely re-allocation of resources, resulting in enhanced customer service and increased agent productivity. Supervisors can now dynamically change some Centrex ACD Configurations without the time constraints imposed by routine system administration processes— offering more flexibility and responsiveness to the dynamic call center environment.
	2	ACD00002	ACD CompuCALL	This feature provides the software for an interactive link between a DMS switch and a business computer for the retrieval of data information pertinent to telephone calls. This link makes it possible for a business to coordinate information resident in their business computers with incoming and outgoing telephone calls. For example, a company representative can receive a customer telephone call and simultaneously receive the customer's file for viewing on a desktop workstation.	5				AG2335	Billing	CompuCALL provides a signaling channel between the DMS and a host computer located on a customer's premises for the exchange of information to enhance call processing. The information carried over the signaling link conforms to Switch Computer Application Interface (SCAI) protocol standards as defined by ANSI'S T1S1 committee. The two-way information flow over the CompuCALL data link allows DMS applications to communicate with applications running in the host computer. As a result, the DMS and the computer "cooperate" in providing enhanced services to the customer. CompuCALL is planned to support a variety of different applications requiring switch to host communications. The first application is ACD Extended Call Management (ECM), which provides for the concurrent delivery of a voice call and data from the customer's host computer to an ACD agent. Together, these features provide base support for CompuCALL services, including: interfaces to the two initial message transport media (Basic Rate Interface [BRI] and X.25), common data structure and datafill for all of the SCAI applications, simplifying the control of CompuC

Change In Issue 2		Order Orde	Orden Orde Neuro	order Orde Description	1st NCS	Enh		Repl Ord	DOID	ACTID	F	Eastern Description
			Order Code Name ACD CompuCALL	Order Code Description This feature provides the software for an interactive link between a DMS switch and a business computer for the retrieval of data information pertinent to telephone calls. This link makes it possible for a business to coordinate information resident in their business computers with incoming and outgoing telephone calls. For example, a company representative can receive a customer telephone call and simultaneously receive the customer's file for viewing on a desktop workstation.	Ris 5	RIS	MD RIS	Code	PCID	ACTID AR0051	Feature Name CompuCALL Base Enhancements	Feature Description Together, these features provide base support for CompuCALL services, including: Support for the X.25 message transport medium, Common data structure and datafill for all CompuCALL applications, simplifying the control of CompuCALL services for the telephone operating company, Support for multiple application sessions over a single CompuCALL link, and Notification of the host computer when a call is answered. The X.25 Transport for SCAI works to provide a physical transport for the link connecting the DMS Meridian ACD node with the customer's business computer, as well as with Meridian ACD compuCALL Options software. It is the only feature in package. HARDWARE: The hardware requirement for X.25 Transport for SCAI is a currently available Multi-Protocol Controller (MPC) card or an Enhanced MPC (EMPC) card.
	2	ACD00002	ACD CompuCALL	This feature provides the software for an interactive link between a DMS switch and a business computer for the retrieval of data information pertinent to telephone calls. This link makes it possible for a business to coordinate information resident in their business computers	5					AR0047	CompuCALL Link Reliability	This feature: • Introduces the concept of categorizing CompuCALL services by well-defined functions, such as Coordinated Voice and Data (CVD) and Third-Party Call Control (TPCC) • Adds CompuCALL pricing based on in-use levels (the number of links for which the category is defined) and link-use levels (the number of links defined for CompuCALL
	2	ACD00002	ACD CompuCALL	Information resident in their business computers This feature provides the software for an interactive link between a DMS switch and a business computer for the retrieval of data information pertinent to telephone calls. This link makes it possible for a business to coordinate information resident in their business computers with incoming and outgoing telephone calls. For	5					AR2016	CompuCALL Version Controls	CompuCALL provides a signaling channel between the DMS and a host computer located on a customer's premises for the exchange of information to enhance call processing. The information carried over the signaling link conforms to Switch Computer Application Interface (SCAI) protocol standards as defined by ANSI's T1S1 committee. The two-way information flow over the CompuCALL data link allows DMS applications to communicate with applications running in the host computer. As a
	2	ACD00004	ACD Networking	This feature permits a DMS switch to support multiple groups of agents to answer calls as though they were a single large group or a Super Group. Thus, the number of agents required is reduced through equitable load balancing and assists in trunk cost management.	5						ACD—Supergroup	
	2	ACD00004	ACD Networking	This feature permits a DMS switch to support multiple groups of agents to answer calls as though they were a single large group or a Super Group. Thus, the number of agents required is reduced through equitable load balancing and assists in trunk cost management.	5					AD3994	Nodal Treatment for Networked Calls	When a designated ACD group cannot process a call because the maximum queue size or maximum wait time has been exceeded, the call will be routed to another switch in the ACD network.
	2	ACD00005	ACD Management Information System (MIS)	This feature enables a management information system (MIS) data stream from the DMS ACD system to a customer-provided MIS processor or equipment located on customer premises. This feature provides the ability for a customer to reconfigure parameters for their Centrex ACD, such as queue size, recorded announcements, and agent assignment without involving telephone	5					AD2894	ACD Multiple Line of Business Codes	When an ACD directory number is accessed through a Virtual Facility Group (VFG), this feature includes the existing VFG operational measurements relating to facility blockage in the ACD Management Reports datastream and thus provides the end user with a complete view of the ACD group's call handling capability. This feature introduces new call event messages that affect the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if MIS tracking information siseired for this feature, the software that runs the MIS downstream processor must be enhanced to support this new switch feature. Consult
	2	ACD00005	ACD Management Information System (MIS)	This feature enables a management information system (MIS) data stream from the DMS ACD system to a customer provided MIS processor or equipment located on customer premises. This feature provides the ability for a customer to reconfigure parameters for their Centrex ACD, such as queue size, recorded announcements,	5					AD2125	ACD Walkaway/Closed Key Operation	This feature enables ACD agents to enter a Line-of-Business code for each call. Entering the code pegs a register for that line of business and allows the Management Information System (MIS) administrator to track peg count and holding time for calls attributed to various activities. This feature affects the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if this feature is used in conjunction with MIS, the MIS downstream processor must be enhanced to support this new switch feature. Consult the development schedule of
	2	ACD00005	ACD Management Information System (MIS)	This feature enables a management information system (MIS) data stream from the DMS ACD system to a customer-provided MIS processor or equipment located on customer premises. This feature provides the ability for a customer to reconfigure parameters for their Centrex ACD, such as queue size, recorded announcements, and agent assignment without involving telephone company personnel. A customer is also able to generate detailed reports such as reporting on	5					NC0015	MIS for Call Hold, Transfer, Supervisor, and Forceout	This feature increases the number of NOP links available on a DMS node. Previously, 15 NOP links were available. With this feature, 60 links are provided for systems and this increase allows more applications per DMS node of ACD Management Information Systems and other systems interfacing the DMS node through X.25/NOP links and the MPC card.

Change In Issue 2					1st NCS	Enh	Repl Ord				
			Order Code Name ACD Management	Order Code Description This feature enables a management information	RIs 5	RIs	MD RIs Code	PCID	ACTID AD2131	Feature Name Virtual Facility Group Data in ACD	Feature Description This feature allows unified control of the ACD agent Personal Identification Number
	2	ACDUUUUS	Information System (MIS)	This feature entations a management information system (MIS) data stream from the DMS ACD system to a customer-provided MIS processor or equipment located on customer premises. This feature provides the ability for a customer to reconfigure parameters for their Centrex ACD, such as queue size, recorded announcements, and agent assignment without involving telephone company personnel. A customer is also able to generate detailed reports such as reporting on agent call processing feature usage, etc.	5					MIS	This feature allows diffect Control of the ACM agent Personal definition Number (PIN) databases by providing a single point of administration from an ACD Remote Load Management position. Currently, the DNS and the RT-100 Management Information System PIN databases must be administered separately. This feature affects the datastream that feeds Management Information System (MIS) downstream processors. Therefore, if this feature is used in conjunction with MIS, the MIS downstream processor must be enhanced to support this new switch feature. Consult the development schedule of the appropriate MIS vendor to assure feature availability.
	2	ACD00006	ACD Miscellaneous	This feature provides additional ACD supervisor functions and configuration flexibility to enhance the base offering, including monitoring of the level of service provided to an incoming caller. This feature allows the service provider to predefine ACD set layouts.	5				AG1978		The features in this package provide a direct digital interface between the DMS SuperNode system and the S/DMS AccessNode—Northern Telecom's new premier SONET-based multiservice access vehicle. Key services provided include: • Residential services, including CLASS • Full range of Meridian Digital Centrex voice and data, including Meridian Business Sets and ISDN BR/PRI • Two-wire through eight-wire special services • DS-1/DS-3 Wideband Services The S/DMS AccessNode's service-adaptive line cards also enable on-demand service delivery and service changes without the expense of physically changing line cards. The Subscriber Carrier Module-100 Access (SMA) is based on the common hardware platform shared by other members of the SCM-100 Family. It provides both the traditional benefits of directly integrating digital loop carriers, while supporting a new range of advantages enabled by TR-303 and SONET standards. By simplifying the network and the OAM required to support it, SMA enables the network provider to cost-effectively deploy S/DMS AccessNode in the business-service access market, es
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5				AG2195	Call Redirection	This feature establishes a transfer capability on the call-center agent's computer terminal keyboard. As a result, it is no longer necessary to use the telephone set to transfer calls or consult with a supervisor, expert, or someone else in the Centrex customer group regarding a call. The feature works in conjunction with Coordinated Voice and Data so that data session, as well as voice, can be transferred.
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5				AR0311		This feature significantly reduces an ACD agent's call-handling time by enabling the DMS Meridian ACD node to deliver information about the incoming call to the business computer, thus allowing the concurrent delivery to the ACD agent of the voice call and the appropriate information from the company's computer. With Meridian ACD CompuCALL Options, the DMS Meridian ACD node sends the following information to the computer or other outboard processor at the customer's site: Calling number, Called number, Call identification number (for tracking purposes), and ACD position to which the call is being sent. The customer's files can be pulled and presented to the agent position at approximately the same time the call itself is presented if calling-number delivery is provided through the network and the business computer is configured to retrieve customer information on the basis of directory number and is compatible with the calling number or access security is a particular concern, callers can first be routed to an Interactive Voice Response (IVR) u
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5				AG2303	CompuCALL Resource and Queue Status Query	This feature reroutes ACD calls to any directory number whether or not it is an ACD line. This is an enhancement to the Call Redirection feature.
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice	5				AG2003	Computer-Assisted Signaling	This feature allows the following additional information to be delivered by the DMS

Change In Issue 2	Ann	Order Code	Order Code Name	Order Code Description	1st NCS RIs	Enh Ris	MD RIs	Repl Ord	PCID	ACTID	Feature Name	Feature Description
				This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5		MD KIS	Code	POID	AJ0909	Coordinated Voice and Data	This feature rescription This feature enhances existing outbound service. It supports authorization codes for network class of service (NCOS) as well as account codes for billing. It also supports distinctive ringing for agent notification.
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5					AG2005	Increased Event Reporting	This feature enhances the current agent-observation capabilities by allowing supervisors to automatically observe selected call types in order to gauge the service level provided by the call center. With this new feature, observation can be initiated on a next-call-to-arrive basis on a per-ACD-DN, ACD-group, or specific-ACD- supervisory-subgroup basis. In applications where multiple call types are being handled by the same ACD group, supervisors can monitor the type of service being provided to callers on a per-call-type basis. Currently, observation is accomplished on a per ACD agent basis and is used to evaluate the performance of a specific agent rather than to evaluate the service level of the call center.
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5					AR0048	SCAI-Call Redirection to Specific DN	This feature allows the business computer to redirect an ACD call (i.e., send it to a different Centrex customer-group directory number than the one to which the DMS Meridian ACD node has directed it). It does so based on caller information passed to the business computer. This capability is useful in situations where the information stored in the customer file in the business computer might dictate the ultimate
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5					AG2481	SCAI—Consultation/Transfer	This feature uses the CompuCALL link to allow customers' business computers to work in conjunction with the DMS Meridian ACD node to set up an outbound ACD call on behalf of a specific agent position. Since an agent is no longer required to physically dial outbound calls, this feature can eliminate dialing errors. The agent placing the call must be idle when the call is placed.
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5					AR0024	SCAI—Make Call Enhancements	This enhancement to the previous feature adds the ability to have a conference with three parties to the conversation. In this case, two persons in the call center can talk while having access to the computer data.
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5					AG2291	SCAI—Three-Way Call	This activity provides enhancements to the existing CompuCALL interface. It allows an external host computer to log in and log out ACD agents through SCAI signaling. It also allows the host computer to request via SCAI that an ACD agent be made "ready" or "not ready" to receive ACD calls.
	2	ACD00007	ACD CompuCALL-Func	This feature offers simultaneous delivery of voice and data information to ACD agents, as well as capabilities for call conferencing, transferring, and interworking with interactive voice response (IVR) systems.	5					AR0215	Third Party Call Control Enhancem	This feature enables communication between the host and the switch to query the status of calls in queue to calculate a wait time for each incoming call. This information can then be played to the calling party through a IVR/VRU (Interactive Voice Response or Voice Response Unit), so the caller can be informed of the expected time before being serviced. The calling party may then request that the IVR/VRU transfer the call to another group, station, or voice mail (if the IVR/VRU has this capability).
	2	ACD00008	ACD Centrex Coordinated Voice and Data	This feature provides messaging for MDC lines to support delivery of data screens (supplied by a host computer application) with a voice call.	5					AR0046	ECM/SCAI Support for Non-ACD Ph.1	This feature establishes internal modifications to an ACD call center to facilitate interfacing DMS Meridian ACD with an out-board predictive dialer. The dialer automates the dialing of multiple calls from a database, increasing agent productivity.
	2	ACD00009	ACD Network ACD on SS7	This feature provides support for multinode ACD networking across a network, so agents in dispersed locations can work as a single group. This feature uses CCS7 trunking to communicate load status information across the network.	5						Network ACD on CCS7	This software provides enhancements to the existing CompuCALL interface. It allows an external host computer to log ACD agents in and log them out through Switch-to- Computer Application Interface (SCAI) signaling. It also allows the host computer to request via SCAI that an ACD agent be made ready or not ready to receive ACD calls. The feature supports walkaway-reason codes, Meridian Business Sets, and 2500 terminals.

Change In Issue 2	Ann	Order Code	Order Code Name	Order Code Description	1st NCS Ris	Enh Ris	MD Ris	Repl Ord	PCID	ACTID	Feature Name	Feature Description
				This feature provides support for multinode ACD networking across a network, so agents in dispersed locations can work as a single group. This feature uses PRI trunking to communicate load status information across the network.	5	KI3		Code		ACTID	Network ACD on Primary Rate	This feature Description This feature provides messaging for Meridian Digital Centrex lines to support delivery of data screens with the voice call.
	2	ACD00011	ACD Routing Enhancements	This feature provides new routing flexibility for ACD calls to Night Service or Threshold Route.	6					AR1629	Reroute Chaining	This optional software permits ACD calls routed to Night Service or Threshold Routes to be rerouted to up to three other ACD groups. If an incoming call encounters a busy or night service condition in one ACD group, then this software routes the call to the next ACD group. If the call is not answered when the chaining routes the call to the fourth ACD group, then the system returns a busy signal. Reroute Chaining offers new call coverage flexibility for customers with multiple ACD groups, to cost-effectively enhance call completion by adding additional options for
	2	ACD00013	ACD CompuCALL Call Control	This feature provides Answer, Release, Hold, and Unhold capabilities on the CompuCALL terminal.	6					AR1912	CompuCALL Call Control Enhancements	Call Control Enhancements enhance the existing CompuCALL interface by enabling the following new CompuCALL host application-initiated capabilities: • Answer—allows the host computer application, on behalf of the user, to answer an incoming call • Release—allows the host computer application, on behalf of the user, to release the current call. • Hold—during an active call, this feature allows the host computer application to place the call on hold • Unhold—with a call on hold, this feature allows the host computer to return the call to active status CompuCALL Call Control Enhancements provide additional functionalities to the existing agent interface. These controls help increase agent productivity and overall work time by reducing the number of tasks performed on the telephone set and the computer.
	2	ACD00014	ACD CompuCall RSBBS	This feature provides CompuCALL enhancements to support Screen Assisted Telephony such as display-based services including Calling Line Identification Display (CLID), Call Waiting Identification Display (CWID), and Message Waiting Indication (MWI) on a subscriber's telephone set.	6					AF6182	CompuCALL Residential Broadband Support	Screen Assisted Telephony supports display-based services such as Calling Line Identification Display (CLID), Call Waiting Identification Display (CWID), and Message Waiting Indication (MWI) on a subscriber's telephone set. It also has call initiation services that allow outgoing calls to be placed from the subscriber's telephone set. ACD00014 provides the following capabilities to enable Screen Assisted Telephony: • Extends the Third-Party Call Control capabilities of CompuCALL so they may be
	2	ACD00016	ACD Group Increase	This feature increases the number of ACD groups from 256 to 1024	6					AR2129	ACD Group Increase	Lused for Centrex or residential lines. This feature increases the number of ACD groups from 256 to 1024. Larger ACD group capacity expands opportunities in existing switch serving areas with new operational and administrative economies.
	2	ACD00017	ACD Agent Increase	This feature increases the number of ACD agents from 5000 to 9999 and the number of agents per group from 256 to 512.	6					AR2129	ACD Agent Increase	Currently, many large ACD offices are approaching—or have reached—the maximum number of agents that can be datafilled in a group. This enhancement increases ACD datafill capacity in: • The maximum total number of ACD agents from 5000 to 9999.
	2	ACD00019	CompuCall Agt Desktp	This feature enhances existing CompuCALL capabilities to provide basic ACD agent desktop functionality for users with Meridian business sets (MBS).	6					AR2128	Basic Agent Desktop	• The maximum number of ACD scene per aroung from 256 to 512 This feature provides enhancements to the ACD Third-Party Call Control and SCAI Three-Way Calling (for MDC and RES lines), Three-Way Call (3WC) or Call Transfer (CXR) events and lamp synchronization, ACD MIS notification calls originated, terminated, and released from secondary directory numbers that use CompuCALL call control messages, and Call Origination (Make Call) with no alerting.
	30	ADVQ0001	ADVQ Advanced Queuing	This feature provides call-distribution capabilities far beyond the basic four queues and first-in-first- out method. With TOPS Queue Management System (QMS), the switch can support up to 255 unique call queues and up to 255 unique operator profiles that define the service capabilities of individual operators and teams.	5							This feature provides call-distribution capabilities far beyond the basic four queues and first-in-first-out method. With TOPS Queue Management System (QMS), the switch can support up to 255 unique call queues and up to 255 unique operator profiles that define the service capabilities of individual operators and teams. Calls can be assigned to queues based on information contained in trunk signaling, trunk group identification, dialed digits, and/or data matched to QMS screening tables in the DMS switch. When an agent becomes available, TOPS QMS checks the agent's operator profile and pulls an appropriate call from the call queues. Operators can be assigned primary and secondary responsibilities, so they can help more than one

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Added			Order Code Name ADVQ Advanced Queuing	Order Code Description This feature provides call-distribution capabilities far beyond the basic four queues and first-in-first- out method. With TOPS Queue Management System (OMS), the switch can support up to 255 unique call queues and up to 255 unique operator profiles that define the service capabilities of individual operators and teams.	RIs 5	RIs 10	MD RIS	Code	PCID 13942		Feature Name Queue by Called Type	Feature Description This feature provides next-generation queueing capabilities, including support for hundreds of unique queue types and agent profiles. This enhancement enables special routing of incoming international calls. Now the service provider can enhance operational efficiencies and augment customer service by routing inbound international calls to operators assigned to handle international calls.
	30	ADVQ0002	ADVQ TOPS Close Down	This feature allows operator functions at smaller host and remote offices to be closed down during off-peak hours and enables the rearrangement of the relationships among TOPS host and TOPS remote offices in the TOPS network.	5						TOPS Close Down	This feature allows operator functions at smaller host and remote offices to be closed down during off-peak hours and enables the rearrangement of the relationships among TOPS host and TOPS remote offices in the TOPS network. During light traffic periods, typically between midnight and 6 a.m., fewer operators are required. During these times, some operator centers would be very lightly staffed, yet have to remain open to provide operator services at all hours of the day and night. With this functionality, host and stand-alone switches can be converted to remotes, which then send their operator traffic to another host.
	30		ADVQ Host Queue Management System	This TOPS Queue Management System (QMS) feature allows the definition of up to 255 unique call queues and up to 255 unique serving team queues. With TOPS QMS, calls remain in the queue to which they are initially assigned, saving valuable processing power during peak traffic periods.	5					AF2875	Call Queue Assignment (CQA)	To support the expanded integration and revenue generating opportunities available through the TOPS program, the TOPS Queue Management System (QMS) offers a new and powerful automatic call distribution (ACD) capability for use with the DMS SuperNode system. The TOPS QMS allows the definition of up to 255 unique call queues and up to 255 unique serving team queues. With TOPS QMS, calls remain in the queue to which they are initially assigned, saving valuable processing power during peak traffic periods. The TOPS QMS handles peak traffic periods by allowing
	30		ADVQ Remote Queue Management System	Manuss. This feature provides the TOPS Queue Management System at a remote TOPS switch. The TOPS Queue Management System (QMS) feature allows the definition of up to 255 unique call queues and up to 255 unique serving team queues. With TOPS QMS, calls remain in the queue to which they are initially assigned, saving valuable processing power during peak traffic periods.	5					AF2875	Call Queue Assignment (CQA)	This package contains software to support the TOPS Queue Management System (QMS) from remote switches.
	30	ADVQ0005	ADVQ Host/Remote Networking by Queue Type	This feature extends the TOPS Queue Management System (QMS) capability throughout host and remote switches in a network which have QMS installed in the switches.	5					NC0152	Host/Remote Networking by Queue Type	Operator Centralization (OC) provides the ability for many remote offices to share the operator positions at one host office. This package allows TOPS calls to be networked, based on queue types, to different OC host switches and allows for an alternate OC selection in the event that the primary selection is unavailable. As a result, the flexibility and reliability of the TOPS network are significantly improved. With this software, DMS TOPS offices can serve as host or remote offices for different functions at different times, thus maximizing network efficiency and robustness, allowing flexible network engineering, permitting improved load balancing, and reducing switch requirements.
			QMS Customer Service Enhancements	This feature provides new TOPS Queue Management System (QMS) Customer Assistance Service Enhancements for a wide array of capabilities traditionally associated with dedicated Service Assistance (SA) / In-Charge (IC) operator positions, and allows these capabilities (and more) to be assigned on the basis of the operator profile and to be accessed from existing TOPS MP.	7					AN1836, AN1837, AN1838, AN1839, AN1840	QMS Customer Assistance Service Enhancements (QMSCASE)	KEY CAPABILITIES TOPS Queue Management System (QMS) Customer Assistance Service Enhancements (CASE) provides a wide array of capabilities traditionally associated with dedicated Service Assistance (SA) / In-Charge (IC) operator positions, and allows these capabilities (and more) to be assigned on the basis of the operator profile and to be accessed from existing TOPS MP and OPP-compliant operator positions. With QMS CASE, a new kind of assistance operator (designated Customer Service Expert) can handle transferred assistance calls with the context in tact, can share joint screen control with the original operator, and can serve as a regular concator when one to needed in a sesistance cancely.
	30	ADVQ0007	ADVQ QMS Billing Indicator	This feature refines TOPS Queue Management System criteria by allowing calls to be separated based on whether or not billing requirements have been satisfied. This enhances call-handling efficiency and customer service by allowing more rapid routing of calls that have met billing requirements.	9					AF7321	OMS Queue by Billing Satisfied	Include: operation when not needed in an assistance capacity. This feature refines TOPS Queue Management System criteria by allowing calls to be separated based on whether or not billing requirements have been satisfied. This enhances call-handling efficiency and customer service by allowing more rapid routing of calls that have met billing requirements.

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SUE Z	Ann	Order Codo	Order Code Name	Order Code Description	NCS Ris	Enh	MD RIs	Repl Ord	PCID	ACTID	Feature Name	Feature Description
dded			Music & Ann in Q	This feature expands the Queue Management System (QMS) by supporting music and announcements for calls in queues to enhance customer service	10	KIS	I MID KIS	Code	12849		Music and Announcements in Queue	This feature bescription This feature permits callers to hear music and announcements while waiting for operator services. The calls in queues have the option of connecting to ringing, music, or announcement. This software can enhance customer satisfaction and provides an opportunity for the service provider to promote valuable information to callers.
	8	AIN00001	AIN Primer	This feature provides initial Advanced Intelligent Network capabilities including enhanced announcements, overload controls, and triggers for PVN.	5					AR0253	3/6/10 Digit Trigger	This feature establishes a software trigger for DNs with 3, 6, or 10 digits. The trigger is used to access SCP services based on the NPA, NPA-NXX, or NPA-NXX-XXX of the dialed number (for example, 900 or 976 calls). It can also be used for N11 services such as network 911.
	8	AIN00001	AIN Primer	This feature provides initial Advanced Intelligent Network capabilities including enhanced announcements, overload controls, and triggers for PVN.	5					AG2244	AIN Announcement Expansion	This feature significantly enhances the Intelligent Network base package by providing additional announcement capabilities. With this feature, customers can define up to 75 customized announcements (as opposed to four in earlier versions of the package). This additional flexibility greatly improves the marketability of AIN for telephone operating companies.
	8 /	AIN00001	AIN Primer	This feature provides initial Advanced Intelligent Network capabilities including enhanced announcements, overload controls, and triggers for PVN.	5					AN0099	Intelligent Network Billing Attributes	AMA billing information is provided by the SCP in the TCAP response message to the SSP, using the call code included in the billing indicator information. This package enhances the flexibility of the DMS- SSP to generate billing records as instructed by the network SCP by supporting flexible call codes and feature codes in the billing indicator fields of the SCP routing message. In addition, this feature provides terminating AMA records on AIN calls received from IECs or over dedicated trunk groups without requiring a new access to the SCP. The Extended Bellcore AMA format is used for these billing records.
	8	AIN00001	AIN Primer	This feature provides initial Advanced Intelligent Network capabilities including enhanced announcements, overload controls, and triggers for PVN.	5					AR0252	Intelligent Network Overload Controls	By regulating the rate at which different types of calls can be released from the DMS SSP, this package gives network managers enhanced manual or automatic control over the load on network SCPs. Call types can be regulated by 3-, 6-, 7-, 8-, 9-, or 1 digit originating/terminating control codes (i.e., by NPA, NPA-NXX, NPA-NXX-X, etc. The network manager can specify the number of digits, the gap interval, and the duration of this control. When a query is received by the SCP from the selected code, the SCP may return an overload control message that identifies the gap interval, the control duration, and the reason for call gapping. The range of control code alternatives enabled by this package significantly expands the flexibility in controlling SCP overloads currently provided by the SSP/Private Virtu
	8	AIN00001	AIN Primer	This feature provides initial Advanced Intelligent Network capabilities including enhanced announcements, overload controls, and triggers for PVN.	5					AG2340	Intelligent Network Release 0.0 Base	This package lays the foundation for the evolving AIN. It enables the DMS SuperNode to detect AIN triggers that identify calls requiring access to the SCP for service processing. These triggers can be associated with lines or trunks, or they can be switch-based triggers. As a result of any of these triggers, the SSP determines the actions to be taken to send a query to the SCP and stops processing of the call until a response is returned from the SCP. The response supplies the information needed to complete the call and provide the service to the subscribers. With this package, triggers can be placed and detected at four points during call
	8	AIN00002	AIN Essentials	This feature provides key AIN SSP capabilities and introduces core capabilities for the AIN Rel. 0.1 Basic Call Model applications. This feature establishes the protocol base for AIN and provides message transactions between the DMS SSP and an SCP including TR-defined call and error messaging, to enable deployment in a multi-vendor network.	5					PA0035	AIN Generic Messaging Base	This feature provides the messaging protocols necessary for AIN Release 0.1 and establishes the base for the continued evolution of message structure complexity tha will be specified in later AIN releases. This software also provides the functionality to support various test messages.
	8	AIN00002	AIN Essentials	This feature provides key AIN SSP capabilities and introduces core capabilities for the AIN Rel. 0.1 Basic Call Model applications. This feature establishes the protocol base for AIN and provides message transactions between the DMS SSP and an SCP including TR-defined call and error messaging, to enable deployment in a multi-vendor network.	5					AR0219	AIN Local Base	This software provides base AIN call processing software. It supports access to AIN services from a DMS SSP for subscribers on POTS and enhanced POTS (RES) service platforms and the following line types—1FR, RES, 1MR, and all line types compatible with the RES platform, such as Meridian Digital Centrex (IBN line) and Meridian Business Set (EBS line). This software also permits the DMS SSP to identify the four originating trigger detection points (TDPs) and one terminating TDP for these line types. Alto Local Base also provides the control of software tables used for the provisioning of triggers and defining the criteria contained within each trigger.

Change In Issue 2			Orden Orde News	Order Orde Description	1st NCS Rls	Enh Ris	Repl Ord MD RIs Code	PCID	ACTID	N	Fortune Description
			Order Code Name AIN Essentials	Order Code Description This feature provides key AIN SSP capabilities and introduces core capabilities for the AIN Rel. 0.1 Basic Call Model applications. This feature establishes the protocol base for AIN and provides message transactions between the DMS SSP and an SCP including TR-defined call and error messaging, to enable deployment in a multi-vendor network.	5	KIS			AR0298	Feature Name AIN Software Base	Feature Description This feature provides AIN base software, establishing the foundation for future deliverables of the evolving AIN releases. It includes the AIN Release 0.1 call model and associated trigger tables with all related trigger information.
	8	AIN00002	AIN Essentials	This feature provides key AIN SSP capabilities and introduces core capabilities for the AIN Rel. 0.1 Basic Call Model applications. This feature establishes the protocol base for AIN and provides message transactions between the DMS SSP and an SCP including TR-defined call and error messaging, to enable deployment in a multi-vendor network.	5				AR0226	AIN SSP Message Encoder/Decoc	This feature gives the DMS SSP the capability to encode messages going to an SCF external to the switch and decode messages coming from an external SCP. Specifically, the message encoder/decoder provides an Application Protocol Interface between the DMS SSP and an SCP to establish the parameters and procedures of application layer messages. This software is designed to support both current and future messaging requirements with a universal method for conducting SSP-SCP message transactions.
	8	AIN00002	AIN Essentials	This feature provides key AIN SSP capabilities and introduces core capabilities for the AIN Rel. 0.1 Basic Call Model applications. This feature establishes the protocol base for AIN and provides message transactions between the DMS SSP and an SCP including TR-defined call and error messaging, to enable deployment in a multi-vendor network.	5				AD4446	TCAP Monitor Enhancements	This software enhances the implementation of Transaction Capabilities Application Part (TCAP) messaging in the DMS SSP by allowing complex, component-level encoding and decoding of messages. Additionally, the previous monitoring and managing of messages at the transaction level are expanded to provide component- level timing and management. Previous to this software, complex TCAP messages containing multiple components in each message were not supported. These enhancements align the different TCAP calling sequence models defined by ANSI an CCITT.
	8	AIN00006	AIN Call Management	This feature provides the administration of the Basic Call Model's Point in Call triggers, subjects forwarded calls to basic call model and triggers, and provides Service Control Point control for Primary Rate Interface (PRI) and ISDN User Part (ISUP) trunks.	5				AG3289, AG3294, AG3296, AG4550, AN1065, AN1066, AR0939,	AIN Call Management	This feature provides the administration of the Basic Call Model's Point in Call triggers, subjects forwarded calls to basic call model and triggers, and provides Service Control Point control for Primary Rate Interface (PRI) and ISDN User Part (ISUP) trunks.
	8	AIN00007	AIN Essentials-Call Model Control	This feature provides AIN Call Model controls to include Feature Group C trunks.	5				AR1325	15-Digit Support of IDDD	This feature modifies AIN digilators to accommodate the additional digits required for the new International Direct Distance Dialing (IDDD) calling standards. It is designed to support regulatory requirements for international dialing in the AIN environment.
	8	AIN00007	AIN Essentials-Call Model Control	This feature provides AIN Call Model controls to include Feature Group C trunks.	5				AR0387	AIN Feature Code Trigger	This feature provides subscriber access to AIN services through an additional trigge that recognizes dialed digits for such features as Cancel Call Waiting (*70) and Automatic Callback (*69). When similar digits, which represent a feature code, are received by the switch, a query is launched to a service control point. The feature code trigger supports a wide range of applications by letting the subscriber control th on/off state of an AIN service, access special dialing plans, such as Enhanced Services Network (ESN) dialing, and be properly billed for that type of service, or access the profiles of user-programmable services.
	8	AIN00007	AIN Essentials-Call Model Control	This feature provides AIN Call Model controls to include Feature Group C trunks.	5				AG3293	ATC Trunk Support	This feature increases the triggers that Access-to-Carrier (ATC) trunks can encounter in the originating half of call. These triggers are PODP, N11, and AFR. Incoming traffic from tandem switches and interexchange carrier networks typically use ATC trunk groups because they support Equal Access signaling.
	8	AIN00007	AIN Essentials-Call Model Control	This feature provides AIN Call Model controls to include Feature Group C trunks.	5				AG3295	BRI Interworking to Termination Attempt Trigger (TAT)	This feature allows originating from National ISDN-1 (NI-1) Basic Rate Interface (BRI) lines to support and interwork with the TAT at the terminating half of a call. When a called party subscribes to an AIN service that recognizes TATs, BRI- originated calls will work properly.
	8	AIN00007	AIN Essentials-Call Model Control	This feature provides AIN Call Model controls to include Feature Group C trunks.	5				AR0423	Misc Interworking to Termination Attempt Trigger	This feature allows various line and trunk agents to support and interwork with the termination attempt trigger (TAT) at the terminating half of call. These facilities including 8- and 10- party flat rate subscriber lines, telex lines, and E911 trunks will now be able to support AIN services that are assigned to called-party subscribers.

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	Ann	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
				This feature provides AIN Call Model controls to include Feature Group C trunks.	5	8			AQ1590, AQ1589	Routing to FGC Carriers	This standard feature of AIN00007 expands support of Call Model Controls to include calls that reach destinations by Feature Group C (FGC) trunks. This could involve a direct trunk to an FGC carrier as identified in a database response, or this may be a trunk through an access tandem (AT) to an FGC carrier. This feature generates correct Automatic Message Accounting (AMA) records when an SCP instructs an equal access end office (EAEO), Access Tandem, or Traffic Operator Position System (TOPS) switch to route to an FGC carrier.
	8	AIN00007		This feature provides AIN Call Model controls to include Feature Group C trunks.	5				AR1390	T-Selector Support	This feature supports the use of trunk selection in various digit translation and routing tables, allowing AIN services to use a popular method of translating calls that route to trunks. Providing this feature allows existing routing algorithms be used when AIN services are introduced into a network.
	8	AIN00008		This feature enables the delivery of alphanumeric information (such as the caller's name, number, or both) from SCPs to subscriber terminals on RES, RES 1FR, and RES 1MR lines. This feature implements network standards published in Bellcore TR-1284 and TR-1285 that specify how SSP/STP communications should control and deliver text information to a subscriber's	5				AR1440, AR1535	Display for RES	Display Services enables the delivery of alphanumeric information (such as the caller's name, number, or both) from SCPs to subscriber terminals on RES, RES 1FR, and RES 1MR lines. This feature implements network standards published in Bellcore TR-1284 and TR-1285 that specify how SSP/STP communications should control and deliver text information to a subscriber's display phone. Specifically, the new software lets a DMS SSP process "Display Text" and "Generic Name" message parameters that are part of response messages sent from an SCP. Network providers can enhance existing services with AIN-based display capability by
	8	AIN00008		This feature enables the delivery of alphanumeric information (such as the caller's name, number, or both) from SCPs to subscriber terminals on RES, RES 1FR, and RES 1MR lines. This feature implements network standards published in Belicore TR-1284 and TR-1285 that specify how SSP/STP communications should control and deliver text information to a subscriber's display phone.	5	6			AJ4008, AJ4009	Display Text for MBS Lines	The Display Text for MBS (Meridian Business Set) Lines feature uses the AIN 0.1 call model (specifically, the Display Text parameter) to deliver name, number, date, and time-of-day information for display on MBS phones. It also delivers calling name and number information for display on EBS (Electronic Business Set) phones. The following table shows the type of information that can be displayed on MBS and EBS phones. With Display Text for MBS Lines, service providers can open new sources of revenue by developing and marketing AIN services that use the manipulation of displayed text on supported business terminals.
	8	AIN00009		This feature provides office-wide AIN0.1 trigger support for a wide variety of line, trunk, and service types, including single number and information-based services.	6				AR1700, AR1781, AR1790, AR1791, AR1792, AR1807, AR1808, AR1809	AIN Essentials Enhancements	As part of Nortel's multiple-release AIN product—AIN Essentials—this software continues the rollout of new enhancements, based on specifications published in Bellcore TR-1284 and TR-1285. These enhancements include: • Expanded support of line agents (AR1790, AR1809) to include: – Basic Rate Interface (BRI) interworking with off-hook delay (OHD) and termination attempt (TA) triggers. – Support of the Data and PData line class codes (LCCs) relative to Datapath. The Data LCC is used for MDC (business) customers using Datapath, while the PData LCC is used by POTS (residential) customers using Datapath. Meridian Business
	8	AIN00009		This feature provides office-wide AIN0.1 trigger support for a wide variety of line, trunk, and service types, including single number and information-based services.	6				AJ4005, AJ4006	Calling Party Business Group ID	This feature provides the calling party business group identification (BGID) parameter in the Info_Analyzed message when the following conditions exist: The originating access (non-ISDN, ISDN interface, or private facility trunk group) is assigned to a Basic Business Group (BBG) or Multilocation Business Group (MBG). The originating access in this case may be associated with the caller or a user forwarding the call through a switch-based call forwarded feature. The Info_Analyzed message is sent in response to a Customized Dial Plan (CDP) trigger.
	8	AIN00009		This feature provides office-wide AIN0.1 trigger support for a wide variety of line, trunk, and service types, including single number and information-based services.	6	8			AR1804, AR1805, AR1924	Monitor Resource	Monitor Resource (also called Monitor for Change [MFC] by Bellcore) is a non-call- related application within the scope of AIN that allows an SCP (service control point) to query an SSP (service switching point) about the status—either busy or idle—of an analog line or multi-line hunt group (MLHG). Monitor Resource also lets the SSP request that the SCP monitor a line or MLHG for a designated amount of time until the line or MLHG changes to the desired status or until the time period expires. Service providers benefit from a supporting tool that allows them to create value- added, revenue-generating business services based on line or hunt group status and

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
٤	8 A	IN00009	AIN Services Support	This feature provides office-wide AIN0.1 trigger support for a wide variety of line, trunk, and service types, including single number and information-based services.	6	8				AQ1587, AQ1588	RES Coin/WATS Interworking	RES Coin/WATS Interworking provides AIN Essentials with expanded Residential Enhanced Service (RES) line agent support by allowing AIN triggers to be accessed by RES Coin and WATS lines. Service providers can now market AIN-defined services targeted at coin lines and residential lines that have the line class code RES assigned to them. This broadens the potential market for AIN-defined services.
3	8 A	IN00010	AIN Default Routing	This feature provides default route provisioning with GR-1298 enhancements, full support for Specific_Digit_String (3/6/10 trigger), Termination_Attempt, and N11 triggers as defined in Bellcore Gr-1298-CORE R 7-57 Issue 1, Nov. 1993, and support for the enabling of options on a trigger basis through table datafill, including: Route call to a specified DN, Continue routing to the dialed DN, and Pout to an	5					AQ1060, AQ1061	AIN Default Routing	This feature provides default route provisioning with GR-1298 enhancements, full support for Specific_Digit_String (3/6/10 trigger), Termination_Attempt, and N11 triggers as defined in Bellcore Gr-1298-CORE R 7-57 Issue 1, Nov. 1993, and support for the enabling of options on a trigger basis through table datafill, including: Route call to a specified DN, Continue routing to the dialed DN, and Route to an announcement, and then disconnect or route to a specified or the dialed DN.
3	8 A		AIN SSP Services Enhancements	Truiting to the dialed DNL and Evidence and This feature provides trigger support for interaction between some Centrex features and the AIN 0.1 call model. The Centrex features included are Group Intercom, SMDR, and Call Park.	5					AQ1474, AR1640, AR1646	Centrex Services 1	Provides optional value-added functionality for a DMS SuperNode system serving as a service switching point (SSP). Supports a variety of Centrex features with the AIN 0.1 call model. Key Capabilities: This software provides trigger support for the interaction between the following set of Centrex features and the AIN 0.1 call model: Group Intercom—interworks with the termination attempt trigger detection point to permit abbreviated dialing connections between users within a predesignated group [AR1640]. Station Message Detail Recording (SMDR)—uses service control point (SCP) information to provide detailed billing records for AIN calls and append those records to SMDR reports [A014774]. Call Park—allows the MDC call park and retrieval function to not encounter particular AIN 0.1 triggers and operate successfully within the AIN 0.1 call model [AR1646]. Principal Benefits: This capability provides AIN 0.1 call model support of, and interworking with, particular high-demand Centrex features. For example, the SMDR feature allows billing information for AIN calls to be accurately appended to detailed records, thereby facilitating a business customer's ac
3	8 A	IN00015	AIN Network Services Enhancements	This feature provides trigger support for interaction between some advanced residential and business features including Analog Display Services (ADSI) features	6					AR1532, AR1645, AR1780, AR1786, AR1818, AR1826, AR1959	AIN Network Services Enhancements	KEY CAPABILITIES This optional software provides AIN 0.1 trigger support of, and interworking with, the following advanced residential and business features, including Analog Display Services Interface (ADSI) features: • Spontaneous Call Waiting Identification (SCWID)—this ADSI feature displays number and name information (if subscribed to) about the call waiting call. • Deluxe Spontaneous Call Waiting Identification (DSCWID)—in addition to displaying information about the waiting call, this ADSI feature allows the user to respond to the call (on a call-by-call basis) in a variety of ways. • Send to Resource to Standard Announcements—enhances Send to Resource (STR) operations to support standard recordings (as terminating announcements) that can be broadcast to more than one user at a time. • Speech-Activated Intelligent Dialing (SAID) Stringing of Digits (SOD)—supports number translations for two contiguous voice commands, allowing feature activation
3	8 A		AIN Network Services Enhancements	This feature provides trigger support for interaction between some advanced residential and business features including Analog Display Services (ADSI) features	6					AR1687	Send to Resource to Standard Announcements	It be added to basic cell commands. KEY CAPABILITIES These Personal Communications Service features comply with Bellcore-defined network PCS functionality using the ISDN, CCS7, and AIN networking capabilities as detailed in SR-3454. Future enhancements are to address Bellcore's Network Operations Plan (NOP) architectural requirements (as defined in GR-2801 and SR- 2459). PRINCIPAL BENEFITS This software is designed to enable network providers and their PSPs to enter the

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1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
			AIN ACB/AR Premium	This feature interworks the Call Back and Automatic Recall features with the AIN 0.1 call model.	5					AR1638	ACB/AR Enhancements	Interworks the Automatic Call Back and Automatic Recall features with the AIN 0.1 call model. Key Capabilities: ACB/AR Enhancements provide two levels of AIN interaction with the Automatic Call Back/ Automatic Recall (ACB/AR) features. Standard 100% TR compliance is offered as a base interoperability as well as an optional enhanced interaction. ACB enables the subscriber to use an abbreviated feature code to call the last number dialed by the subscriber after encountering a busy or no answer condition. ACB enables a subscriber to use an abbreviated feature code to call the last incoming unanswered call to the subscriber. Bellcore's TR-1284 AIN 0.1 Product Release specification currently blocks many call scenarios that require ACB/AR features. The AIN 0.1 DMS SSP basic offering (AIN Essentials) complies with these undellage. Optional ACB/AE Enbacements (AIN0018) howaver.
	8		AIN Maintenance Enhancements	This feature permits technicians to trace and display AIN messages by Directory Number.	6					AR1780, AR1503	Trace Tools Enhancement	Optional AIN00022 software permits craftspersons to trace and display AIN messages in standard ASCII text. AINTrace—the software block that stores this information for retrieval—can be used for directory numbers (DNs), Common Language Location Identifiers (CLLIs) for trunk group identification, trunks, or Terminal Identifiers (TIDs).
							L					This simple-to-operate message trace and display facility can help reduce the time to
			AIN Translations Simplification	This feature minimizes translation datafill by facilitating the reuse of existing standard pretranslators which decreases the amount and kind of information previously required to datafill software tables. A "lookahead" procedure is utilized that determines, in advance, which digits need to be added or stripped to properly route a call.	6						AIN Translations Simplification	This feature simplifies the current AIN response translation system for public lines and trunks. Currently, the flexible DMS AIN translations use individual pretranslators for each call type. The more call types, the more pretranslators—and the more datafill required to make the pretranslators operate. The datafill within these pretranslators resulted in increased setup and maintenance costs for network providers. To address this, AIN Translations Simplification minimizes translation datafill by facilitating the reuse of existing standard pretranslators. This reuse decreases the amount and kind of information previously required to datafill software tables for both public line- and trunk-based "response" translations. This is accomplished by using "lockabad". REY CAPAB (LITIES
	8		AIN Office Trigger Flexibility	This feature allows the assignment of a virtual location and rate center to a Public Office Dial Plan (PODP).	6					AR1691	Office Trigger Flexibility	KEY CAPABLITIES Office Trigger Flexibility delivers originating call model translation enhancements to the Public Office Dial Plan (PODP). This software gives the network provider the flexibility to assign chosen line attributes to a virtual PODP number, and align that virtual number with a specific rate center. A service provider, in turn, can distribute its customer call centers across different rate centers and be accurately charged for all calls to the PODP number. For calls to the PODP number, billing between the originating DN and the PODP number is separated from billing between the PODP number and its distributed call center numbers. Originating call charges can be more consistently applied to calls from different rate centers that terminate to the same PODP number. With Office Trigger Flexibility, calls are also processed based on the PODP number and not originating DN triggers. This can help to increase call completion rates, because originating DN triggers. This can help to increase call completion rates, the cause originating DN triggers are delivered within the originating call model:
	8	AIN00210	AIN Service Enablers Rel 1	Service Enablers is Nortel's multiple-release product based on Bellcore AIN Generic Requirements (GRs). This feature provides GR- based AIN capabilities focused initially through GR-based AIN 0.2 capabilities. It provides GR- based AIN capabilities for Intelligent Peripherals (IP) and Next Event List (NEL).	6					AJ4099, AJ4100, AJ4102	Service Enablers Release 1	KEY CAPABILITIES Service Enablers is Nortel's multiple-release product based on Bellcore AIN Generic Requirements (GRs). Service Enablers Release 1 is based on the following versions of the AIN GRs: GR-1298-CORE, Issue 2, Revision 3, December 1994; GR-1299- CORE, Issue 2, Revision 3, December 1994; and GR-1129-CORE, Issue 1, Revision 2, December 1995. Release 1 software is scheduled to provide AIN capabilities that enhance existing services or enable new services that are based on AIN events and/or Intelligent Peripheral (IP) network elements. PRINCIPAL BENEFITS Service Enablers allows service providers to design and market new and advanced

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			Order Code Name	Order Code Description	RIs	Rls	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	8	AIN00211	AIN SE Counter-Office	This feature provides a Query on Release option which allows calls to non-ported numbers to be routed to the terminating SSP without performing a database query. Without this option, the SSP must launch a query for every call attempt.	8					AR2305	Service Enablers LRN QoR	Query on Release (QoR) is an optional feature of Nortel's AIN SE LRN solution. This option allows calls to non-ported numbers (numbers that have not been moved to another central office) to be routed to the terminating SSP without performing a database query. Calls to ported numbers are released back from the intended terminating SSP to the originating SSP, which then launches a query to the SCP to locate the ported number. Without QoR, the originating SSP must launch a query for every call attempt, thus adding increased CCS7 signaling traffic to the network. QoR can be activated at the originating SSP on a per NPA-NXX basis. The feature counts office-based Triggers/Events and all call related components in response or in conversation. It includes Specific_Digit_String, N11, Network_Busy, O_Called_Party_Busy, O_No_Answer, and O_Answer.
	8	AIN00212	AIN SE Counter- Subscriber	This feature allows for usage-based billing (pay per use) and is advantageous for smaller entrants to get into AIN. This feature counts all triggers and events that are based on an individual subscriber or group basis.	8					BY61934	AIN SE Counter - Subscriber	This feature allows for usage-based billing (pay per use) and is advantageous for smaller entrants to get into AIN. This feature counts all triggers and events that are based on an individual subscriber or group basis.
	8	AIN00213	AIN SE Counter-NCR	This feature allows for usage-based billing (pay per use) and is advantageous for smaller entrants to get into AIN. This feature counts all components that are non-call related. Examples of non-call related components include Automatic Code Gapping (ACG) which blocks/throttles calls to certain numbers or from certain numbers, Monitor_for_Change (e.g. Monitor a busy line until it becomes idle), and Update - Turn Triggers on and off.	8					BY61938	AIN SE Counter - NCR	This feature allows for usage-based billing (pay per use) and is advantageous for smaller entrants to get into AIN. This feature counts all components that are non-call related. Examples of non-call related components include Automatic Code Gapping (ACG) which blocks/throttles calls to certain numbers or from certain numbers, Monitor_for_Change (e.g. Monitor a busy line until it becomes idle), and Update - Turn Triggers on and off.
	8	AIN00220	AIN Service Enablers Rel 2	Service Enablers is Nortel's multiple-release product based on Bellcore AIN Generic Requirements (GRs). This feature provides GR- based AIN capabilities focused initially through GR-based AIN capabilities for Toll-Free Service, Intelligent Peripherals (IP) and Next Event List (NEL). Release 2 provides two new triggers and three new events.	8					AF6762, AF6850, AF6851, AF6852, AF6961, AF6993, AF7136, AF7139, AF7140, AF7141, AJ4505, AJ4582,	Service Enablers Release 2	KEY CAPABILITIES Service Enablers is Nortel's multiple-release product based on the following Bellcore AIN Generic Requirements (GRs): GR-1298-CORE, Issue 3, July 1996; GR-1299- CORE, Issue 3, July 1996; GR-1129, Issue 2, July 1996; and GR-2892-CORE, June 1995. This second release of Service Enablers expands the revenue opportunities included in Release 1, offering the following capabilities: Triggers: Service Enablers Release 2 is scheduled to provide two new triggers—O_Called_Party_Busy and O_No_Answer. The following triggers are also scheduled for upgrades based on GR specifications: Specific Feature Code, Specific Digit String, Customized Dial Plan, Off Hook Delay, Public Feature Code, and Termination Attempt. Events: Service Enablers Release 1 introduced three Originating AIN Next Event Lis (NEL) events: Busy, Answer, and No Answer. Release 2 introduces three new
	8	AIN00230	AIN Service Enablers Rel 3	Service Enablers is Nortel's multiple-release product based on Bellcore AIN Generic Requirements (GRs). This feature provides GR- based AIN capabilities focused initially through GR-based AIN 0.2 capabilities. It provides GR- based AIN capabilities for Toll-Free Service,Intelligent Peripherals (IP) and Next Event List (NEL). Release 3 expands agent support and enhances OAM&P for AIN.	9					AJ4926, AJ4927, AU2561	AIN Service Enablers Base Release 3	Notwork Durur T, Burn and T, Na Ansurar Alth Censing providers nault This feature updates OAM&P and AMA capabilities and expands trigger support. It enhances the AIN Primer software module, adds Expanded Attendant Console support for SDS/N11 / Virtual Access to Private Networks (VAPN), agent support for the Off- Hook Delay (OHD) and Custom Dialing Plan (CDP) triggers, and support for the Termination Attempt Trigger (TAT) without Send to Outside Resource (STOR). It also adds Trigger Item ID support to enable the SCP to activate and deactivate office-side triggers. It enhances the Translations Verification (TRAVER) facility used to construct and store AIN messages. Messages are stored in a DMS file, which can be read into the TstQuery tool for transmission as a test query to an SCP
	8	AIN00231	AIN SE R3 - GETS EACR	This feature supports the U.S. government's effort to enhance communications service during emergency situations by automatically attempting to route a high priority call to a number of carriers to provide a high probability of completion.	9					AU2681, AU2682, AU2683	Service Enablers Release 3: Enhanced ACR	This new feature increases the probability of a call being completed through the switching network. The software accomplishes this by enhancing the DMS service switching point (SSP) routing algorithm used to respond to the Analyze_Route message (based on GR-1298-CORE, Issue 3, Revision 1). One of the main applications of this feature is GETS (Government Emergency Telecommunications Service) in the United States. Authorized users (at the federal, state, and local level) receive enhanced routing and priority treatment through the public switched telephone network during periods requiring national security and emergency preparedness (NS/EP) response.

Change In					1st							
Issue 2	4.00	Order Cor	e Order Code Name	Order Code Description	NCS Ris	Enh	MD RIs	Repl Ord	PCID		Feature Name	Feature Description
Added			Service Enablers Base Release 4	This feature delivers the base functions required This feature delivers the base functions required to support continuing rollout of GR-1298/1299- based AIN Service Enablers.	10	KIS		Coue	12829		Service Enablers Base Release 4	Base Release 4 enhances operations, administration, maintenance, and provisioning (DAM&P) functions, updates Automatic Message Accounting (AMA) capabilities, and expands Advanced Intelligent Networking (AIN) trigger support. This feature delivers: • Phase 2 of Trigger Item ID support, enabling a Service Control Point (SCP) to activate and deactivate subscription triggers for more efficient services management. • An update message for Message Waiting Indicator (MWI), enabling a SCP to signal a Service Switching Point (SSP) to change the MWI status for a specific line. In addition to supporting revenue-enhancing features and capabilities, these updates to OAM&P and AMA functions provide new, non-call related messages to enable new IN service offerings, such as end-user management of trigger subscription status and SCP control of Message Waiting Indicator.
Added	8	AIN00241	ISDN Control Trigger	This feature enables per-B-channel support for PRI trigger and AIN subscription services.	10				13225	AU2858	ISDN Control Trigger	This enhancement opens the door to a new class of revenue-generating services by enabling network providers to: • Assign the PRI channel setup trigger on a per-B-channel basis. With this feature, all incoming calls on a subscribed B-channel (whose digits are not on the escape code list) trigger to the SCP for call treatment. • Support AIN subscription services on a PRI B-channel basis. AIN00241 enables a new suite of services for carriers, Internet Service Providers
Added	8	AIN00242		This feature provides a more effective service deployment tool for services based on Originating Triggers	10				13621		Originating Busy-No Answer Trigger Screening	(ISPs), and telecommuter service providers. The range of new services include multi- trunk PRI hunting, call queuing, call screening, and more. This feature offers the service provider more flexibility in deploying Originating Busy- No Answer subscription trigger services. This software also enables providers to activate services on a per-customer-group basis for faster, easier deployment. Line subscribers can deactivate and activate a service independently by dialing a service line and entering appropriate codes. AIN00242 contributes to lowering the provider's cost of DMS SuperNode system ownership by allowing the Originating Busy-No answer triggers to be provisioned at a group level and by providing new screening capabilities that block undesired queries.
Added	8	AIN00243	Terminating Call Model Control	This feature adds two new triggers and a new event to support services based on the Terminating Call Model.	10				13660	AJ5080, AU2784	Terminating Call Model Control	This feature provides triggers and functions required to support new AIN services, including: • Two new triggers, Terminating Busy and Terminating No Answer, to enable carriers to enhance terminating subscription services based on terminating busy or no answer conditions. • A Terminating Answer Event function to enable the terminating call model to report a successful answer condition. AIN00243 enables AIN to manage call termination when a call encounters a busy or no answer condition. New terminating services are enabled, integrating voice mail and find me/follow me services, to offer service providers enhanced revenue opportunities.
Added	8	AIN00244	Collect Information Control Message	This feature enables the SCP to return a call to the Collect Information point-in-call.	10				13230	AJ5110	Collect Information Control Message, Phase I	This feature enables the SCP to provide new dialed digits to the SSP, enabling the SSP to process the digits as if dialed by the originator. Phase 1 of the new Collect Information message includes the ability to process call routing dial plan elements such as directory numbers and extension numbers — as well as a subset of Vertical Services codes, such as Automatic Call Back (*66) or Automatic Recall (*69). AIN00244 enables an expanded set of AIN services than was possible with the Analyze Route message (such as Enhanced Busy Call Return), providing greater revenue opportunities for service providers.

Change In					1st							
Issue 2	4	Order Cede	Order Code Name	Order Code Description	NCS Ris	Enh	MD RIs	Repl Ord	PCID	ACTID	Feature Name	Feature Description
Added			OffHook Delay, Escape Centrex Intercom	This feature eliminates unneeded AIN queries for intra-centrex intercom calls.	10	RIS	MD KIS	Loge	13629			Provide the originating subscriber with an Off-Hook Delay (OHD) trigger datafilled with "escape" criteria for intra-Centrex calls. Introduce the administration of an escape Meridian Digital Centrex (ESCMDC) criteria to both the trigger group and trigger item tables associated with OHD trigger to escape intra-Centrex intercom calls. Since the majority of Centrex intercom calls complete within an organization (almost never needing AIN involvement), this feature helps ensure that an AIN query is not sent. This saves the expense of processing a query and response for this type of call, and eliminates the need for additional processing of OAM&P data, such as billing records.
	44	AMA00002	AMA MOD (LAMA MODULES)	This feature, for the Canadian market, appends data into Bellcore Automatic Message Accounting (AMA) records that exists in Northern Telecom AMA records. This data includes out-of- zone indicator for Canadian 800 Plus service and call type information in tables TOLLENTC and BILLCODE.	6						Automatic Message Accounting LAMA Modules	This feature, for the Canadian market, appends data into Bellcore Automatic Message Accounting (AMA) records that exists in Northern Telecom AMA records. This data includes out-of-zone indicator for Canadian 800 Plus service and call type information in tables TOLLENTC and BILLCODE.
	44	AMA00004	AMA MOD (CAMA MODULES)	This feature is similar to AMA00002, but is tailored for use with Bellcore AMA records that will be used for Centralized Automatic Message Accounting (CAMA) purposes in the Canadian market.	6						Automatic Message Accounting CAMA Modules	This feature is similar to AMA00002, but is tailored for use with Bellcore AMA records that will be used for Centralized Automatic Message Accounting (CAMA) purposes in the Canadian market.
	44	BAS00001	BAS AMA-COOK Teleprocessing System	This feature provides support of a Distributed Processing Peripheral (DPP, from Cook) to serve as an Automatic Message Accounting teleprocessing system interface to a host office collector (HOC).	5						BAS AMA-COOK Teleprocessing System	Efficient billing becomes more important as the volume of AMA data expands with the dramatic growth of toll calling, local measured service, and new usage-based services, such as CLASS and packet-switched services. AMA teleprocessing is much more cost effective than recording billing data on bulky magnetic tapes that must be transported to the revenue accounting office, risking erasure or damage along the way. This feature provides the DPP with call records formatted into the Bellcore AMA format and supports transmission over direct or dial-up teleprocessing links at up to 9600 bps. It also integrates the DPP into the DMS switch, including alarms, log reports, and MAP capabilities and supports tracer records for auditing and tracking.
	44	BAS00001	BAS AMA-COOK Teleprocessing System	This feature provides support of a Distributed Processing Peripheral (DPP, from Cook) to serve as an Automatic Message Accounting teleprocessing system interface to a host office collector (HOC).	5	9				SD0911	DPP Alarm Enhancements	This enhancement permits the network provider to use more alarm scan points equipped on the DPP-dedicated NTOX10AA scan card to monitor low voltage (point 3), Thermal A (point 4), Thermal B (point 5), and Auxiliary Alarm Conditions (point 6).
			BAS ANI With AMA	This feature provides call records which are not normally generated at the end office for direct dialed calls to a tandem office with CAMA and an operator service center.	5						Automatic Number Identification	This feature provides call records which are not normally generated at the end office for direct dialed calls to a tandem office with CAMA and an operator service center.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1854	200 MS Disconnect Timing	This feature makes disconnect timing with flash privileges assignable to RES lines as necessary when flash-activated features or options are assigned against the line. Currently, all RES lines are assigned disconnect timing with flash privileges, regardless of which options or features appear on the line. When no flash privileges are needed for a RES line, disconnect timing without flash is used so that any on- hook duration greater than 200 ms is interpreted as a disconnect rather than as a flash.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID		Feature Name	Feature Description
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AR0238	AIN AMA	This feature provides the base capability for Bellcore-standard Automatic Message Accounting (AMA) format. It is being updated to support Intelligent Network enhancements.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1462	AMA Test Call Capability	This feature allows the line assignment of a test option that generates an Automatic Message Accounting (AMA) record whenever the line makes various types of calls. The option allows verification of the effectiveness and accuracy of the AMA function in the DMS switching system. This capability provides a method to track new features from a specific line quickly in order to verify the switch's ability to generate the correct billing record for the new service or upon insertion of a new load.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1981	AMA Test Call Enhancements	This feature enhances the AMA Test Call capability by allowing the AMATEST option to be enabled on Business Sets, Data Units, and selected trunk group types, thus saving operating companies lost revenue from improper billing records by providing an early fault detection mechanism. The AMATEST option ensures that a particular translations path is producing an AMA record and that the proper information is contained within the record fields. Thus, when a new feature is introduced in the switch or when translation changes are made, telephone operating companies can verify that the resulting AMA records are being produced correctly.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1439	AMA—Separation of Billing and Routing Functions	This feature provides users the ability to allow originating 7-digit-dialed calls to be translated as long distance calls and 10-digit-dialed calls to be translated as local calls. The supply of unique Numbering Plan Area (NPA) numbers in the United States has been nearly exhausted, creating a situation in which office codes could have the same form as NPA numbers. This feature addresses the difficulty of distinguishing between the two by: separating the decision to create a billing record from the presence or absence of a "1" prefix, and expanding the capabilities of the AMA pretranslation (AMAPRT) subtable for influencing the generation of AMA records. In order to separate the decision to create a billing record for non-Interexchange Carrie (IEC) involved calls from the presence of a "1" prefix in the dialed digits, this feature uses the Local Call Area Screening Control Table (LCASCRCN) and its associated subtable to determine whether or not a non-IEC call is billable, and if so, whether it is billed as a local or toll call. To expand the capabilities of subtable AMAPRT for influencing the generation of AMA records, this feature provides two "OVERRIDE" field influencing the generation of AMA records, this feature provides two "OVERRIDE" field influencing the generation of AMA records, this feature provides two "OVERRIDE" field influencing the generation of AMA records, this feature provides two "OVERRIDE" field influencing the generation of AMA records, this feature provides two "OVERRIDE" field is a subtable to determine whether or provides two "OVERRIDE" field influencing the generation of AMA records, this feature provides two "OVERRIDE" field influencing the generation of AMA records, this feature provides two "OVERRIDE" field influencing the generation of AMA records, this feature provides two "OVERRIDE" field influencing the generation of AMA records, the second provides two "over the seco
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF5960	BAS RDT Line Status Display	Bu ilding on the Integrated Remote Test Unit (IRTU) circuit pack support, this "Phase 2" version expands the Computing Module support of line maintenance capabilities on the S/DMS AccessNode. Integrated with the DMS SuperNode through either the SCM-100 Access (SMA) or Expanded SCM-100 Access (ESMA) digital interface, the S/DMS AccessNode uses the IRTU to emulate a Metallic Test Unit (MTU) or a Digital Remote Test Unit (DRTU). As a group, the new features: • Speed Automatic Line Test (ALT) operation, by allowing the use of both IRTU test heads at the S/DMS AccessNode simultaneously. • Support the 'TalkLTA with Battery' command, using an IRTU. • Expand support for the ALT Short Diagnostics (SDIAG) command on the S/DMS AccessNode. • Enhance code robustness.

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		BAS00003		This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						Base Card Analysis	This feature will study the hardware and diagnostic software of three or more XPM cards. The cards selected for investigation are (in order of investigation): NT6X72 (RCC Formatter Card), NT6X41 (Base XPM Formatter Card), and NT6X69 (Message Protocol and Tones Card). The results of the study will be used to correct software bugs and deficiencies as well as make recommendations for future enhancements.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1735	Basic 911 and Three-Way Calling Interaction (G0156)	This feature allows a line with the three-way-calling feature to establish a three-way call that involves a Public Safety Answering Point (PSAP) operator. The PSAP must be the second leg of the call. Prior to this feature, a three-way call involving a PSAP could not be made. If a line with the three-way-calling feature was involved in a call, flashed, and then dialed 911, the call would be completed to a PSAP operator. However, a second flash from the three-way-calling line would be ignored, and the other party would be left permanently on hold.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						Call Forwarding Reactivation (old G0045)	This feature allows a telephone subscriber to activate "Call Forwarding" to his or her last "Forwarded To" directory number. The subscriber activates the feature by dialing an access code (e.g., 79). Upon feature activation, the subscriber receives confirmation tone denoting that call forwarding has been properly activated. If the subscriber had not deactivated the previous call forwarding, he or she still receives confirmation tone indicating that call forwarding is active. If there was no previously stored forwarded-to DN, then the subscriber receives 120 IPM treatment.
			BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						Called Party Released Timing Enhancement	This feature provides a new line option, short timed release disconnect (STRD), that frees network resources and results in real time savings for line-to-trunk calls involving the following trunk group types: •equal access (ATC) •intertoll (IT) • super CAMA (SC) • operator (TOPS) • outgoing end office (TO) Before this feature, calls that entail high set-up costs (i.e., real time, call processing resources, etc.) were automatically assigned to the long time release disconnect (LTRD) line option by the DMS software. LTRD is used to keep a call connection up across the network for a specified period of time (usually about 16 seconds) after the terminating party has gone back on-hook from an answered call. The purpose of LTRD is to avoid taking down a call and subsequently having to set the call back up should the terminating party accidentally go on-hook. With this feature, lines that would previously have been automatically assigned to the LTRD option can now be
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						Cancel Call Waiting—Per Line Option	Cancel Call Waiting (CCW) service allows the subscriber to cancel the call waiting function for the duration of one call in order to prevent call waiting tones from interrupting for the duration of the call. CCW can be used effectively to ensure the integrity of data transmissions for home computer users. Activated by flashing the hookswitch and entering the correct code, CCW is automatically deactivated at the completion of the single call, and the subscriber's Call Waiting service is restored. This feature allows the telephone operating company to assign the Cancel Call Waiting feature on either a line-by-line or an office-wide basis. Previously, Cancel Call Waiting could only be assigned on an office-wide basis.

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			BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					NC0202	Carrier Code Expansion (FGB)	This feature permits 9999 unique access codes, rather than the previous 999. The assigned access digits are presently 75 percent full. This increase allows for future growth without changing the present access codes for existing carriers. The current *FGB* access of 950-0/1xxx is replaced with 950-xxx. Offices that need the increased selection capacity can now assign FGB carriers based on a four-digit code. The feature also includes a change in the AMA billing record that increases the *carrier-prefix* field from three to four characters.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					NC0202	Carrier Code Expansion (FGB)	This feature permits 9999 unique access codes, rather than the previous 999. The assigned access digits are presently 75 percent full. This increase allows for future growth without changing the present access codes for existing carriers. The current "FGB" access of 950-0/1xxx is replaced with 950-xxxx. Offices that need the increased selection capacity can now assign FGB carriers based on a four-digit code. The feature also includes a change in the AMA billing record that increases the "carrier-prefix" field from three to four characters.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL0810	CCS7 Call Progress/Comfort Tone (old G0035)	This feature provides the caller with audible tones during the post-dial delay of a CCS7 call setup that requires Service Switching Point database query. The tones inform the caller that the call is in progress, thus reducing abandons and retries due to uncertainty about the progress of the call. The call progress/comfort tones consist of a short burst of two standard HI tones. The sequence normally occurs only once per call but may be heard more or not at all, depending on the length of the post-dial delay. The feature applies tones to Private Virtual Network (PVN), Enhanced 800, and 800 Plus calls and provides a base for future comfort-tone applications. It can be applied on a per-Number-Service-Code basis and (for PVN) on a customer-group basis.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AJ0965	Cold SWACT Recovery on Failures of Planned SWACTs	This feature enhances XPM robustness through early detection of failure of a planned switch of activity (SWACT). If no failure is observed, the SWACT continues as usual. Otherwise, a cold SWACT back is performed immediately, and the newly active unit is returned to service without diagnostics being executed, thus allowing call processing to be restored sooner than it would be if a full Return To Service (RTS) had been performed. The enhancements in this feature are supported by the DTC, LTC, LCC, SMU, SMS, SMR, and RCC peripheral modules. This feature does not enhance unplanned SWACTs.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AN0101	Conventional Timing Requirement	s This feature meets the Bellcore standards for long duration call changes established in TR-TSY-000508 Issue 2, Revision 1. These changes greatly simplify the generation of long-duration call records and allow more flexibility in the record generation time of long-duration calls.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name	Order Code Description	RIs	RIs	MD RIs C	ode	PCID	ACTID	Feature Name	Feature Description
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AN0101	Conventional Timing Requirements	This feature meets the Bellcore standards for long duration call changes established in TR-TSY-000508 Issue 2, Revision 1. These changes greatly simplify the generation of long-duration call records and allow more flexibility in the record generation time of long-duration calls.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AJ0193	Data Integrity Mtnce Fault Sectionalization Automation	Currently the output from a BERP test run is given on a per sortkey basis. The sortkeys are specified by the user on a node type basis. The sortkeys for each node type correspond to typical components found on that node type. For example, the sortkeys on a network node include such components as the cross points, the junctors, and the links. Similarly, typical sortkeys or components on an XPM include such items as the C-side links or the P-side links. With this feature, information on a per card basis is provided for each of the sortkeys specified. In addition, a record is kept of the worst N (where N is a user specified parameter) cards. This list is then output in a summary fashion at the end of the BERP output. The worst cards are determined by the ratio of error calls to total calls made through a particular card. This report is only output if all paths (error and non-error) are traced in the test.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					NC0108	DTSR OM Enhancement	This feature enhances the existing Dial Tone Speed Recording (DTSR) operational measurements (OMs) by counting the number of times that dial tone delay is greater than three seconds and the subscriber goes on-hook without placing a call. The feature is not available for Line Module (LM) or Remote Line Module (RLM) peripherals.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance	5					AF2565	E800 on PBX Trunks	This feature provides the capability to support E800 and 800+ calls from Public Branch Exchange (PBX) trunks without requiring special datafill beyond that needed for existing E800 and 800+ translations. Enhanced 800 Service (E800) and 800 Plus Service (800+) provide 800 services through the Telephone Operating Company Number Service, which requires access to telephone operating company databases. The database query is used to determine call routing as well as other call handling parameters. This feature supports E800 and 800+ calls from POTS lines, as well as from InterToll (IT), SuperCAMA (SC), and TOPS trunks.
	44	BAS00003	BAS Generic	capabilities_local and centralized hillina, and This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					NC0337	E911 Memory Management	This feature makes it easier for the telephone operating company to administer Selective Routing Database (SRDB) memory by providing an operational measurement (OM) that displays statistics on the current amount of datastore used by the E911 SRDB. The OM is output on demand and/or after every initial load of the database, every reload, and every daily update.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities. local and centralized billing, and	5	-				NC0154	End Office—Automated Intercept Call Completion	This feature allows customers to utilize fully the Automated Intercept Call Completion feature by datafilling their particular trunk groups to allows pass answer supervision for intercepted calls.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL0684	Enhanced Fiber Monitoring	This feature allows operating company personnel to use the Maintenance and Administration Position (MAP) to pinpoint transmission faults between the host and DMS Remotes linked by the FMT-150. Enhanced alarm monitoring capability is thus provided for the FMT-150, which can be engineered in a DMS miscellaneous frame and integrated into the DMS lineup. The FMT modules have alarm points that generate contact closures, which initiate major and minor alarms. The FMT alarm points are monitored by scan points located in a DMS remote ends. In addition to relay contact closures for monitoring major and minor alarms, the fibr unit generates discret hard alarms that are combined to provide a single output. These alarms
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and	5					AG0649	Enhanced Line Access Measurements—Part I (old F7275	Adviced loss of clock lases decreade, and optical receive fail. Each EMT-150 unit ic. hese two features work together, adding a number of line access measurements to DMS Extended Peripheral Modules (XPMs), thereby allowing detailed analysis of call rocessing performance in the DMS switching system. Both the central controller CC) and the processor in the message switch can request these measurements rom the XPMs. In addition, reports can be scheduled for generation at regular thervals.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1318	Enhanced Line Access Measurements—Part II	These two features work together, adding a number of line access measurements to DMS Extended Peripheral Modules (XPMs), thereby allowing detailed analysis of call processing performance in the DMS switching system . Both the central controller (CC) and the processor in the message switch can request these measurements from the XPMs. In addition, reports can be scheduled for generation at regular intervals.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced	5					AL0175	Enhanced XPM C-Side Link Diagnostics	This feature improves the hardware fault detection on the control-side links and associated hardware of the Line Trunk Controller and the Line Group Controller. A new diagnostic test for the control-side links has been created. This diagnostic can be run on several links at the same time, resulting in faster return to service action. A two-minute audit provides quicker detection of faults on the service link. In addition, facilities are provided for plane select verification and for verification of the pulse code modulation path by means of pattern and tone checksum.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced	5					AL0475	Enhanced XPM Diagnostic Triggering	This feature improves the diagnostic triggering for in-service fault detection and provides greater coverage for the XPM hardware. With this feature, a new facility audit invokes full set of in-service diagnostics more frequently (normally, once every two minutes). In addition, the in-service diagnostics available previous to this feature have been restructured to perform many of the same extensive tests on one channel that are run on all channels in the out-of-service diagnostics.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and	5					AF1747	Enhanced XPM Perform Tool	This feature allows the craftsperson to gather information detailing performance, usage, and real-time activity on individual in-service enhanced LCMs. Only enhanced XLCM and XRLCM peripheral processors are supported by this feature.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced	5					AJ0964	Enhanced XPM SWACT Management Phase I	This feature enhances XPM SWACT management by: providing the SWACT "when- ready" option to planned warm SWACT, speeding up the Dynamic Data Sync under high traffic conditions after the XPM inactive unit is returned to service, and displaying the number of terminals with calls that may be affected by SWACT operations, thus allowing the user to delay the operation if a high number of terminals with calls will be affected. These enhancements are supported by the following peripheral types: DTC, LTC, LGC, SMU, SMR, SMS, RCC, DRCC, LTCI, DTCI, PLGC, PDTC.

Change In Issue 2					1st NCS	Enk		Banl Ord				
10000 L	4.00	Order Carle	Order Code Name	Order Code Description	NCS Ris	Enh	MD RIs	Repl Ord	PCID	ACTID	Feature Name	Feature Description
			Order Code Name BAS Generic	This functional group along with BASE0001 and This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5	KIS	MD RIS	Code	PCID	AL1541	Expansion of LCD Number to 1000	This feature Description This feature expands the number of available Line Concentrating Devices (LCDs) on a DMS SuperNode from 255 to 1000. In addition, the total number of Remote Carrier SLC-96 (RCS) peripherals that can be attached to a DMS SuperNode is increased from the present 200 to 1000. Prior to this feature, the maximum number of system nodes was 1024. System nodes are made up of network modules (NMs), Input Output Controllers (IOCs), XMS-based Peripheral Modules (XPMs), virtual LCDs, and other nodes in addition to real LCDs. Therefore, the maximum number of LCDs that could be datafilled was less than 1000.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance	5					AF2755	Flexible AMA Software Platform	The features in this package provide a direct digital interface between the DMS SuperNode system and the S/DMS AccessNode—Northern Telecom's new premier SONET-based multiservice access vehicle. Key services provided include: • Residential services, including CLASS • Full range of Meridian Digital Centrex voice and data, including Meridian Business Sets and ISDN BRI/PRI • Two-wire through eight-wire special services • DS-1/DS-3 Wideband Services The S/DMS AccessNode's service-adaptive line cards also enable on-demand service delivery and service changes without the expense of physically changing line cards. The
	44	BAS00003	Bas Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF0965	Improved Coin Service—Local MUMR Service	Cocal Multi-Unit Message Rate (MUMR) service is provided for coin lines in this feature, which permits calls made from a coin station to be billed in Automatic Message Accounting (AMA) records with call codes 001 through 005. The feature also allows the DMS system to prompt for the correct initial coin deposit and all overtime deposits based on the distance dialed for the call and the time of day or day of week the call is made. This feature requires additional recording capability in the DMS switch Digital Recorded Announcement Modules (DRAMs), and a receiver to detect and decode the tones provided by the coin station to indicate the deposit and denomination of coins. Such ability permits more flexible service offerings by the telephone companies in the area of coin service.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF5722	Interchangeable NPA	With the introduction of interchangeable NPAs, the requirement that the middle digit be a zero or a 1 is removed. This feature increases the number of NPAs that can be datafilled in table FNPACONT (Foreign Number Plan Area Control), by expanding the table from 160 to 800. This helps enable interchangeable NPA capabilities in end offices and access tandems.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL0944	ISDN Loop Maintenance Enhancements	This feature improves loop maintenance by: Allowing Automatic Line Testing (ALT) of ISDN Alternate Mark Inversion (AMI) loops. Extending Bit Error Rate Testing (BERT) to idle ISDN B channels. Displaying the connected party and the Logical Terminal Identifier (LTID) when a busy B channel is posted. Automatic Line Testing includes extended diagnostics, short diagnostics, and line-insulation tests. Extended diagnostics can only be used on idle lines. Short diagnostics do not affect service, and can be performed on a busy line. The line-insulation test also disrupts service through operation of the cutoff relay.

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13306 2		Orden Orde	Onder Onde Name	Orden Orde Description	NCS Ris		MD RIs	Repl Ord	PCID	ACTID	Feature Name	Facture Description
			Order Code Name BAS Generic	Order Code Description This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5	KIS		Code	PCID		Key Pad Enable	Feature Description This feature provides a means of additional data collection for coin calls by re- enabling the key pad (without external input from the coin station) once the switch has determined that the call is supported on an Access To Carrier (ATC) or an Inter-Toll (IT) trunk. Previous to this feature, the coin station key pad was disabled as soon as all of the called digits had been received and translated, prohibiting the collection of additional data (e.g., credit card or other call routing information) from the coin station.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1647	LCM Takeover/Takeback Enhancement	This feature minimizes the dropping of voice and data calls in the event of a Line Concentrating Module (LCM) switch of activity (SWACT) initiated by the central controller (CC). This enhancement to the LCM Takeover/Takeback mechanism is accomplished by substantially reducing the time during which the Pulse Code Modulation (PCM) transmission path is broken as activity is transferred between processing units. The Extended LCM processor is required to implement this feature.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AD4733	LEC Bellcore Billing	This feature provides Bellcore-standard billing for Dialable Wideband Service calls and provide preparatory work for private virtual network (PVN) billing in compliance with Bellcore TR-1203 requirements for Local Exchange Carriers.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					NC0109	Line Card Monitor	This feature enhances existing diagnostics and maintenance procedures by providing the switch with the capability to analyze lines that are faulty and to see whether the fault is caused by foreign line voltages or by insufficient loop resistance. If lines are identified as hazardous, the DMS operates the cut-off relay in the line card, physically isolating and protecting the card from the line. This feature provides the cut-off relay capability for Type A, Type B, and EBS line cards. Cut-off capability for data line cards is not provided in this feature.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1750	Line Load Control—Phase II	This feature enhances the current Line Load Control (LLC) capability by providing the ability to activate or deactivate LLC for all sites connected to the host office. With this feature, sites can be controlled independently of the host office.

Change In Issue 2					1st	Enh		Bank Carl				
		Order Code	Order Code Name	Order Code Description	NCS Ris		MD RIs	Repl Ord	PCID	ACTID	Feature Name	Feature Description
			Order Code Name Bas Generic	This functional group along with BASE0001 and This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5	KIS	MD RIS	Code	PCID	AF1750	Line Load Control—Phase II	This feature onhances the current Line Load Control (LLC) capability by providing the ability to activate or deactivate LLC for all sites connected to the host office. With this feature, sites can be controlled independently of the host office.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1756	LTG Capacity Increase	This feature increases from 64 to 256 the maximum number of Line Treatment Groups (LTGs) that can be assigned. This increase allows telephone operating companies more flexibility in discriminating among customer lines having different routing or screening patterns, but having the same Line Class Code (LCC). Line Treatment Groups are used in conjunction with LCCs in distinguishing among specific entries in the Line Attribute (LINEATTR) table. Using different LTG values along with a given LCC, it is possible to provide varying line attributes to different subscribers within a single switching entity.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF2087	Network Management Signal Distribution Table Rewrite	This feature allows the telephone operating company to adjust the number of Signal Distribution Points, or alarms, required to monitor capabilities and features as they are added to or deleted from the switch. The NWMSD table and its sub-table NWMSDPT identify the function of each alarm. Before this feature, the memory allocation for data store for these tables was limited to 32 tuples. When offices exceeded this static size limit, it was necessary to apply a patch in order to increase the table size. This method of expansion was inconvenient and expensive. This feature greatly improves the process by allowing dynamic allocation of memory, so that each site uses only as much data store as is necessary for the table. In addition, new table controls allow the table to be increased or reduced to meet the changing needs of the office.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AD0943	Office Line Totals/QNOS	This feature provides an enhancement to the office line totals utility, located in the ALMSTAT level of the Maintenance and Administrative Position (MAP). A new service order command provides a summary of the Network Class of Service (NCOS). The ALMSTAT utility has also been enhanced to include the line totals of Meridian Business Sets. The new service order command, QNCOS, provides the capability of counting terminals by NCOS.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					NC0033	Operational Measurements for XPM Links	This feature provides additional operational measurements (OMs) for several LGC- related XPMs: • Line Group Controllers (LGCs), • Line Trunk Controllers (LTCs), • ISDN Line Group Controllers (LGCs), and • Subscriber Carrier Modules (SCMs) The additional OMs assist telephone operating company personnel in engineering DMS offices and include: • Two-way usage, • Maintenance busy usage,

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					NC0322	PM 180 Clean Up	This feature streamlines DMS maintenance by separating logs into hardware and software exceptions and providing a new PM log that explicitly reports hardware abnormalities—reducing the number of PM180 logs generated by the DMS. Descriptive text that increases the craftsperson's ability to determine if a trouble exists and what corrective action needs to be taken is also provided with each log.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AN0337	P-Side Loop Around Test	The purpose of this feature is to reduce XPM (including XPM PLUS and CPM) outages by enhancing P-side loop allocation and appropriately isolating and tolerating facility P-side loops.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF2668	RCU Line Configuration	This feature reduces capital costs and operating expenses by enabling the telephone operating company to defer installation of DMS-1U line cards until service is required at the remote site. The feature suppresses unwanted alarms associated with unequipped line card slots by way of an initial datafill option. Standard Service Order (SERVORD) procedure is not affected.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1957	RDT Table Control	This package enables the Subscriber Carrier Module-100 Access (SCM-100A) to provide a direct digital interface between the DMS SuperNode system and the S/DMS AccessNode—Northern Telecom's Next Generation Digital Loop Carrier (NGDLC). The SCM-100A, when integrated with the S/DMS AccessNode, provides a full range of business and residential services. From a single S/DMS AccessNode NGDLC, network providers can offer Meridian Digital Centrex (MDC), voice and data services including Meridian Business Set (MBS) service, Datapath, National ISDN-1 (NI-1), Custom Local Area Signaling Services (CLASS), two- to eight-wire special services, DS-1/DS-3 wideband/broadband services, and more—increasing revenue opportunities for network providers. When integrated with a DMS switch, the S/DMS AccessNode provides the capacity, reliability, and availability that large business customers expect from high end data and broadband applications—with such strategies as: line card sparing, survivable net
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with witch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1395	Reduced LCM Ringing Delay	With this feature, the "normal delay" possible for Line Concentrating Modules (LCMs) is reduced from 2-4 seconds to < 1 second, thus permitting the application of ringing current to the called line within 1 second of the attachment of the incoming call to the line. This feature provides near synchronized ringing in DMS switching systems.

Issue 2

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			Order Code Name BAS Generic	Order Code Description This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized biling, and computing module support for other services.	8 15 5	RIS	MD Ris Code	PCID	ACTID AF5008	Feature Name REX/SWACT Improvement	Feature Description This feature creates the PM600 REX Failed log produced upon REX failure. The log is a record of each maintenance action performed during REX, the XPM unit impacted, and the time each action began. The log includes the failure reason and, if applicable, supplemental data consisting of the filed diagnostics and card list reported by the XPM. The feature significantly reduces the number of logs produced during REX.
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	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF3078	Timing Irregularity Compliance	This feature provides the billing capabilities required for compliance to National ISDN 1 standards. It enhances the existing DMS billing capability for ISDN to allow the operating company to bill for the level of service provided (i.e. based on the Bearer Capability of the call—one rate for "Speech" another rate for "64 kbps Unrestricted") and out-of-band signaling (i.e. High Layer / Lower Layer Compatibility, Calling / Called Sub Address). This is the first phase of delivery of ISDN circuit-mode Bellcore-format AMA as described in TR-862. The billing capabilities that this feature introduces are: ISDN Core Module, ISDN Terminating, User Service Module Billing on the basis of signaling capability usage.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF3078	Timing Irregularity Compliance	This feature provides the capability to record the nearest known elapsed time after an established call is abnormally released, without overbilling the customer or carrier. The first BCD character of the Timing Indicator, Table 7, will be set with a value of 2. The Single Time Line, Charge Guard, and Time Stamp Error flags have been removed from the Timing Indicator data field. Key areas incorporated by this feature include the optional removal of Minimum Charge Duration (MCD) in timing calculations, a new underbilling requirement of 500 msec, and new accounting procedures for time-of-day or date adjustments.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AG2343	TR-862 AMA Compliance Packet	This feature integrates packet billing into the existing DMS AMA billing subsystem, providing the necessary capabilities to meet the packet AMA requirements outlined in National ISDN 1 standards. Billing data is extracted or derived from a number of data structures at different stages of the call. The billing data is filled into the Recording Unit at different stages of the call and then dispatched to the formatter under the following criteria : 1. An exit message received from either the originating or the terminating agent. 2. A midnight message for calls that have been up for more then 24 hours. 3. An intermediate update message to report billing information. 4. CM maintenance call takedown. Type 1 detailed recording uses Bellcore format.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF3556	TR-862 AMA Compliance—Circuit	This feature provides the billing capabilities required for compliance to National ISDN 1 standards. It enhances the existing DMS billing capability for ISDN to allow the operating company to bill for the level of service provided (i.e., based on the Bearer Capability of the call—one rate for "Speech" another rate for "64 kbps Unrestricted") and out-of-band signaling (i.e., High Layer / Lower Layer Compatibility, Calling / Called Sub Address). This is the first phase of delivery of ISDN circuit-mode Bellcore- format AMA as described in TR-862. The billing capabilities that this feature introduces are: ISDN Core Module, ISDN Terminating User Service Module, Billing on the basis of signaling capability usage.

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	44	BAS00003	BAS GENERIC	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1665	(old F7393)	This feature adds the capability for AMA records to distinguish between the two types of calls that are classified as unanswered: calls that are truly unanswered, and calls that are actually answered but that are Under Minimum Charge Duration (UMCD). Currently, calls that are answered but under the Minimum Charge Duration, which is normally about 2 seconds, are classified as unanswered. AMA records of unanswered calls and UMCD calls are identical. Based on customer input in table AMAOPTS, AMA recording can be enabled for certain call types, such as unanswered local calls, high revenue calls, and local coin calls. When unanswered calls are requested to be recorded, UMCD calls are also recorded.
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	44	BAS00003	Bas Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1093	Calls	This feature allows telephone operating companies to designate a Meridian Digital Centrex Virtual Facility Group (VFG) as a Foreign Exchange (FX) or Electronic Tandem Switched (ETS) facility and allows Bellcore Automatic Message Accounting (AMA) records to be generated for calls routed over these types of facilities to or from a VFG. Prior to this feature, VFGs could be designated only as Tandem Tie- Trunk (TDMTT) and Common Control Switching Arrangement (CCSA) facilities.
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	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF5006	XPM Diagnostics History	XPM Diagnostics History captures diagnostics results which are an indicator of the SPM's health. Diagnostic failure counts and card fault counts are stored for each XPM unit. The data is used by the XPM Pre/Post SWACT feature to help determine if an XPM SWACT is advisable. The data is also available via MAP commands to aid in maintenance activities and outage analysis.
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	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF4826	XPM Load Time Enhancement	This feature decreases the time required to load an Extended Peripheral Module (XPM). The size of the load file is decreased through compression, decreasing the amount of time required to transmit the load to the XPM. The XPM will then expand the load file to its full size upon receipt.
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	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF5007	XPM Pre/Post SWACT Audit	This feature reduces XPM outages by enhancing the pre-Switch of Activity (SWACT) controller, creating a centralized CC SWACT-Back capability, creating a post- SWACT audit, and implementing a SWACT-Back capability. This feature enhances XPM SWACT by denying the SWACT if the inactive unit is deemed unreliable. This feature also checks to see if the newly active unit can communicate after a SWACT and provides a SWACT-Back to the original active unit if the unit cannot communicate with the front-end central controller.
	44	BAS00003	BAS Generic	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF2583	XPM RTS Enhancements	This feature offers an improved return-to-service (RTS) sequence by reducing the time of the RTS for any Extended Peripheral Module (XPM) unit that is found at Read Only Memory (ROM). This feature eliminates excess messages and initializations for: an XPM that has been loaded and RTSed by means of the RECOVER command, the system RTS of an XPM unit with a corrupted load, and the RTS of an inactive XPM unit at ROM level with Out-Of-Service tests.
	44	BAS00004	BAS Generic-OAM	This feature provides optional time-saving OAM features to simplify maintenance procedures and reduce the time and effort required to implement new features.	5				AJ1056	OSS Interface Enhancement—ITALK Command	This feature provides a new command—ITALK—that enhances the flexibility of the operating company's OSS by enabling the OSS to use any syntax to talk to the DMS. The command tells the switch to "talk" to the OSS using the user-designated release. To provide additional flexibility, the command can be invoked multiple times during the same session to take advantage of features in the current load that the OSS has been modified to accept, and then toggled—by invoking the ITALK command again—back to previous releases. By reducing the dependence of new feature implementation on load schedules, this feature increases the flexibility with which operating company marketers can introduce new features. In addition, the ITALK command can reduce expenses by simplifying operating and administration procedures. The valuable QCUST command is also now offered. QCUST can be used to upload a customer's line/station data by querying a customer or customer group with a single command. QCUST also provides a single command request for all incremental changes made since the last database synchronization. This command A new attribute of the QLEN feature also included in this offering enables the retrieval (equipment number (LEN) assigned to a station. The DN is now accepted as a valid in
	44	BAS00004	BAS Generic-OAM	This feature provides optional time-saving OAM features to simplify maintenance procedures and reduce the time and effort required to implement new features.	5				AJ1266	OSS Interface Enhancement—QCUST Command	This feature implements the valuable QCUST command. QCUST can be used by the operating company to upload a customer's line/station data by querying a customer group on the DMS with a single command. QCUST also provides a single command request for all incremental changes made since the last database synchronization. This command provides an excellent means for an OSS to remain current with the subscriber's station-change activity. A new attribute of the QLEN feature also included in this offering enables the retrieval of all features assigned to a directory number (DN) without requiring the user to know the line equipment number (LEN) assigned to a station. The DN is now accepted as a valid input parameter of QLEN.

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	44	BAS00007	BAS LOGS	This feature reduces the number of log messages received at a surveillance operations system (OS) by analyzing certain LINE log messages and outputs only those messages that indicate current or potential troubles.	5						Line Log Reduction	This feature reduces the number of log messages received at a surveillance operations system (OS) by analyzing certain LINE log messages and outputs only those messages that indicate current or potential troubles.
	28	BAS00009	BAS RSC-S	This feature supports the Extended Distance Capability (EDC) operation of the RSC-S switch remote at greater distances from the host office and extends the distance to about 500 miles over copper-based facilities with the actual distance based on transmission delay limits.	5						Extended Distance Capability	This feature supports the Extended Distance Capability (EDC) operation of the RSC- S switch remote at greater distances from the host office and extends the distance to about 500 miles over copper-based facilities with the actual distance based on transmission delay limits.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5	6				AF0993	800 Call Handling Block Support	This feature increases traffic handling capacity of the Remote Switching Center-S (RSC-S) by increasing the number of call handling blocks (required for originating and terminating intra-remote calling) from 512 to 800. With this feature, service providers with a single RSC-S and 20% intra-remote calling could experience an improvement in the traffic capacity of the RSC-S of approximately 30%.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5					AF2798	CC Call Processing for RCC Warm ESA—Phase II	These packages/features support RSC Warm Entry/Warm Exit to ESA. With Warm Entry/Warm Exit, all survivable (i.e., established; not in setup stages) inter- and intraswitched calls are preserved during both ESA entry and exit. ISDN calls remain Cold Entry/Cold Exit in this phase. During a Cold Entry/Cold Exit, calls in progress are dropped as the RSC enters the ESA mode. For a full advance-planning overview of the RSC offering, including its evolution to support FiberWorld, see the Remote Switching Center Planner (50022.16/06-91), obtainable through your regional Northern Telecom representative.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5					AF4218	Central Controller Support of Unified Processor on the RSC	The combined features of this package provide support for the Unified Processor on the Remote Switching Center.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5					AG1159	CLASS Modern Resource on Remote Switching Center	This feature enhances the operation of Calling Number Delivery (CND) on a Remote Switching Center (RSC) by providing for the intraswitching of CLASS CND calls within the RSC. The CLASS subscriber requires a telephone with display capability to receive and display the calling directory number. The RSC requires the following hardware: Extended Line Concentrating Module (LCM) Processor circuit packs in the LCM serving the subscriber. CLASS Modern Resource (CMR) circuit packs mounted in the Remote Cluster Controller (RCC) serving the LCM.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5					AF2791	CPM Basic RSC Applications Support	The combined features in this package provide basic functionality for the RSC-S, a major evolution to the RSC that brings the advantages of the FiberWorld vision to remote switching. Equipped with an enhanced 68020-based Remote Cluster Controller (RCC2), the RSC-S provides the following key benefits (see figure below): Increased capacity—up to 12,000 lines at 3.0 ccs per line—to minimize the per-line costs of delivering both residential and business applications, including ISDN. Seamless growth from as few as 200 up to 12,000 lines. Also efficiently upgrades to a standalone DMS SuperNode system, thus protecting the operating company's investment and simplifying network planning for the future. SONET interface that increases network reliability, widens the path back to the host, and provides increased capacities. Cost effective field upgrade for existing RLCMs and RSCs. This package, NTXP92AA, provides basic RSC-S capabilities for use with a DS-1 interface. Optional RSC capabilities, such as intraswitching, dual RCC, ISDN, etc., can be added by installing the same packages for RSC-S as would be required for RS
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5	6				AF0554	Intra CND Without Host Channels	This software shortens the time that the host link and host resources are used for Call Number Display (CND) intra-remote calls by releasing the host channel immediately after the RSC-S receives all the CND information. This feature has the potential to improve RSC-S traffic up to 40%, depending on the penetration of CND and intra-calling.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs Code	PCID	ACTID AF2659	Feature Name RCC Warm ESA High Level	Feature Description
		1	BAS Remotes Generic BAS Remotes Generic	This feature provides the software interface for This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5				AF2659 AF4328	RCC2 Dual Warm Exit	The RSC emergency stand alone (ESA) option improves network survivability and This feature permits a warm exit to Emergency Standalone (ESA) operation for the dual RCC2 configuration. All inter- and intra-switched calls not in setup stages are preserved in the transition to ESA operation.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5				AF4319	RCC2 Provisionable EISP	With this feature the Enhanced ISDN Signaling Processor (EISP), previously shipped as standard equipment, becomes a provisionable circuit pack. This lowers RSC equipment expenses for sites that will not be offering ISDN.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5				AF2701	RSC—Fast Cold Exit Driver and Instant RTS of Lines	With Warm Entry/Fast Cold Exit, survivable (i.e., established; not in setup stages) inter- and intraswitched calls are preserved on warm entry of the RSC into ESA. The active unit is brought into service within one minute. A full Return-To-Service (RTS) is done on the inactive unit.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5				AF2702	RSC—Instant RTS of Links for Fast Cold Exit	When the RSC exits ESA, new calls can be established after one minute, although calls in progress are lost upon exit.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5				AF2865	RSC—Instant RTS of Nodes for Fast Cold Exit	ISDN calls remain cold entry/cold exit in this phase.
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5				AF4853	RSC-S ESA National ISDN-1 Call Control	This software provides RSC-S compliance with Northern Telecom's offering of National ISDN-1 for the following: • Functional Call-Control Signaling (basic call)
	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S,	5				AN0191	RSC-S National ISDN-1 Host Compliance	This feature provides Remote Switching Center-SONET (RSC-S) compliance with Northern Telecom's offering of National ISDN-1 (NI-1) as described in the ISDN Basic Rate Access User- Network Interface Specification (NIS S208-6 issue 1.0) for the following: Signaling (basic call) Supplementary Services
Added	28	BAS00012	BAS Remotes Generic	This feature provides the software interface for all DMS Switch Remotes, including the RLCM, OPAC, RSC, and RSC-S. In NCS10, this feature provides software support for the new Star Remote Hub.	5	10		13077	AF7417, AF7419, AF7421	Star Remote System-Hub	This software provides Computing Module support for the Star Remote Hub. As the center of the new DMS Star Remote System, the Hub provides a cost-effective, switch-based remote that can support over a thousand lines for network providers wanting to leverage their investments in DMS remote hardware and training. The Star Remote Hub features include: • Small footprint offers a single frame that supports up to 1,152 lines • Small footprint offers a single frame that supports up to 1,152 lines • Extended Distance Capability — as a standard feature (no licensing necessary) — enables the Hub to be placed approximately 650 miles from the DMS switch when the round trip message delay with the host does not exceed 13 milliseconds • Expanded service supports 16 Host DS-1 links offering 10 ccs traffic capacity — at zero percent intraswitching • Flash memory for quick emergency recovery • Integrated operations, administration, maintenance, and provisioning (OAM&P) with the DMS SuperNode system • Intraswitching of calls within the Star Remote Hub to minimize Host DS-1 traffic • Emergency Stand Alone capability to support calls should the Host DS-1s all be cut • ISDN support using the ISDN Line Drawer for Remotes (ILDR)
	28	BAS00015	BAS RSC-S Sync	This feature provides synchronization for the RSC-S from the building integrated timing supply (BITS) clock. The RSC-S accepts primary and backup DS-1 synchronization sources from the BITS clock, over two existing peripheral-side ports.	5				AN1167	RSC-S Integrated Timing Supply I/F	This feature provides synchronization for the RSC-S from the building integrated timing supply (BITS) clock. The RSC-S accepts primary and backup DS-1 synchronization sources from the BITS clock, over two existing peripheral-side ports. While T1-derived synchronization is adequate for speech, an external BITS clock- serving as a standalone Stratum sync source-is required to ensure high quality data services, as described in Bellcore TR-1244. Operating separately from the switching and transmission networks, the BITS clock enhances network transmission quality by reducing slips (data transmission errors) and by maintaining network timing during Emergency Standalone periods.

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF4860	ABBT Support for SMS-R Lines	When a new DMS is brought into an office to replace an analog or earlier vintage digital switch, there needs to be a verification that all the subscriber terminals are identified with the same directory number as the old office. This feature shortens the time required to complete this task, and reduces the likelihood of errors, by automatically performing this verification with Automatic Board to Board Testing (ABBT) in the SMS-R. This capability is functionally identical to ABBT already available in the SMS.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF4310	ESMU Base Support of UTR Card	These features enable the SMU to support the NT6X92BB Universal Tone Receiver (UTR) card that replaces the Digitone receivers in the Maintenance Trunk Module. This migration improves switch efficiency and adds capability for future CLASS services—such as Caller ID on Call Waiting—compliant to TR-NWT-000030 Issue 2 and NT-NWT-000575 Issue 1.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF3673	ESMU ISDN Call Processing	As a group, these features extend Meridian Business Set (MBS) and ISDN services to the enhanced Subscriber Carrier Module-100 URBAN (ESMU—the DMS-1 URBAN is the industry's first RDT to offer these services).
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF4250, AF5379, AF5437, AF5438	ESMU ISDN Digital Test Access S	These features extend support on the Enhanced Subscriber Module-100 URBAN of Digital Test Access (DTA) capabilities to Basic Rate ISDN lines terminating on the DMS-1 Remote Carrier URBAN. With this software, the network provider can monitor circuit-switched B channels and B-channel packet data connections of a BRI loop terminating on the URBAN. DTA references Bellcore TA-783 Section 5.1.2.1 and Section 5.1.2.2.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF3680	ESMU ISDN/MBS Line Provisioning	As a group, these features extend Meridian Business Set (MBS) and ISDN services to the DMS-1 URBAN. ISDN on the SMU will provide all user services prescribed by National ISDN 1 standards.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF1733	Flow Controls for SMS	This feature expands the telephone operating company's ability to provide essential service protection to public-service lines served by the SMS. It ensures that essential lines in the SMS receive preferential dial tone at all times, particularly during overload. In addition, the feature provides various alarms, logs, and operational measurements (OMs) to indicate when the SMS enters and exits overload. This capability is provided by implementing Origination Flow Control so that when the SMS goes into overload, flow control guarantees that essential-line originations receive priority over originations from non-essential lines. Until now, this capability was only provided for DMS host lines.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF1734	Flow Controls for SMU	This feature expands the telephone operating company's ability to provide essential service protection to public-service lines served by the SMU. It ensures that essential lines in the SMU receive preferential dial tone at all times, including periods of overload. During overload conditions, various alarms, logs, and operational measurements (OMs) are provided, and flow control software guarantees that essential-line originations continue to receive priority over originations from non- essential lines. Until now, this capability was only provided for DMS host lines.

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
			BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2983	Integrated Line Test with DRTU	This feature extends the flexibility with which operating companies can test lines that terminate on a DMS-1 Urban. By supporting a standard Northern Telecom #3704 Digital Remote Test Unit (DRTU) at the remote site, the feature allows the full capabilities of DMS subscriber line testing (as presently provided by a Line Test Unit, or LTU) to be extended to the DMS-1U—without requiring a metallic-bypass test pair. As a totally integrated solution, DRTU functions are controlled by standard DMS Line Test routines, accessible from the DMS MAP terminal.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2671	Integrated Local Specials Enhancement	This feature provides support of the new DMS-1 Urban 2-Wire Special Services line card for the following special service applications: Teletypewriter exchange lines (TWX), INWATS lines, OUTWATS lines, and Private branch exchange (PBX) lines. Both loop-start and ground-start modes of operation are supported.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AN0463	MX77 for SMS	This feature delivers XPM PLUS capabilities for the Subscriber Carrier Module-100S (SMS), the DMS- integrated digital interface for TR-008 digital loop carriers. XPM PLUS enhances the SMS by providing additional real-time capacity and 8 megabytes of memory—almost twice that of the current processor—to enable network providers to keep pace with the features and capabilities demanded in today's network. The XPM PLUS processor, called the Unified Processor (NTMX77), replaces the existing processor and memory, combining the functions of the current XPM Processor, Signaling Processor Memory, and Master Processor and Memory.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AN0465	MX77 for SMS-R	This software delivers XPM PLUS capabilities for the Subscriber Carrier Module-100 Remote (SMS-R), the integrated digital interface between the Remote Switching Center (either RSC or RSC-S) and TR-008 digital loop carriers. XPM PLUS enhances the SMS-R by providing additional real-time capacity and 8 megabytes of memory—almost twice that of the current processor—to enable network providers to keep pace with the features and capabilities demanded for today's network. The XPM PLUS processor (NTMX77)—or Unified Processor—replaces the existing processor and memory, combining the functions of the current XPM Processor, Signaling Processor Memory, and Master Processor and Memory.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF4935	New Tuple to Identify Equipment Lo	This feature streamlines maintenance tasks by adding the capability to datafill the location (address) of a Remote Carrier URBAN (RCU) in the DMS and display the location information for each RCU in the PM128 log report. Table RCUINV now contains a new 32-character field that can be used to contain the address of each RCU.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF4936	New Tuple to Identify Equipment Location (RSC)	This feature streamlines maintenance tasks by adding the capability to datafill the location (address) of a Remote Switching Center in the DMS and display the location information for each RSC in the PM128 log report. Now table RSCINV contains a new 32-character field that can be used to contain the address of each RSC/RSC- SONET.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs C	ode	PCID	ACTID	Feature Name	Feature Description
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2256	RCU 4-Wire Special Service (CC)	These two features reduce the cost of delivering special services from the SCM- 100U by supporting the new 4-Wire Special Service card located at the DMS-1 Urban. The features provide the ability to: access the Maintenance and Administration Position (MAP), provision new line card inventory data, download inventory data changes to the SCM-100U, and handle new alarm information.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2253	RCU 4-Wire Special Service (PP)	These two features reduce the cost of delivering special services from the SCM- 100U by supporting the new 4-Wire Special Service card located at the DMS-1 Urban. The features provide the ability to: access the Maintenance and Administration Position (MAP), provision new line card inventory data, download inventory data changes to the SCM-100U, and handle new alarm information.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2672	RCU Line Test Processor	This feature reduces maintenance costs on the SCM-100U by supporting Northern Telecom's new Line Test Processor unit (NT4A16AA) introduced on the DMS-1 Urban. On a routine basis, the new Line Test Processor unit tests subscriber lines, stores test results, and forwards the data to an external operating company operations support system.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF4309	SMS Support of UTR	This package enables the Subscriber Carrier Module-100S (SMS) to support the NT6X92BB Universal Tone Receiver (UTR) card that replaces the digitone receivers in the Maintenance Trunk Module. This migration improves switch efficiency and adds capability for future CLASS services—such as Caller ID on Call Waiting—compliant to TR-NWT-000030 Issue 2 and NT-NWT-000575 Issue 1. Equipment required for these services include: the UTR, special customer premise equipment, and the NT6X78AA Class Modern Resource (CMR). AF4310 and AF4495 are standard for package NTX387AC in BCS35.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					BC2153	SMS-R Basic Maintenance—CC	These features allow the telephone operating company to perform basic maintenance functions for the SMS-R and subtending TR-008 DLC systems currently supported by the Subscriber Carrier Module-100S. Software commands supported by this feature are: LoadPM, RTS, TST, and QueryPM.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					BC2153	SMS-R Basic Maintenance—CC	These features allow the network provider to perform basic maintenance functions for the SMS-R and subtending TR-008 RDT systems currently supported by the Subscriber Carrier Module-100S. Software commands supported by this feature are: LoadPM, RTS, TST, and QueryPM.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF0164	SMS-R Basic Maintenance—XPM	These features allow the telephone operating company to perform basic maintenance functions for the SMS-R and subtending TR-008 DLC systems currently supported by the Subscriber Carrier Module-100S. Software commands supported by this feature are: LoadPM, RTS, TST, and QueryPM.

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			Order Code Name BAS SCM/SMS/SMU	Order Code Description This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	<u>Ris</u>	RIs	MD RIS	Code	PCID		Feature Name SMS-R BERT Functionality	Feature Description This feature reduces the time needed to troubleshoot minor problems with bit error rate performance for call paths that use the SMS-R. Performance monitoring and fault isolation are enabled for SMS-R DS-30As, DS-1s, and external loopbacks.
28	8 1	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF1794	SMS-R Call Processing II	This feature reduces outside plant expenses and conserves host resources by providing intraswitching capabilities for the SMS-R. Intraswitching allows calls between subscribers served by the SMS-R and the host RSC to be switched without using DS-1 links back to the host DMS, except for initial call setup. This feature also complements SMS-R ESA Maintenance (AF1791) by allowing calls to be intraswitched when the RSC is in the ESA mode.
28	8 1	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF0163	SMS-R Call Processing—XPM	The combined features in this package provide a direct digital interface between the Remote Switching Center and TR-008 compliant Remote Digital Terminals (RDT). Each SMS-R supports up to six TR-008 compliant RDTs (see the figure below). An RSC or RSC-S with a full complement of nine SMS-Rs can support up to 54 RDTs in mode II and mode III operation, or up to 36 RDTs in mode I operation. The SMS-R enhances the ability of the RSC and RSC-S to deliver DMS host features cost effectively to subtending RDT subscribers by eliminating the need for the RDT control terminal, associated RSC Line Concentrating Modules (LCMS), and additional DS-1 links back to the DMS host. The SMS-R further enhances the network provider's ability to deploy the RSC as a cost-effective community dial office replacement.
28	8 6	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF4308	SMS-R Enhanced C-Side Maintenance	This feature provides enhanced detection of SMS-R control side (C-side) link loss, and provides an indication of the number of active calls on an SMS-R control side link prior to manually busying the link.
28	8 1	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF3377	SMS-R Enhanced Maintenance	This feature enhances SMS-R maintenance by providing: Dynamic Static Downloading, which allows lines to be added or deleted to an existing digital loop carrier or SMS-R without disrupting service to existing lines, RCC Warm Entry/Fast Cold Exist, which provides Phase I ESA enhancements to lines served by the SMS-R Support for XBERT, which provides XPM-based bit error rate measurement tools to use during installation or for fault isolation with high speed data applications, and Enhanced Call Waiting Tone, which optimizes real-time usage at the switch
28	8 1	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF1791	SMS-R ESA Maintenance—CC	These features together reduce maintenance costs and improve system reliability by enabling the SMS-R and its subtending DLCs to continue service if the link from the host to the RSC is lost. The operating company thus avoids the expense of responding to call reports from subscribers if the RSC is forced into the Emergency Stand Alone (ESA) mode. Additionally, the feature allows maintenance personnel to perform a manual entry/exit to and from the ESA mode and to download static data at a time convenient to the telephone operating company.
28	8	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF1790	SMS-R ESA Maintenance—XPM	These features together reduce maintenance costs and improve system reliability by enabling the SMS-R and its subtending RDTs to continue service if the link from the host to the RSC is lost. The network provider thus avoids the expense of responding to call reports from subscribers if the RSC is forced into the Emergency Standalone (ESA) mode. Additionally, these features allow maintenance personnel to perform a manual entry/exit to and from the ESA mode and to download static data at a time convenient to the network provider.

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				Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	28	BASOO	016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2490	SMS-R MDC Support	This feature enables SMS-R lines to support Meridian Digital Centrex features on 500/2500 sets and attendant consoles. The feature set support is the same as that currently provided on the Subscriber Carrier Module-100S.
	28	BAS00	016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2528	SMS-R New Messaging	This feature provides new messaging software to support the SMS-R control-side (C- side) architecture. The C-side interfaces (NT8X18s) are arranged in a normal XPM configuration in which both the active and the inactive unit interfaces are active, and each interface is dedicated to a plane. The interface cards are connected to both control sections for reliability, but are only controlled by the active unit. There are either one or two links to each NT8X18 interface, providing the SMS-R with two to four DS-30A C-side links to the RCC.
	28	BAS00	016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2528	SMS-R New Messaging	This feature provides new messaging software to support the SMS-R control-side (C- side) architecture. The C-side interfaces (NT8X18s) are arranged in a normal XPM configuration in which both the active and the inactive unit interfaces are active, and each interface is dedicated to a plane. The interface cards are connected to both control sections for reliability, but are only controlled by the active unit. There are either one or two links to each NT8X18 interface, providing the SMS-R with two to four DS-30A C-side links to the RCC.
	28	BASOO	016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF3721	SMS-R Off RCC2 Configuration	This feature allows the SMS-R to be deployed with the RSC-S, Northern Telecom's new enhanced RSC configuration.
	28	BAS00	016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2678	SMS-R Operator Verification	This feature enhances the operating company's ability to monitor TR-008 digital loop carrier lines that subtend off the RSC through an SMS-R. By way of a conference circuit to RSC lines, the operator can check the status of DLC circuits by listening for a quiet line, a conversation announcement, or other indicators.
	28	BASOO	016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2678	SMS-R Operator Verification	This feature enhances the network provider's ability to monitor TR-008 Remote Digital Terminal lines that subtend off the RSC through an SMS-R. By way of a conference circuit to RSC lines, the operator can check the status of RDT circuits by listening for a quiet line, a conversation announcement, or other indicators.
	28	BAS00	016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF3622	SMS-R Overload Control/ESP	This feature ensures that essential services can be supported on SMS-R lines by providing preferential dial tone to essential lines, such as public-service lines, during an overload situation.

Change In Issue 2					1st NCS	Enh	Repl Ord				
			Order Code Name BAS SCM/SMS/SMU	Order Code Description This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	RIs 5	RIs	MD RIs Code	PCID		Feature Name SMS-R Provisioning and MAP	Feature Description This feature provides an easy way for the operating company to provision the SMS-R as well as access to maintenance functions from the MAP. In addition to the commands supported by SMS-R Basic Maintenance CC, the following maintenance commands can be performed by posting the SMS-R at the PM level of the MAP: TRNSL, BSY, OFFL, DISP, and SWACT.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5				BC2147	SMS–R Serving Lines Support—CC	These features provide the software necessary to implement TR-008 DLC line support in the SMS-R environment by allowing the operating company to assign Remote Switching Center lines and to perform maintenance functions from the host DMS through the RSC and SMS-R to a subtending TR-008 DLC.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5				AF3663	SMS-R Warm RCC Exit—CC	This feature enables SMS-R lines to preserve established calls when the RSC enters or exits Emergency Standalone (ESA) for non-ISDN calls.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5				AF2676	SMS-R Warm SWACT—CC	Together, these features increase service reliability for subtending SMS-R subscribers by maintaining established calls when the SMS-R switches processor control. SMS-R Warm Switch of Activity (SWACT) allows the inactive unit of the SMS- R to maintain established calls (calls in the talking state) and to process new calls when it takes control of the SMS-R in a SWACT with its mate. When established calls are maintained in this manner, the process is known as warm SWACT. Calls that are in a transient state—such as dialing or ringing—are not maintained when a warm SWACT occurs. However, subscribers do receive dial tone immediately, without going onhook—except in the case of Mode II dual circuits, where the subscriber must go onhook first to reoriginate.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5				AF2676	SMS-R Warm SWACT—CC	Together, these features increase service reliability for subtending SMS-R subscribers by maintaining established calls when the SMS-R switches processor control. SMS- R Warm Switch of Activity (SWACT) allows the inactive unit of the SMS-R to maintain established calls (calls in the talking state) and to process new calls when it takes control of the SMS-R in a SWACT with its mate. When established calls are maintained in this manner, the process is known as warm SWACT. Calls that are in a transient state—such as dialing or ringing—are not maintained when a warm SWACT occurs. However, subscribers do receive dial tone immediately, without going on- hook—except in the case of Mode II dual circuits, where the subscriber must go on- hook first to reoriginate.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5				AF4310	SMU Base Support of UTR Card	This feature helps implement Universal Tone Receivers (UTR) on the Subscriber Carrier Module 100-URBAN (SMU) by allowing the digit collection function to be done by the UTR card on the SMU instead of by the digitone receivers on the MTM. The UTR streamlines the digit collection function by eliminating the need to set up a path through the network to the digitone receivers. These functions include allocating a free receiver, establishing a path to the receiver, collecting and processing digits, and releasing the receiver.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name BAS SCM/SMS/SMU	Order Code Description This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	<u>Ris</u> 5	RIs	MD RIS	Code	PCID	AF2255	Feature Name SMU Calling Number Delivery (CC)	Feature Description When the DMS switching system is equipped with NTXA01AA [Custom Local Area Signaling Services (CLASS)—Number Display], these features automatically extend Calling Number Delivery to subscribers served by a DMS-1 Urban. The subscribers receive the incoming calling number, time, and date of the call on display terminals at their premises. These features require that CLASS Modern Resource Cards (NT6X78) be equipped in the SCM-100U (SMU) that digitally interfaces the DMS-1U to the host DMS.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2252	SMU Calling Number Delivery (PP)	When the DMS switching system is equipped with Custom Local Area Signaling Services (CLASS)—Number Display, these features automatically extend Calling Number Delivery to subscribers served by a DMS-1 Urban. The subscribers receive the incoming calling number, time, and date of the call on display terminals at their premises. These features require that CLASS Modern Resource Cards (NT6X78) be equipped in the SCM-100U (SMU) that digitally interfaces the DMS-1U to the host DMS.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF3688	SMU EISP & DCH Prov. & Maintenance	As a group, these features extend Meridian Business Set (MBS) and ISDN services to the DMS-1 URBAN.
	28	BAS00016	BAS SCM/SMS/SMU	This feature provides the software foundation for subscriber terminals in Nortel's family of direct digital interfaces including Subscriber Carrier Module-100 (SMS), Subscriber Carrier Module- 100 Remote (SMS-R), Subscriber Carrier Module-100 Urban (SMU), and the Enhanced Subscriber Carrier Module-100 Urban (ESMU)	5					AF2670	SMU Enhanced 2-Wire Special Services	This feature extends the special services capabilities of the SCM-100U by supporting new DMS-1 Urban 2-Wire Special Service line cards for non-switched and non-locally switched service applications. Direct Inward Dialing (DID) PBX trunk applications using SCM-100U special connection to the Digital Trunk Controller (DTC) are also supported. Access to administration, maintenance, and provisioning functions is provided through the DMS Maintenance and Administration Position (MAP).
	44	BAS00020	BAS Flex Bellcore AMA	This feature enables customized assignment of Call Type and Service Feature AMA characteristics, compatible for both local AMA and centralized AMA applications.	5						Flexible Bellcore Automatic Message Accounting	This feature enables customized assignment of Call Type and Service Feature AMA characteristics, compatible for both local AMA and centralized AMA applications.
	44	BAS00021	BAS MAP TELNET Access	This feature provides a full-screen MAP interface over Ethernet connections between the DMS switch and the DMS SuperNode Data Manager (SDM).	6						Maintenance and Administration Position (MAP) TELNET Access	This feature provides a full-screen MAP interface over Ethernet connections between the DMS switch and the DMS SuperNode Data Manager (SDM).
	44	BAS00022	BAS SDM Table Access	This feature provides access to tables and office parameters for the DMS SuperNode Data Manager (SDM) applications to reduce significantly the time and effort required to complete translations changes in a DMS SuperNode switch.	5						SuperNode Data Manager Table Access	This feature provides access to tables and office parameters for the DMS SuperNode Data Manager (SDM) applications to reduce significantly the time and effort required to complete translations changes in a DMS SuperNode switch.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID		Feature Name	Feature Description
	44	BAS00024	BAS Offnet Access Svcs	This feature provides the capability to specify dial plans unique to trunk groups which will extend the flexibility of the DMS switch to address differing end user requirements. This feature standardizes the various translation schemes for access to Network Services software for hotline, senderized, and cut-through dialing and enables the Network Class of Service (NCOS) datafill to be overridden by calls using 700, 800, or 900 dialing; travel card number; authorization code; or ANI screening on Feature Group D dialing.	5					AD2471	Off-Network Access Services	This feature provides the capability to specify dial plans unique to trunk groups which will extend the flexibility of the DMS switch to address differing end user requirements. This feature standardizes the various translation schemes for access to Network Services software for hotline, senderized, and cut-through dialing and enables the Network Class of Service (NCOS) datafill to be overridden by calls using 700, 800, or 900 dialing; travel card number; authorization code; or ANI screening on Feature Group D dialing.
	28		BAS SCM-SLC96 Spec Svcs	This feature provides special services support through the SMS-R .	5					AF2469	Special Services on the SMS-R	This feature provides special services support for TR-008 RDTs integrated by the SMS-R with the Remote Switching Center or Remote Switching Center - SONET. This capability allows the network provider to offer revenue- generating services such as INWATS, OUTWATS, teletypewriter exchange (TWX), and PBX connectivity through the SMS-R. Peripheral side (P-side) hairpin capability is provided by the SMS R, allowing the grooming of DS-0 channels from DS-1 links originating from remote terminals served by the SMS-R. These channels are then combined on DS-1 link(S) that are routed to channel bank(s). Also, for the peripheral side, nailed-up P-side-to-P-side channel management is implemented for special services. Based upon connection information from the central controller, the SMS-R adds, removes, or audits these connections.
	44	BAS00028	BAS High Capacity DPP	This feature provides the compression of AMA records over ordinary dial-up lines as a customer- provided host office controller polls the DMS switch.	5					AF1407	760-Megabyte Disk for DPP	The 760-Megabyte Disk for Distributed Processing Peripherals (DPPs) provides greater AMA storage capacity for the DPP. Existing disk Megabyte sizes of 72, 140, and 380 are complemented with the 760-Megabyte disk. The 760-Megabyte disk allows for additional AMA retention in the event of AMA Teleprocessing System (AMATPS) polling difficulty or loss of the transmission path to the collector. This feature is particularly useful for fulfilling multiple-day storage requirements for larger, metropolitan offices with high volumes of billable calls. In addition, this feature now includes high speed transmission capability for DPP. The feature allows the Distributed Processing Peripheral (DPP) to transmit data to a host office collector at a speed of 56 kbps, providing a significant enhancement to the existing 9.6 kbps maximum that is currently available with the DPP. The provisionable DPP provides this feature as an engineering option). Existing DPPs can be easily and inexpensively upgraded to provisionable DPPs to permit deployment across the installed DPP base.
	44	BAS00041	BAS Enh Permanent	This feature provides the capability to analyze a	5	1				AG3884	Enhanced Permanent Signal	This feature provides the capability to analyze a line having a permanent signal, to
	44		BAS 56 Kb/s Trunk Test Port	This feature provides support of digital trunk testing with 56 kilobits per second digital trunks using compatible test head equipment.	6					AG4583	56 Kbps Trunk Test Port	This optional software supports Digital Trunk Testing (DTT) with 56 kilobits per second (kbps) digital trunks using compatible test head equipment from another manufacturer. With this software, a network provider can complete analog and digital bit error rate testing by replacing analog four-wire E&M cables with a DS-1 link between the DMS SuperNode system and a digital test head. (The Centralized Automatic Reporting on Trunks [CAROT] system serves as the test system controller.) Before Bellcore TL-1 based DTT becomes available (see Major Dependencies, below), this software offers a convenient way to perform Bit Error Rate tests over 56 kbps digital trunks, using the network provider's choice of compatible test head equipment.

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	App	Order Code	Order Code Name	Order Code Description	Ris		MD RIs		PCID	ACTID	Feature Name	Feature Description
			BAS ANI for E911 Abandon	This feature permits an emergency calltaker to ring back to a 911 caller that went on hook before the call was answered by providing the calling party's complete ANI to the tandem switch once the call routes to an Emergency System trunk.	8					AN0349	ANI for E911 Abandon	Automatic Number Identification (ANI) identifies the telephone number of a line initiating a call. Currently, a 911 call over an Emergency Service (ES) trunk may not have the opportunity to pass the ANI if the calling party hangs up before the call is answered. This can result in calls being presented to the PSAP (Public Safety Answering Point) with no calling line information, preventing the PSAP agent from using the Ringback feature or an operator from manually calling the originating party. This feature delivers the calling party's complete ANI to the tandem switch once the call routes to an ES trunk, regardless of the hook status of the calling line. If the caller hangs up prematurely, the PSAP can try to call the party back—and can dispatch emergency personnel to the caller's location if attempts to reach the caller fail. This safeguard—along with other call processing features (such as Ringback)—expands the Public Safety Answering Point's ability to effectively respond to a range of emergency situations.
	44	BAS00063	BAS Enh Line Card Mon	This feature supports the detection of hazard and ring-ground faults on working lines.	8					AR2216, AR2268, AR2217	Enhanced Line Card Monitor for Lines	This feature supports the detection of hazard and ring-ground faults on working lines.
				This feature helps prevent the fraudulent practice of manipulating answer supervision signals to avoid billing by withholding two-way conversation until the DMS switch receives the answer supervision signal.	8					4772,AJ48 41,AJ4771, AJ4599		Billing systems use answer supervision signals to mark the start of charges in a call billing record. Although fraudulent, it is possible to suppress or delay the return of answer-supervision signals from a PBX. This practice results in improper billing, particularly for brief called-party 1+800 calls. Even if the answer supervision signal from the PBX is simply delayed and not suppressed, the cost for a portion of a call can still be avoided. Ordering code BAS00064 enables the DMS switch to inhibit fraud by allowing only a one-way transmission path until answer supervision is returned from the PBX (or other terminating device, euphemistically called a "black box"). By limiting the speech path to only the forward direction, call progress and comfort tones are still heard by the originating party, but two-way communication is impossible. Once the DMS system receives answer supervision on a per trunk-group basis. This feature can be applied as an option on a per trunk-group basis. The Black Box Fraud Prevention feature can help recoup revenues to the network provider from calls that were previously not billed due to fraud. Although this feature of
			BAS Black Box Fraud	This feature helps prevent the fraudulent practice of manipulating answer supervision signals to avoid billing by withholding two-way conversation until the DMS switch receives the answer supervision signal.	8	9					Black Box Fraud Prevention Enhancements	This enhancement expands this revenue protection from direct inward trunks (DID) trunks to now include PRI trunks and adds an optional timer that will tear down the call if answer supervision has not been received within one, two, three, four, or five minutes (datafilled on a trunk-group basis). If this timer is used, the DMS switch pegs a new operational measurement and creates a new log (TRK 610) whenever the black box fraud timer expires before receiving answer supervision signals.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1249	BCSMON Enhancements	This feature significantly enhances the current version of the LOAD Monitoring function (BCSMON), a DMS-resident feature that was designed to provide data on switch status at the request of the craftsperson. This tool is particularly useful for comparing performance of a new LOAD software release with that of a previous release in the same office. The major enhancements provided by this feature include: Re-structured command syntax for increased clarity, with deletion and addition of parameters, and subsequent modified output; Increased output content with the addition of a new sub-parameter, MEMORY; Improved visibility of the man-machine interface to allow querying of the command for help and prompting for the command parameters; and Improved formatting of the BCSMON output to allow for better sectioning and increased legibility.

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	Ann	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
		BASE0001		This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1927	BCSMON—Enhanced Monitoring Capabilities	This feature enhances the Batch Change Supplement monitoring system (BCSMON). The BCSMON provides data needed to assess the performance of a LOAD software release in an office, thus determining areas of concern before they become problems. With this feature, the existing output format is enhanced, and several new capabilities are provided: monitoring of new patches, display of twenty "high runner" logs, display of "high-water" call processing (CP) occupancy, and office performance report (OPR). In addition, over 20 new counts have been incorporated into BCSMON for use with CLASS and RES features.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1869	CC Warm SWACT Man Machine Interface Enhancements	This feature enhances the CC Warm SWACT Man Machine Interface by making it more user friendly and organizing the output in a more readable manner. Currently, the Man Machine Interface for CC Warm SWACT consists of two directory-level commands. These commands set up the environment before the SWACT and clean up the environment after the SWACT. The craftsperson is informed of SWACT status through log and Cl output. Currently, the user must consult the logs continuously to verify proper command execution and process correctness.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1868	CC Warm SWACT Residency	This feature provides the software necessary to make the CC Warm SWACT tools resident in all software loads. With this software resident, the telephone operating company can use the tool to perform any update that requires a restart. Using the Warm SWACT tool, patches that require cold restarts and restart reloads can be applied with less service impact. The telephone operating company drops sync, applies the patches to the inactive side, performs the necessary restarts on the inactive side (with no service impact to the active side), and then "Warm SWACTs" the CPUs to the newly patched side.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AJ0194	Central Controller Warm SWACT Enhancements	Currently, Central Controller (CC) Warm Switch of Activity (SWACT) supports a number of features that preserve states and statuses over a LOAD application by providing a facility that allows features to transfer data between the FROM and TO sides. These features are considered as SWACT applications to the CC Warm SWACT base process. Some of these features require CC Warm SWACT facilities and must be accommodated. This feature upgrades the CC Warm SWACT to allow for more SWACT applications. The capability to handle more SWACT applications must be "backward" compatible with previously released loads. This feature does not alter the basic CC Warm SWACT process.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1818	CP Long Messaging Implementation I	This feature extends the scope of long messaging (long messages exceed 64 bytes) for call processing (CP) to: more peripheral types, including first-level XPMs with TPT (Transaction Processing Task) and 6X69 messaging cards, a larger terminal address space, and more potential applications, such as CLASS and ISDN. In addition, the real-time requirements for CP long messaging are reduced.

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	Арр	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG0919	Decouple CC Hardware and Software System Initialization I (old F7209)	This feature enables more rapid DMS office recovery by decoupling hardware initialization from the software initialization process. Combined with the Enhanced Office Recovery package, the feature ensures the fastest possible recovery of central controller (CC) hardware and associated XPM modules.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1082	Detection and Correction of Slow Call Processing Babblers	This feature allows the central controller to recognize and reduce the real time use of lines and trunks that repeatedly result in call deaths (i.e., traps or suicides) due to software or datafill errors.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF2705	DIRP DPP Reload and SWACT Recovery	This feature increases the robustness of Device Independent Recording Package (DIRP) and Automatic Message Accounting (AMA) billing systems by automatically recovering the Distributed Processing Peripheral (DPP) on a reload restart, SWACT, and device system return-to-service. This feature implements the following recovery enhancements for DPP: • DPP volumes are recovered automatically on reload restart, SWACT, . • DPP volumes are never marked 'INERR'; instead, after an error, they are marked "RECOVERING" and are back in service within 5 minutes after the magnetic tape drive (MTD) system is recovered through a device audit. • A real time recovery capability is added to DPP so that when data is being written, if the active DPP volume is unavailable but the device system has returned to service, the DIRP performs an instant recovery on the DPP volume and opens a new DIRP file to continue recording.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1780	DIRP Space Rotation (old G0162)	This feature enhances the control a user can exert over the period for which Device Independent Recording Package (DIRP) memory is stored and saved by modifying DIRP rotation so that expiration date, rather than processing status, determines when a file is erased. This change allows files to be retained for a longer period of time than do current procedures. The feature also increases storage flexibility by allowing DIRP to rotate based on the amount of available recording space, rather than on a predetermined date/time basis.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1725	DIRP—Multiple Tape Usage	This feature allows the Device Independent Recording Package (DIRP) to use multiple tapes to record DMS data. This capability (1) increases memory capacity for applications that require more than a single magnetic tape and (2) permits multiple tapes to be used in parallel, so that data are stored in both primary and backup files.

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		Order Code BASE0001	Order Code Name Base	Order Code Description This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	<u>RIs</u> 5	RIS	MD RIS	Code	PCID	ACTID AL0802	Feature Name DMS-Bus (Local) S/W Support for 128-Port Interface Card	Feature Description This feature serves to integrate the Enhanced Network (ENET) onto the DMS-Bus by providing the local maintenance software to support the 128-port interface card on the Message Switch shelf in the DMS-Bus. The following enhancements are included in the new software: maintenance functions for the 128-port interface card, enhanced diagnostics on card maintenance unit (CMU) request failures, improved babbling idiot detection and protection, enhanced fault processing for both the card and the port, and enlarged CMU command set. This feature is an enhancement to the existing DMS-Bus software and, in itself, requires no new hardware. However, if the new 128- port card is installed on the DMS-Bus in support of ENET, this feature is required.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL0802	DMS-Bus (Local) S/W Support for 64-Port Interface Card	This feature serves to integrate the Enhanced Network (ENET) onto the DMS-Bus by providing the local maintenance software to support the 64-port interface card on the Message Switch shelf in the DMS-Bus. The following enhancements are included in the new software: maintenance functions for the 64-port interface card, enhanced diagnostics on card maintenance unit (CMU) request failures, improved babbling idiot detection and protection, enhanced fault processing for both the card and the port, and enlarged CMU command set.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL1186	DMS-Bus Fault Correlation Using Tracer Card (NT9X49CB)	This feature enhances the fault detection capabilities of the DMS-Bus Tracer card by allowing the isolation of faults at the source (port) rather than at the destination interface (card). This improved fault correlation technique is required with the Enhanced Network (ENET).
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL0790	DMS-Bus Software Support for 4 Meg Memory CPU Card	This feature allows for an increase of program and data store allocation within the Message Switch shelf to 10 megabytes. The feature simultaneously reduces the requirements for program and data store by removing unused subsystems and modules and reconfiguring the software operating system (SOS) environment. This feature simplifies the transition to the Enhanced Network, allowing ENET to be implemented onto the DMS-Bus with no effect on the existing SuperNode System. This feature works in conjunction with processor card NT9X13DC to provide the enhancements described above.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL0172	Enhanced XPM Audit Driver	This feature enhances the current XPM audit system in the following ways: • The audit table contains more information, including the audit priority, an enabled/ disabled flag, a status flag, a skip counter (to indicate when an audit is skipped), and a run counter (to indicate the number of times the audit was run since this counter was reset). • The audit monitor offers more commands, such as the enable, disable, kill, run for one or all audits. Commands that display and reset values of different counters are also provided. • The audit time base is improved, so that audits are run at proper intervals. • Audit processing procedures have been improved so that high priority audits are not skipped because of heavy traffic through the system.

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		BASE0001	Order Code Name Base	Order Code Description This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	<u>Ris</u> 5	RIS	MD RIS	Code	PCID	AL1147	Feature Name Environment Restructuring	Feature Description This feature improves the system environment by restructuring and adding robustness to the modules that encompass the system software environment. This restructuring focuses on three main areas: Improved code execution. Reduction of the size of the environment. Improved code maintainability and robustness. This new system environment further reduces the possibility of coding errors.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL1299	Flexible Security Options	This feature allows telephone operating companies to select specific security features appropriate for their individual use. Previous to this feature, security features have been hard-coded, requiring high level security clearance in order to modify or to change parameters or passwords. With this feature, telephone operating companies can exercise the option of using or not using the following existing features: • Password Control • Enhanced Command Screening • Audit Trail • Access Control • Automatic Layout of Dial-Up Lines • Security Table Enhancements I
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF2531	Forced Sequence Application	This feature ensures that patches are applied sequentially and are implemented with the following characteristics: • provisions to allow for the tracking of all patches (whether needed or not), • the capability to increment each processor's HWR for the highest patch sequence number applied, • enhancement to the PATCHER APPLY command to allow patches to be "Force" applied out of sequence, and • enhancement to the PATCHER INFORM LIST, indicating which patches have been "Force" applied out of sequence.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AJ0191	Hardware/Software Initialization Coordination II (old F7476)	This feature provides more efficient system restarts for several key DMS components: networks, Extended Peripheral Modules (XPMs), Line Concentrating Modules (LCMs), and lines. The feature uses an initialization manager to coordinate and synchronize the Central Controller-driven initializations of software and hardware elements in DMS switches.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AJ0475	Hardware/Software Initialization Coordination III	This feature applies the initialization manager function to interperipheral message links (IPMLs) and signaling terminals (STs) and extends the XPM static data audit to cover the Remote Cluster Controller (RCC). The initialization manager provides more reliable and efficient system restarts by coordinating and synchronizing central controller driven initialization of the software and hardware elements in DMS switches. This feature also enhances the initialization manager by upgrading its naming convention and use of timing routines. The static data audit for the RCC: • detects corruption in static data, execs, and Emergency Stand-Alone (ESA) data while the RCC is in service; • reduces the time required for Return to Service (RTS) by eliminating the downloading of static data and execs if there is no data mismatch between the central controller and the RCC; and • reduces messaging between the central controller and the RCC immediately after the peripheral module is returned to service by not sending ESA data if they are already valid on the RCC.
	44	BASE0001	Base	This functional group along with BASE0001 and	5					AR0125	ILM Isolation Detection	Together, the features provide improved fault diagnostics and isolation on links for

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		Order Code BASE0001	Order Code Name Base	Order Code Description This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	<u>Ris</u> 5	RIS	MD RIs Code	PCID	ACTID AF0967	Feature Name Immediate Audible Ringback Tone (old G0028)	Feature Description This feature allows the call progress tone of Ringback to be provided to the calling party as soon as the system knows that the call can be completed. This ability is especially important when "hot line" service is involved; it allows the calling party to know that the call has processed and is connected to the called party.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AG1474	Improved Terminal Response	This feature improves the DMS- Family terminal response time by moving all non- critical audit processes from background scheduler class to a new scheduler class. Improvements in terminal response will vary from office to office, as the amount of time used by audits will vary with office datafill.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF1399	Improved Trunk Log for Preroute Abandon	This feature enhances trunk log TRK116 by providing a unique log indication for trunks that are seized, receive some digits, and then are released because the calling party disconnects before the call can be completed. Presently these calls are not distinguished from other types of trunk failure on the log. They must be identified from among all trunk log messages that relate to trunk failures, a process that requires much craft analysis. This feature simplifies the craft troubleshooting function by separating the important trunk failure information.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AL0627	Increase Permitted Number of Supervisory Transitions	This feature increases the permitted number of supervisory transitions on the outgoing trunk from 3 to 15 before the connection is torn down.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AG1524	JFRREZE—DMO Enforcement for Journal File	This feature enhances the Journal File (JF) to facilitate the transition to new LOAD applications. When invoked immediately after the system image is taken for the dump and restore process, the Journal File creates and maintains a history record of all Journal Files created during the pre-application data freeze period. Data changes that cannot be restored automatically on the new LOAD through the JFDUMP and DMOPRO commands are stored in a separate file, so that they can be manually re- entered on the new LOAD by the software installer or telephone operating company. JFFREZZ is invoked manually; it implements commands to specify the status of the feature and to display the JF history file. The JFDUMP utility reads the journal files recorded during the data freeze period by the JF system; it translates the data modification orders and service orders into a sequence of readable datafill commands that can be applied to the new LOAD. JFDUMP uses the reformat utility to modify the data to comply with those tables that have been restructured in the new load. The output of JFDUMP is a file in DMOPRO file format that is transferred over a transferred over a tran

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15506 2		Order Code	Order Code Name	Order Code Description	Ris	Enh Ris	Repl Ord MD RIs Code	PCID	ACTID	Feature Name	Feature Description
		BASE0001		This functional group along with BASE0001 and This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5	RIS	MD KIS Code	PCID	AL0917	Enhancements	This feature Description This feature provides for centralized control over the dump program and allows for concurrent dumping of multiple remote nodes. In addition, it improves communication resulting from dumps between local and remote nodes. As a result, the dump process becomes more robust and easier to maintain. Prior to this feature, control of the dump program was distributed; each node was equipped with its own copy of the complete software supporting the dump program.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AG1004	Log Retrieval Facility For E1 Incidents	This feature permits the capture and retrieval of log messages without the intervention of the craftsperson and preserves logs that might otherwise be lost during an emergency situation. Such logs can help to determine the cause of the problem and can suggest future steps that will prevent or minimize the impact of such action. Using the Device Independent Recording Package (DIRP) and a maximum of 10 percent of all available disk space, this feature enables telephone companies to capture all logs on disk continuously. If disk space allocated to logs has been filled, the oldest logs on the disk are overwritten. Every 24 hours or whenever a file becomes full, the log file is automatically closed, and a new file takes its place. To reduce the time required to process logs and the amount of disk space used, logs are recorded in a compact, unformatted manner. Closed log files can be accessed by running the Command Interpreter (CI) command and reading with the SCANLOGS command. If one wishes to access an open file, the file must be closed in DIRP. When this is done, a standby file automatically takes over and continues to capture log
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AL1052	Lost Messages Reporting Enhancements	This feature enhances the LOST log reporting system by providing improved log text formatting and base support that allows the system to take action when a LOST log is reported. As a result, when LOST logs are generated, the user may see automatic corrective action applied by the system. (For example, a line that is generating garbage messages to the central controller may be placed in cut state until diagnostics can be performed.)
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				NC0079	Mandatory Parallel AMA	This feature enhances the level of AMA recording security by ensuring continuity in the parallel recording of AMA data. With this feature, the Device Independent Recording Package (DIRP) system automatically opens parallel AMA files and provides a recurring audible alarm (in addition to the current MAP display) in the event that the parallel AMA file cannot be opened. By automating the parallel AMA records due to primary AMA failure at a time when the parallel system has been disabled. The DIRP automatically handles the normal recording of data output from contributing systems such as AMA. In addition to maintaining active and standby AMA files, DIRP can maintain a parallel AMA file at the telephone operating company's option. This parallel file is used as a backup for recording AMA data output by the system and can be on either disk or magnetic tape. (The parallel file does not have to be on the same type of recording device as the active file.) This feature therefore interacts with DIRP to ensure that parallel files are automatically opened. If the parallel file cannot be opened

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		BASE0001		This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						CC Warm SWACT	This feature verifies line drawer states . Currently, the line drawer states must be checked manually on the active and inactive sides prior to central controller (CC)/central memory (CM) warm switch of activity (SWACT). With this feature, the process is automated, thus ensuring the status of the line drawers for the SWACT.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF2532		This feature allows the packaged replacement of obsolete patches in the DMS. Patches are applied and logged into the proper category and status update in the patcher inform list. In addition, enhancements are provided that prevent the attempted removal of replacement patches and the attempted application of obsolete patches.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF2013		This feature quadruples the office routes that are available to the telephone operating company in a single switching system. Currently, 1024 routes are available in the OFRTE table; with the new capability, 4092 routes are available.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AJ0295	30A Links (old G0164)	This feature allows the telephone operating company to monitor messaging capacity and overload conditions on the DS-30A links/channels between an Extended Peripheral Module (XPM) and its associated P-side peripherals. Standard operational measurements are provided, including peg counts for call originations and terminations and for overflow situations.

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	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				NC0033	Operational Measurements for LGC Links	This feature provides additional Operational Measurements (OMs) for several XPMs: Line Group Controllers (LGCs), Line Trunk Controllers (LTCs), ISDN Line Group Controllers (LGCIs), and Subscriber Carrier Modules (SCMs). The additional OMs assist telephone operating company personnel in engineering DMS offices and include: C-Side and P-Side Link Two-Way Usage, C-Side and P-Side Terminating Attempts, and C-Side and P-Side Link Blockage.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF2704	MMI Improvements	This feature enhances the robustness of the Device Independent Recording Package (DIRP) by allowing telephone operating companies to configure extra parallel storage for any DIRP system. The following enhancements to the recording of parallel data through DIRP parallel data, and modifications to the DIRP-related Man Machine Interface (MMI) commands to make it easier to initiate and restore parallel recording media available for DIRP parallel data, and modifications to the DIRP-related Man Machine Interface (MMI) commands to make it easier to initiate and restore parallel recording and to manipulate parallel recording volumes. With this feature, telephone operating companies can assign between 2 and 24 volumes to any subsystem for parallel recording purposes. Automatic "rotation" of these parallel volumes is provided, so that when a given volume is full or if errors occur while it is being written, the next sequential volume in the pool is used to continue recording parallel volumes easier, provide consistency with the memethod of datafilling parallel volumes, and simplify administration of a pool of parallel volumes.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AG1521		This feature simplifies and reduces the time required for patching in the message switch. DMS system patches can now be administered once through the central controller, rather than three separate times (i.e., once for the computing module and once for each side of the message switch), as was previously required.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				NC0007	Recorded Announcement Cycle Time Change	This feature changes the processing of trunk and line calls to Automatic Call Distribution (ACD) groups so that callers hear one complete announcement cycle. With this feature, calls access table "AUDIO" and field "CYCLE," instead of table "ANNS" and field "CYTIME," as they currently do. This change is accomplished through office parameters accessible through the MAP. Currently, trunk calls hear one cycle of recorded announcement and line calls hear 1.5 cycles of announcements.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AL1274	Reload Restart in Restart Progression	In order to prevent the loss of any datafill that has been applied since the last image was taken, it is desirable to recover an office through a reload restart rather than through a reboot. This feature modifies the current restart progression mechanism so that a reload restart is attempted prior to rebooting.

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	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF1661	Retain Speed Call List	This feature allows the DMS family switch to retain the speed call list when a directory number is transferred from one Line Equipment Number (LEN) to another. Previously, it was necessary for the subscriber to reenter the list.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AJ0296	Simultaneous Multiple Alarms	This feature enables the DMS switching system to monitor and to display simultaneous multiple alarms, thus allowing operating company personnel to prioritize their attention to specific alarm conditions.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				Al0716		This DMS SuperNode SE feature supports the new Series 60 processing option. This processor increases both real-time and memory capacity through the synergistic benefits of BRISC (Bell-Northern Research Reduced Instruction Set Computing) processing combined with exclusive use of 96 Megabyte memory cards and burst mode memory addressing. This option uses the NT9X10AA processor circuit pack and the associated NT9X26DB Remote Terminal Interface (RTIF) in conjunction with the NT9X14EA 96 Megabyte memory pack.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AL1112	RI Interface	This feature provides the telephone operating company with an improved interface between the Visual Display Unit (VDU) and the subsystem Reset Terminal Interface (RTIF). The new 20 MA (milliamp) Current Loop Interface saves equipment costs by eliminating the need for modems or RAD units, as were previously required when local Video Display Units (VDUs) were connected to the DMS switch through RS-232 ports. The new interface also provides the operating company with improved electrical isolation between the VDU and the RTIF and meets Northern Telecom Isolated System Grounding (ISG) Requirements. Light Emitting Diodes (LEDs) are provided at the rear of the frame to indicate the operational status of the CPU (i.e., In- Sync or Lock-Step) and the associated subsystem (INACTivity). This feature requires the NT9X26AB circuit pack for operation.

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		BASE0001		This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						This feature makes use of the new Special Application field in the patch file to supply warnings when checking, applying, or removing a patch. It also causes the Special Application field to appear in the INFORM LIST and adds it to the fields displayed with the DISPLAY command. The new Restart Required field is also displayed with the INFORM LIST and DISPLAY commands.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				NC0086	Standard Pretranslation Expansion	This feature quadruples the number of standard pretranslators that are available in DMS offices. With the new capability, the current limit of table STDPRTCT is increased from 255 to 1,023.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AL1101	Store Allocator Audit	This feature provides an audit process for the Store Allocator function to ensure the integrity of the Store Allocator data structures. If corruption is detected, it is corrected wherever possible, and appropriate logs are generated.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AL1174	System Load Module II—Maintenance Software	This feature provides the maintenance and operational software that allows operating companies to increase the size of their tape and disk drives to support increased System Load Module II (SLM II) capability, thus accommodating the increase in image size and number of system files that can be generated using the enhanced services and features available on DMS SuperNode system. With the SLM II, the current 75 megabyte capacity of the tape drive is expanded to 150 megabytes, and the current 140 megabyte capacity of the disk drive is expanded to 600 megabytes.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AL1166	System Load Module Phase II	This feature allows operating companies to increase the size of their tape and disk drives to support increased System Load Module II (SLM II) capability, thus accommodating the increase in image size and number of system files that can be generated using the enhanced services and features available on DMS SuperNode system. With this feature, the current 75 megabyte capacity of the tape drive is expanded to 150 megabytes, and the current 140 megabyte capacity of the disk drive is expanded to 600 megabytes. This feature requires circuit pack NT9X44AB to operate.

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1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL1166	System Load Module Phase II Disk/Tape Replacement	This feature allows operating companies to increase the size of their tape and disk drives to support increased System Load Module II (SLM II) capability, thus accommodating the increase in image size and number of system files that can be generated using the enhanced services and features available on DMS SuperNode system. With this feature, the current 75 megabyte capacity of the tape drive is expanded to 150 megabytes, and the current 140 megabyte capacity of the disk drive is expanded to 600 megabytes.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL2666	Telco Defined Login Banner	After a successful login, this enhancement provides a banner warning that the user is entering a private database and that unauthorized access or use is prohibited and prosecutable by law. This enhancement also allows the banner to be edited to meet the customer's specific notification requirements, as well as to address legal requirements that service providers have to provide notification about unauthorized entry or use. Compatibility with operations systems should be reviewed.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AD2997	Trunk Group Expansion to 8K	This feature increases the limit on the number of trunk groups possible per office from its prior value of 2047 to a maximum of 8191. This expansion applies to all DMS Family products that support trunks. Tables keyed by trunk group CLLI inherit the capability to use up to 8191 different trunk group CLLIs as keys unless limited by other factors.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AJ0729	Trunk RTS Enhancements II	This feature reduces the central processing unit (CPU) time required to return LTC and RCC trunks to service by reducing the number of messages required when an entire carrier is returned to service. Rather than sending one message per trunk, with this feature, one message is sent per peripheral module.
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL0479	Trunk/Carrier Return-To-Service Enhancement	This feature reduces both the CPU time and the number of messages required to return the Digital Trunk Controller (DTC) trunks to service on restarts. Prior to this feature, in order to return a DTC to service on a restart, separate messages containing the trunk data that the DTC needs to put the trunk in service were sent for each trunk. Therefore, in order to idle the trunks on a T-1 carrier, up to 24 messages had to be sent to the DTC (one for each carrier); to idle all the trunks on a DTC required up to 480 messages (one for each trunk).

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L	Арр	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL1149	User Passwords Survivability over LOAD Application	This feature preserves user passwords over the application of new software, saving the time and labor previously required to re-establish passwords after an upgrade. Previous to this feature, when a new software release was loaded into the switch all user passwords were lost and were required to be re-entered using the PASSWORD command. In addition, well known default passwords were automatically installed. With this feature, user passwords are preserved with the data store information during the dump and restore process. Customer security is protected, since all user passwords are temporarily encrypted during the dump phase and decrypted during the restore phase.
	44	BASE0001	Base	This functional group along with BASE0001 and	5					AL1518	User Programmable Line Test	In order to accommodate the diversification of customer needs, the proliferation of
	44	BASE0001	Base	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AJ0206	ZPM Synchronization Enhancements	This feature ensures that the synchronization data produced by the XPM synchronization software provide a true indication of the most recent appraisal of synchronization sanity, thus increasing the reliability of the entire XPM synchronization system. The transmission of all messages and speech between an XPM and the network (and between an XPM and its mate unit) is dependent on the integrity of the frame pulses generated by the XPM formatter card. Operational faults may occur if this frame pulse does not coincide with the network frame. Currently, such frame faults are detected by the synchronization software and reported to the XPM resident maintenance. The generation of an operational fault triggers the XPM synchronization diagnostic.
	44	BASE0006	BASE SN SR60 Processor	This feature provides the DMS SuperNode RISC Series 60 Processor.	5						DMS SuperNode Series 60 Processor	This feature provides the DMS SuperNode RISC Series 60 Processor.
	44	BASE0008	BASE SNSE SR60 Processor	This feature provides the DMS SuperNode SE RISC Series 60 Processor.	5						DMS SuperNode SE Series 60 Processor	This feature provides the DMS SuperNode SE RISC Series 60 Processor.
	44	BASE0009	BASE SN SR70 Processor	This feature provides the DMS SuperNode BRISC Series 70 Processor.	5					SR0075	DMS SuperNode BRISC Series 70 Processor	This feature provides the DMS SuperNode BRISC Series 70 Processor.
	44	BASE0010	BASE SNSE SR70 Processor	This feature provides the DMS SuperNode SE BRISC Series 70 Processor.	5						DMS SuperNode SE BRISC Series 70 Processor	This feature provides the DMS SuperNode SE BRISC Series 70 Processor.
	44	BASE0011	BASE CO Data Change Capture	This feature enhances data change effectiveness for DMS operations support systems (OSS) by introducing new logs that immediately notify the OSS of any configuration data changes to the switch databases and establishing a backup to store recent configuration data changes.	6						Central Office Data Change Capture for OSSs	This feature enhances data change effectiveness for DMS operations support systems (OSS) by introducing new logs that immediately notify the OSS of any configuration data changes to the switch databases and establishing a backup to store recent configuration data changes.
	22	CAIN0100	CAIN Messages	This optional ordering code enables a service provider to purchase a specified number of Carrier AIN messages. This alternative is intended to assist customers that need to make a more gradual investment in Carrier AIN.	5						Carrier AIN Usage-Based Messages	This optional ordering code enables a service provider to purchase a specified number of Carrier AIN messages. This alternative is intended to assist customers that need to make a more gradual investment in Carrier AIN.
Added and the Order Code is corrected and changed to CAIN0100 instead of CAIN0010 as in FPG.	22	CAIN0100	CAIN Messages	This optional ordering code enables a service provider to purchase a specified number of Carrier AIN messages. This alternative is intended to assist customers that need to make a more gradual investment in Carrier AIN.	5	10	1		7925		GR-1299 Protocol Alignment - Phase I and Phase II	This feature provides modifications to CAIN in order to more closely align with Bellcore standard GR-1299-CORE. Protocol modifications are made to the following CAIN parameters: UserID AccessCode CollectedDigits BearerCapability CalledPartyID

Change In					1st							
Issue 2	Ann	Order Code	Order Code Name	Order Code Description	NCS Ris	Enh RIs	MD RIs	Repl Ord	PCID		Feature Name	Feature Description
Added and the Order Code is corrected and changed to CAIN0100 instead of CAIN0010 as in FPG.			CAIN Messages	This optional ordering code enables a service provider to purchase a specified number of Carrier AIN messages. This alternative is intended to assist customers that need to make a more gradual investment in Carrier AIN.	5	10		Coue	7925	AX0207,	NetworkBuilder CDR Enhancements-Phase I and Phase II	This feature provides the ability to record information for up to three separate NetworkBuilder triggers and/or events in the Call Detail Record (CDR). For each trigger/event, the total number of TDP/EDP Request messages sent to an SCP during the life of a call is stored in the CDR. This feature also provides these enhancements to billing functionality: • Populates the route list or route index field in the Call Detail Record (CDR) • Allows for the receipt of the project code extension parameter from the SCP to populate the project code field
Added and the Order Code is corrected and changed to CAIN0100 instead of CAIN0010 as in FPG.	22	CAIN0100	CAIN Messages	This optional ordering code enables a service provider to purchase a specified number of Carrier AIN messages. This alternative is intended to assist customers that need to make a more gradual investment in Carrier AIN.	5	10			7925	AX0952	NetworkBuilder Route Advance Announcements	This feature enhances the ability to notify the calling party via announcements before transferring a call. This feature enables IXCs to provide customized announcements before routing a call.
	22	CAIN0200	CAIN Extended Parameters	The DMS-500 system SSP AIN 0.2 implementation supports an extended parameter set to convey optional feature-specific information which may not easily be transmitted using the standard AIN 0.2 parameter set.	5						Carrier AIN Extension Parameters	The DMS-500 system SSP AIN 0.2 implementation supports an extended parameter set to convey optional feature-specific information which may not easily be transmitted using the standard AIN 0.2 parameter set.
Added and the Order Code is corrected and changed to CAIN0200 instead of CAIN0020 as in FPG.	22	CAIN0200	CAIN Extended Parameters	The DMS-500 system SSP AIN 0.2 implementation supports an extended parameter set to convey optional feature-specific information which may not easily be transmitted using the standard AIN 0.2 parameter set.	5	10	1		7720	AX0206	NetworkBuilder STS Enhancements	This feature enables the service provider to offer a diverse range of terminating options by allowing the SCP to specify a Service Translation Scheme (STS) for each of the Direct Termination and POTS route choices and it updates the CDR with the STS that is associated with the call. This feature provides flexible and enhanced SCP routing control and improves billing capabilities by maintaining the partition information when using direct termination routing to another network.
	22	CAIN0300	CAIN SCP Simulator	The service control point (SCP) simulator can interface with the DMS-500 platform's implementation of AIN 0.2. It is used by the service switching point (SSP) for testing its AIN 0.2 functionality. Without the purchase of an SCP, the Virtual Private Network service can be fully simulated with a DMS-500 system and this	5					AD7761	Carrier AIN SCP Simulator	The service control point (SCP) simulator can interface with the DMS-500 platform's implementation of AIN 0.2. It is used by the service switching point (SSP) for testing its AIN 0.2 functionality. Without the purchase of an SCP, the Virtual Private Network service can be fully simulated with a DMS-500 system and this simulator.
	22	CAIN0400	CAIN Test Query Tool	This feature provides the capability of initiating test messages to an SCP and receiving its responses. The results of the SCP response displays in a symbolic, user-friendly format.	5					AD7759	Carrier AIN test Query	This feature provides the capability of initiating test messages to an SCP and receiving its responses. The results of the SCP response displays in a symbolic, user-friendly format.
	22	CAIN0500	CAIN CUSTDP Trigger	The Customized_Dialing_Plan trigger is mainly used to implement Virtual Private Network (VPN) services. This trigger is assigned on a trunk group basis to incoming and two-way SS7 FG-D trunks and PTS FG-D DALs, or on a subscriber basis to an ANI or authcode. When the DMS- 500 switch evaluates the Customized_Dialing_Plan trigger, the collected	5						Carrier AIN Customized Dialing Plan Trigger	The Customized_Dialing_Plan trigger is mainly used to implement Virtual Private Network (VPN) services. This trigger is assigned on a trunk group basis to incoming and two-way SS7 FG-D trunks and PTS FG-D DALs, or on a subscriber basis to an ANI or authcode. When the DMS-500 switch evaluates the Customized_Dialing_Plan trigger, the collected information is checked to determine if a 1- to 14-digit number has been dialed within a customized dialing plan. The number is compared against a table of access codes stored on the DMS-500 system associated with the trigger.

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			CAIN SPECDIG Trigger	The Specific_Digit_String is used to implement 800/N00 services as well as off-board ANI screening. It is assigned on an office basis to Public Office Dialing Plans used by incoming and two-way AIN-capable SS7 FG-D or PTS DAL trunks. When the DMS-500 switch evaluates the Specific_Digit_String trigger, the collected information is checked for the inclusion of a particular contiguous digit string. These digits are checked against a table of digit strings stored	5						Carrier AIN Specific Digit String Trigger	The Specific_Digit_String is used to implement 800/N00 services as well as off-board ANI screening. It is assigned on an office basis to Public Office Dialing Plans used by incoming and two-way AIN-capable SS7 FG-D or PTS DAL trunks. When the DMS-500 switch evaluates the Specific_Digit_String trigger, the collected information is checked for the inclusion of a particular contiguous digit string. These digits are checked against a table of digit strings stored on the DMS-500 system associated with the trigger.
	22	CAIN0502	CAIN OFFHKIM Trigger	This trigger is encountered when the subscriber requires immediate call completion without dialing digits. It is used to implement services that uses nonstandard dialing plans such as Speed Dialing, Hotline, Menu Routing and Military Dialing Plans. From the O_Null Point In Call (PIC), this trigger is encountered when the Origination_Attempt Trigger Detection Point is detected via a seizure	6						Carrier AIN 0.2 Shared Interoffice Trigger	This trigger is encountered when the subscriber requires immediate call completion without dialing digits. It is used to implement services that uses nonstandard dialing plans such as Speed Dialing, Hotline, Menu Routing and Military Dialing Plans. From the Q_Null Point In Call (PIC), this trigger is encountered when the Origination_ Attempt Trigger Detection Point is detected via a seizure signal on a 2 wire direct access line (DAL) trunk indicating a desire to initiate a call. At this Trigger Detection Point, the DMS-500 system has prepared for digit collection and has captured the arcination trunk and the origination time in the CDR. This trioger may be subscribed.
	22	CAIN0503	CAIN SIOTRK Trigger	This trigger reduces real-time usage while implementing services such as Authcode/Account Code/PIN Screening, 500 - Find Me, CIC Routing, and ANI Screening. From the Collect_Information Point In Call (PIC), this trigger is encountered when the Info_Collected TDP is detected. At this Trigger Detection Point (TDP), the DMS-500, SSP has collected the	6						Carrier AIN 0.2 Offhook Immediate Trigger	This trigger reduces real-time usage while implementing services such as Authcode/Account Code/PIN Screening, 500 - Find Me, CIC Routing, and ANI Screening. From the Collect_Information Point In Call (PIC), this trigger is encountered when the Info_Collected TDP is detected. At this Trigger Detection Point (TDP), the DMS-500 SSP has collected the required digits according to the dialing plan of the originating agent. In order to determine the dialing plan, Authcode or ANI/PANI screening has been performed. This trigger may be subscribed on an Authcode. ANI. Agent. or Office basis. PTS and SS7 equal access network trunk and
		CAIN0504	CAIN PRIBCHNL Trigger	This optional software functionality adds PR_B_Channel trigger to the call model provided by NetworkBuilder. This trigger is implemented for PRI originating agencies, and it gives the same capability and services as the Shared_Interoffice_Trunk trigger for PRI agencies.	6					AD8824	Carrier AIN 0.2 PRI B Channel Trigger	This optional software functionality adds PRI_B_Channel trigger to the call model provided by NetworkBuilder. This trigger is implemented for PRI originating agencies, and it gives the same capability and services as the Shared_Interoffice_Trunk trigger for PRI agencies.
	22	CAIN0505	CAIN ONOANSWER Trigger	This feature provides the capability to specify a time limit in which the called party should answer a call. If the limit is exceeded, the O_No_Answer Trigger Detection Point (TDP) is encountered. It provides value-added busy services such as Call Redirect, Call Take back, and Message Delivery for 800 subscribers. The O_No_Answer trigger is supported on the following originating agencies: PTS and SS7 equal access network trunk (EANT), direct access line (DAL), and Primary Rate Interface (PRI) trunks. Subscribion is on an Authcode, Automatic Number Identification (ANI), agent, or office basis.	6						Carrier AIN 0.2 Originating No Answer Trigger	This feature provides the capability to specify a time limit in which the called party should answer a call. If the limit is exceeded, the O_No_Answer Trigger Detection Point (TDP) is encountered. It provides value-added busy services such as Call Redirect, Call Take back, and Message Delivery for 800 subscribers. The 0_No_Answer trigger is supported on the following originating agencies: PTS and SS7 equal access network trunk (EANT), direct access line (DAL), and Primary Rate Interface (PRI) trunks. Subscription is on an Authcode, Automatic Number Identification (ANI), agent, or office basis.
	22	CAIN0506	CAIN NETBUSY Trigger	This trigger is evaluated when a network busy event occurs at the Select_Route Point In Call (PIC). The Network, Busy trigger is used to implement network rerouting services. Network Busy occurs in two scenarios: • When route busy event occurs, CAIN tries to route advance to the next trunk in the route list or the next route choice. If no additional routes are available, then a Network Busy event is detected. Route busy occurs when the DMS-500 system attempts to route a call over a trunk group that is busy at the SSP. When this occurs, CAIN call processing tries to route advance to either the next trunk in the route list or the next CAIN route	6						Carrier AIN 0.2 Network Busy Trigger	This trigger is evaluated when a network busy event occurs at the Select_Route Point In Call (PIC). The Network_Busy trigger is used to implement network rerouting services. Network Busy occurs in two scenarios: • When route busy event occurs, CAIN tries to route advance to the next trunk in the route list or the next route choice. If no additional routes are available, then a Network Busy event is detected. Route busy occurs when the DMS-500 system attempts to route a call over a trunk group that is busy at the SSP. When this occurs, CAIN call processing tries to route advance to either the next trunk in the route list or the next CAIN route choice (Alternate, Second Alternate, and Standard routing, as well). • The querying SSP receives an indication from the terminating trunk that a route was busy at a switch other than the SSP that queried. This requires PRI or SS7 connectivity for the reception of release causes at the querying SSP.

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1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	22	CAIN0507	CAIN OCLDBUSY Trigger	This trigger is evaluated when the user busy event occurs at the Send Call and 0_Alerting Points In Call (PICs). The O_Called_Party_Busy trigger is used to offer services such as Call Redirect, Call Take back, and Message Delivery.	6						Carrier AIN 0.2 Originating Called Party Busy Trigger	This trigger is evaluated when the user busy event occurs at the Send_Call and 0_ Alerting Points In Call (PICs). The O_Called_Party_Busy trigger is used to offer services such as Call Redirect, Call Take back, and Message Delivery. This trigger is supported on the PTS and SS7 Feature Group D, direct access line (DAL), and Primary Rate Interface originating agencies. Subscription is made on an Authcode,
	22	CAIN0508	CAIN OFTRREQ Trigger	This feature provides collection of up to four different digit streams prior to querying an SCP to perform subscriber data validation services. The primary benefit of this feature is that messaging overhead is reduced when collecting multiple digit streams. For example; Address Digits, Travel Card Number (TCN), Account Codes, and PIN Digits can be collected in-switch and then all of the digit streams can be sent within one message to an SCP instead of using multiple messages and conversational TCAP. The main service example for this trigger is Mechanized Calling Card Service. The O_Feature_Requested Trigger Detection Point (TDP) will be supported at the Collect_Information Point In Call (PIC). The O_Feature_Requested TDP is valid at 5 PICs, but it is only supported at Collect_ Information_PIC for Phase II in the AIN 0.2 Call	6						Carrier AIN 0.2 Originating Feature Request Trigger	This feature provides collection of up to four different digit streams prior to querying an SCP to perform subscriber data validation services. The primary benefit of this feature is that messaging overhead is reduced when collecting multiple digit streams. For example; Address Digits, Travel Card Number (TCN), Account Codes, and PIN Digits can be collected in-switch and then all of the digit streams can be sent within one message to an SCP instead of using multiple messages and conversational TCAP. The main service example for this trigger is Mechanized Calling Card Service. The O_Feature_Requested Trigger Detection Point (TDP) will be supported at the Collect_Information Point In Call (PIC). The O_Feature_Requested TDP is valid at 5 PICs, but it is only supported at Collect_Information_PIC for Phase II in the AIN 0.2 Call Model. From the Collect_Information Point In Call (PIC), this trigger is encountered when the O_Feature_Requested TDP is detected. This trigger may be subscribed based on an agent, ANI, Authcode, or office basis. The following originating agencies are supported : PTS and SS7 equal access network trunks (EAN
Added	22	CAIN0509	CAIN OIECREO Trigger	This feature provides a new trigger, O_IEC_Reorigination, which allows an SCP the ability to control reorigination and provide custom dialing plans, voice announcements, and enhanced screening and billing capabilities.	10				12878	AX0186	NetworkBuilder Mid-Call Trigger Support	This feature provides a new trigger, O_IEC_Reorigination, which allows an SCP the ability to control reorigination and provide custom dialing plans, voice announcements, and enhanced screening and billing capabilities. This feature allows customization of reorigination services providing the capability for IXCs to tailor reorigination for specific markets using custom dialing plans and announcements. This feature provides enhanced reorigination control based on call information. It also allows an SCP to perform additional screening and fraud control.
Added	22	CAIN0510	CAIN TERMATT Trigger	This feature adds support for the Termination_Attempt trigger which allows services such as call screening for calls terminating to a specific group. Support is also added for the DisplayText parameter, which allows display data (e.g., calling party name) to be passed on ISDN terminations. Unlike most	10				12879	AX0197	NetworkBuilder Termination Attempt Trigger	This feature adds support for the Termination_Attempt trigger which allows services such as call screening for calls terminating to a specific group. Support is also added for the DisplayText parameter, which allows display data (e.g., calling party name) to be passed on ISDN terminations. Unlike most triggers, which are evaluated as the call enters the IXC network, the Termination_Attempt trigger is evaluated as the call is about to leave the IXC network.
Added	22	CAIN0511	CAIN SPECFEAT Trigger	This feature enhances NetworkBuilder support for passing control to an SCP when a special address such as a private speed number or special service code (e.g., *71) is dialed and provides a migration path to AIN for existing public/private speed dialing plans.	10				12880	AX0187	NetworkBuilder Specific Feature Code Trigger	This feature enhances NetworkBuilder support for passing control to an SCP when a special address such as a private speed number or special service code (e.g., *71) is dialed and provides a migration path to AIN for existing public/private speed dialing plans. This feature allows for a centralized SCP database containing special addresses such as public and private speed numbers and provides additional routing control for special addresses. It also provides a trigger for service access codes which allow a wide range of information services such as stock quotes and televoting.
Added	22	CAIN0512	CAIN OFFHKDEL Trigger	The Off-Hook_Delay trigger provides enhanced call-control for the NetworkBuilder product by allowing services early in the dialing plan. This trigger is encountered after all machine dialed digits are collected for PTS agencies, upon receipt of the IAM for ISUP agencies, and upon receipt of the SETUP message for PRI agencies.	10				12881	AX0201	NetworkBuilder Off-Hook Delay Trigger	The Off-Hook_Delay trigger provides enhanced call-control for the NetworkBuilder product by allowing services early in the dialing plan. This trigger is encountered after all machine dialed digits are collected for PTS agencies, upon receipt of the IAM for ISUP agencies, and upon receipt of the SETUP message for PRI agencies. This feature is ideal for SCP-based screening of ANIs, authcodes, account codes and PIN digits. It allows centralized SCP screening database which reduces administrative costs and allows fast customization of dialing plan services, including flexible digit lengths and voice prompts.

Change In		1	1									
Change In Issue 2 Added			Order Code Name CAIN TOLLFREE Trigger	Order Code Description This feature adds support for the Toll-Free trigger, which allows the switch (long distance side) to offer the toll-free service defined by Bellcore specification TR-NWT-000533. It allows long distance carriers to offer the TR-533 service which is normally provided by local exchange carriers (LECs)	1st NCS RIs 10	Enh Ris	MD RIS	Repi Ord Code	PCID 15112		Feature Name TR-533 Toll-Free Database Interworking	Feature Description This feature adds support for the Toll-Free trigger, which allows the switch (long distance side) to offer the toll-free service defined by Bellcore specification TR-NWT- 000533. It allows long distance carriers to offer the TR-533 service which is normally provided by local exchange carriers (LECs)
	22	CAIN0600	CAIN Conv. Digit Collection	This feature allows for a centralized SCP database containing special addresses such as public and private speed numbers and provides additional routing control for special addresses. It also provides a trigger for service access codes which allow a wide range of information services such as stock quotes and televoting.	6					AD8829	Carrier AIN 0.2 Conversational Digit Collection	This feature allows SCP to do prompted digit collection in the Send_to_Resource message. With this feature, carriers can construct more flexible dialing plans. They are not as closely dependent on software delivery schedules nor are software development costs incurred to introduce new features.
		CAIN0601		This feature provides the SCP the ability to send CAINGRP extension parameter that specifies a group of triggers that are checked later in the call model. Definition of NB triggers (PICs, TDPs, and triggers) are done through table CAINGRP. The main benefit of SCP Trigger Subscription is the Event Detection Point (EDP) type of functionality without conversation.	6						Carrier AIN 0.2 SCP Trigger Subscription	This feature provides the SCP the ability to send CAINGRP extension parameter that specifies a group of triggers that are checked later in the call model. Definition of NB triggers (PICs, TDPs, and triggers) are done through table CAINGRP. The main benefit of SCP Trigger Subscription is the Event Detection Point (EDP) type of functionality without conversation.
			CAIN EDP	This feature provides support for five Event Detection Points (EDPs) for NetworkBuilder: Network_Busy, O_Called_Party Busy, O_No_Answer, O_Term_Seized, and 0_Answer. With EDP support, the SCP response may include a list of EDPs to "arm" for call bundling.	7						NetworkBuilder Event Detection Points	This feature provides support for five Event Detection Points (EDPs) for NetworkBuilder: Network_Busy, O_Called_Party Busy, O_No_Answer, O_Term_Seized, and 0_Answer. With EDP support, the SCP response may include a list of EDPs to *arm* for call bundling.
	22	CAIN0603	CAIN STR Connection	This feature enables communications with an intelligent peripheral (IP) from NetworkBuilder using the Send_To_Resource message. IP capabilities are accessed via an SSP, based on a request from an SCP. The IP contains functions and resources capable of exchanging information with an end user.	7						NetworkBuilder Send To Resource Connection	This feature enables communications with an intelligent peripheral (IP) from NetworkBuilder using the Send_To_Resource message. IP capabilities are accessed via an SSP, based on a request from an SCP. The IP contains functions and resources capable of exchanging information with an end user. Examples of IP capabilities, an IP may : play pre-recorded announcements or music, collect Dual Tone Multi-frequency (DTMF) digits, record voice or modulated voice (Ex. facsimile) information, play recorded voice or modulated voice information, perform speaker- dependent or speaker-independent voice recognition.

Change In Issue 2					1st NCS	Enh		Repl Ord				
		Order Cod	e Order Code Name CAIN Inter IMT Support	Order Code Description This feature provides NetworkBuilder Carrier AIN trigger support, including conversational messaging and digit collection, of Global and Inter IMTs (InterMachine Trunks). Only those IMTs with a network specifier of Inter or Global will be supported. IMTs will be capable of interacting with some NetworkBuilder triggers.	RIs 7	RIs	MD RIS	Code	PCID	ACTID	Feature Name NetworkBuilder Inter IMT Support	Feature Description This feature provides NetworkBuilder Carrier AIN trigger support, including conversational messaging and digit collection of Global and Inter IMTs (InterMachine Trunks). Only those IMTs with a network specifier of Inter or Global will be supported. IMTs will be capable of interacting with some NetworkBuilder triggers including O_Feature. Requested, Shared_Interoffice_Trunk, Customized_Dialing_Plan, Specific_Digit_String, Network_Busy, O_Called_Party_Busy, O_No_Answer, and Office_Code (Inter IMTs only).
	22	CAIN0605	CAIN Global IMT Support	This feature allows the interaction of Global Inter- Machine trunks (IMTs) with NetworkBuilder AIN triggers-except Offhook Immediate and PRI B- Channel-including conversational messaging and digit collection.	7						NetworkBuilder Global IMT Suppor	t This feature allows the interaction of Global Inter-Machine trunks (IMTs) with NetworkBuilder AIN triggers-except Offhook Immediate and PRI B-Channel-including conversational messaging and digit collection.
Added	22	CAIN0606	CAIN 1129-Style IP	This feature allows connections to an Intelligent Peripheral (IP) based upon the standard GR- 1129-CORE. It allows an SCP and IP to exchange data through a switch using standard ISUP and ISDN messaging. It also allows an SCP service to use the enhanced capabilities of an IP such as voice recognition, voice synthesis, recorded announcements, operator services, etc.	10				12882	AX0190	NetworkBuilder GR-1129 Core IP Support	This feature allows connections to an Intelligent Peripheral (IP) based upon the standard GR-1129-CORE. It allows an SCP and IP to exchange data through a switch using standard ISUP and ISDN messaging. It also allows an SCP service to use the enhanced capabilities of an IP such as voice recognition, voice synthesis, recorded announcements, operator services, etc. This feature provides standards-based protocol which allows interworking with other vendor SCP and IP products and reduces IP development through centralized SCP service logic. It allows trunks to be released after the IP is no longer required to support the call.
Added	22	CAIN0607	CAIN Virtual IP	This feature allows the SCP to send several digit collection instructions to the SSP in a single message (e.g., collect PIN and account code). This is an enhancement over the SCP sending a separate message for each digit stream that needs to be collected and waiting for the SSP to send the results to the SCP and the SSP waiting further instructions.	10				12883	AX0188	NetworkBuilder Virtual IP	This feature allows the SCP to send several digit collection instructions to the SSP in a single message (e.g., collect PIN and account code). This is an enhancement over the SCP sending a separate message for each digit stream that needs to be collected and waiting for the SSP to send the results to the SCP and the SSP waiting further instructions. This feature reduces TCAP messaging between the DMS-500 switch and the SCP and provides real-time and messaging savings over normal conversational digit collection, which allows higher call capacity.
Added	22	CAIN0609	CAIN Term Notification	This feature provides a notification to the SCP of call termination events by sending a Termination Indicator which specifies how a call is completed (e.g., the call answers) and it also sends a Connect Time message which indicates the time duration of the call. This feature eliminates the need for an open TCAP transaction with the SCP for the length of the call.	10				15091	AX0972	NetworkBuilder Termination Notification	This feature provides a notification to the SCP of call termination events by sending a Termination Indicator which specifies how a call is completed (e.g., the call answers) and it also sends a Connect Time message which indicates the time duration of the call. This feature eliminates the need for an open TCAP transaction with the SCP for the length of the call. This feature provides enhanced billing capabilities for services such as pre-paid calling cards and call completion information useful for traffic management and switch engineering.
Added - Note new Order Code Name	22	CAIN0610	CAIN CainPrt Digit Coll	This feature provides a static "play list" that indicates the digit streams to be collected prior to querying an SCP (e.g., collect an authcode followed by an account code). This feature provides enhancements which allow dynamic play list and the digit streams collected are based on what the user dials.	10				15092	AX0199	O_Feature_Requested Trigger Enhancements	This feature provides a static "play list" that indicates the digit streams to be collected prior to querying an SCP (e.g., collect an authcode followed by an account code). This feature provides enhancements which allow dynamic play list and the digit streams collected are based on what the user dials. This feature increases digit collection flexibility—ideal for services with ambiguous dialing plans—and provides real-time and messaging savings over normal conversational digit collection, allowing for higher call capacity. This feature also reduces TCAP messaging between the DMS-500 and the SCP.

					NCS	Enh		Repl Ord				
	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			CAIN Local Number Portability (LNP-QoO)		7						NetworkBuilder Local Number Portability	This feature allows subscribers to retain their directory number (DN) when they change service providers. Local exchange and interexchange carriers must use other means to determine the destination office of ported calls and route the call through the network to that destination. This LNP capability is based on the location routing number (LRN) routing algorithm, which is defined in American National Standards Institute (ANSI) T1S1 specifications. Calls destined for an office code that supports LNP cause a NetworkBuilder - based query to be launched to an SCP. If the DN has been ported, the SCP determines the LRN-which identifies the office to which the number has been ported-and returns that information to the switch. The LRN is then used by the switch to route the call to the correct terminating office.
Added	22	CAIN0700	CAIN Local Number Portability (LNP-QoO)	This feature increases digit collection flexibility—ideal for services with ambiguous dialing plans—and provides real-time and messaging savings over normal conversational digit collection, allowing for higher call capacity. This feature also reduces TCAP messaging between the DMS-500 and the SCP.	7	10			11156	AX0198	NetworkBuilder LNP Enhancements	This feature enhances existing NetworkBuilder LNP functionality by providing support for LNP on MCCS calls and prevents LNP queries based upon STS. This feature also allows the provisioning of a default Jurisdiction Information Parameter (JIP) on a per-trunk basis. The JIP identifies the originating switch LRN. This feature enhances the CAIN LNP product with support for additional call types and improves LNP interaction with existing in-switch and NetworkBuilder capabilities
Added	22	CAIN0700	CAIN Local Number Portability (LNP-QoO)	This feature allows subscribers to retain their directory number (DN) when they change service providers.	7	10			11156	AX0189	NetworkBuilder LNP Interactions with SS7 RLT	This feature provides Local Number Portability (LNP) functionality with SS7 Release Link Trunk (RLT) when performing RLT redirection or for the second call leg of a possible RLT call. It also provides for the addition of an LNPRLT option for Inter/Intra- network IMT trunks which makes a trunk "CAIN-capable" on the Office_Code trigger. This feature provides the appropriate merging of LNP CDR information for RLT bridging scenarios. This feature provides interworking between LNP and Services Platforms and the ability to perform LNP lookups on addresses collected at the Services Platform. It also reduces the passing of possible ported numbers to LECs which eliminates the
Added	22	CAIN0700	CAIN Local Number Portability (LNP-QoO)	This feature allows subscribers to retain their directory number (DN) when they change service providers.	7	10			11156	AX0992	NetworkBuilder Office_Code Enhancements	dip charges from LECs to perform the LNP lookup. This feature increases tuple entries from 64K to 1M to table OFFCODE associated with Local Number Portability (LNP) and increases flexibility in provisioning records. This feature increases table capacity for office codes open to LNP.
Added	22	CAIN0700	CAIN Local Number Portability (LNP-QoO)	This feature allows subscribers to retain their directory number (DN) when they change service providers.	7	10			11156	AX1378	LNP Terminating LRN Recognitionn	This feature enhances the routing functionality for LNP calls by recognizing a received LRN as one assigned to the switch (long distance side-Home LRN) and routing the call based upon the original dialed number instead of the LRN
Added- Note new Order Code Name	22	CAIN0800	CAIN Mid Call Services I	This feature provides an initial platform for prepaid calling cards and allows an SCP to provide billing flexibility and fraud prevention. It provides two new Event Detection Points (EDPs).	10				15093	AX0200	NetworkBuilder EDPs-Phase 2	This feature provides two new Event Detection Points (EDPs): • The timeout EDP provides the ability for the SCP to instruct the switch to start a timer upon call answer for a specified duration. If the timer expires before call completion, a message is sent to the SCP requesting further instructions. • The O_Disconnect EDP provides the ability for the SCP to instruct the switch to send the call's time duration when the call is disconnected.
		0.111000.							1500 (This feature provides an initial platform for pre-paid calling cards (prepaid cards) and reduces costs and port requirements by using the switch as a prepaid calling card platform. It also allows an SCP to provide additional billing flexibility and fraud prevention.
Added- Note new Order Code Name	22	CAIN0801	CAIN Mid Call Services II	This feature is used for applications such as pre- paid calling cards and allows the connection of a resource to an answered two party call. Resource types include announcement, tone or connection to an Intelligent Peripheral (IP).	10				15094	AX0974	NetworkBuilder Connect_to_Resource	This feature is used for applications such as pre-paid calling cards and allows the connection of a resource to an answered two party call. Resource types include announcement, tone or connection to an Intelligent Peripheral (IP). This feature provides pre-paid calling card processing options and enables IXCs to provide customized announcements.

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Added			Order Code Name	Order Code Description This feature is used in the control of network	RIs 10	Ris	MD RIs Code	PCID	ACTID AX0976	Feature Name NetworkBuilder Automatic Code	Feature Description This feature is used in the control of network congestion and prevents overloading of
Addea	22	CAINOSOU	CAIN Auto Code Gapping	This feature is deed in the control of hetwork congestion and prevents overloading of the SCP which can be initiated automatically via the SCP. It allows the SSP to receive and install ACG controls and checks the ACG controls to determine if a query should be stopped or slowed down for a given duration of time.	10			15095	AX0976	Gapping	This feature is cost in the control of network congestion and prevents overloading of the SCP which can be initiated automatically via the SCP. It allows the SSP to receive and install ACG controls and checks the ACG controls to determine if a query should be stopped or slowed down for a given duration of time. This feature increases network reliability and stability under high call volume, reduces network impact that could be caused by LNP, and reduces the cost of ownership.
Added-note new Order Code Name	22	CAIN0901	CAIN Manual Code Gapping	This feature provides IXC capability to selectively control ACG on 3 or 6-10 digits and control exclusion can be applied to emergency numbers. With this feature, manual controls can be initiated before a network congestion problem occurs.	10			15096	AX0975	Management	This feature provides IXC capability to selectively control ACG on 3 or 6-10 digits and control exclusion can be applied to emergency numbers. With this feature, manual controls can be initiated before a network congestion problem occurs. This feature increases network reliability and stability under high call volume and enables the customer to proactively control gapping. It also reduces network impact that could be caused by LNP.
	42	CDD00001	CDD Loc Services	This feature enables basic end office capabilities for international calls in the Canadian market including Country code screening, and international routing translations for direct dial and operator assisted calls.	6					Canadian Direct Distance Dialing Local Services	This feature enables basic end office capabilities for international calls in the Canadian market including Country code screening, and international routing translations for direct dial and operator assisted calls.
	42	CDD00003	CDD 2 DIG ANI ID-EO LAMA	This feature extends flexible ANI service to Canadian end offices with LAMA that do not provide equal access and the ability to include the ANI information code in an appended module (code 306) to the Bellcore AMA record.	6					Two-Digit Automatic Number Identification End Office Local Automatic Message Accounting	This feature extends flexible ANI service to Canadian end offices with LAMA that do not provide equal access and the ability to include the ANI information code in an appended module (code 306) to the Bellcore AMA record.
	42	CDD00004	CDD Trunk Group Member Usage	This feature provides Bellcore format Automatic Message Accounting (AMA) billing records at the toll office that contain outgoing trunk information including trunk group number, trunk member number, and trunk direction information.	6				PA0030	Trunk Group Member Usage	This feature provides Bellcore format Automatic Message Accounting (AMA) billing records at the toll office that contain outgoing trunk information including trunk group number, trunk member number, and trunk direction information.

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	Ann	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
		CMS00001		This feature, available in the Canadian market only, enhances the signaling capabilities of analog stored program controller (SPC) switches to integrate some CCS7-based network features such as Calling Number Display, Automatic Call Setup, and Screening List Editing features. This is achieved by adding a central office data processor - an outboard adjunct processor which provides CCS7 network interface capabilities to the analog SPC.	6						Call Management Services (CMS) CLASS	This feature, available in the Canadian market only, enhances the signaling capabilities of analog stored program controller (SPC) switches to integrate some CCS7-based network features such as Calling Number Display, Automatic Call Setup, and Screening List Editing features. This is achieved by adding a central office data processor -an outboard adjunct processor which provides CCS7 network interface capabilities to the analog SPC.
	22	CRDS0001	Basic/Enhanced Calling Card Service	This feature provides basic 14-digit travel card services on the switch.	5							This feature enables the service provider to offer calling card services, so subscribers can place calls through the DMS-500 system from any location and have the billing charged against a 14-digit calling card. Control for these calls is on a trunk group basis through DMS datafill.
	22	CRDS0001	Basic/Enhanced Calling Card Service	This feature provides basic 14-digit travel card services on the switch.	5						Enhanced Calling Card	This feature allows COSUS access to block or allow international and direct dial calls on a per calling card basis, controlled through DMS datafill.
	22	CRDS0001	Basic/Enhanced Calling Card Service	This feature provides basic 14-digit travel card services on the switch.	5							This feature supports travel card number calling with or without the zero number prefix in the called address for national calls, based on a dedicated universal access number. The software leaves the leading zero intact whenever mechanized voice prompts are set.
	22	CRDS0001	Basic/Enhanced Calling Card Service	This feature provides basic 14-digit travel card services on the switch.	5							This feature provides the service provider with a log after each failed attempt to enter a valid 14 digit travel card number (TCN). These logs are seamlessly integrated into the normal DMS log system and are very useful in monitoring the call card performance of the DMS-500 system.
	22	CRDS0002	TCAP-Based Card Service	This feature provides TCAP-based travel card number and CI command TESTSS (ACCTTEST) for TCN validation.	5							TCAP-based card services allows outboard validation via a Service Control Point (SCP) to take place. TESTSS (ACCTTEST) enables queries to be sent to a SCP and displays the results. The command, invoked from the MAP, allows the craftsperson to query the SCP to test the validity of TCN digits, authcodes, account codes, ANI digits, and private speed translations in the SCP database.

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				Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
				TCAP-Based Card Service	This feature provides TCAP-based travel card number and CI command TESTSS (ACCTTEST) for TCN validation.	5						TCAP Based TCN	This feature allows the service provider to support calling card services for their subscribers using an offboard SCP to validate the calling card. This is accomplished through the use of the Transaction Capability Partition (TCAP) provided by SS7 signaling. Calling card information is collected from the caller and routed to an SCP for lookup. This greatly simplifies database management by storing all calling card numbers in a single database rather than replicating them throughout the network. In addition, the use of an SCP greatly increases the range of services that the service provider can offer the card user.
	22	2 C		Voice Prompts)	This feature enables carriers to migrate the calling processing functionality from the tone- based mechanized calling card system (MCCS) to a system based on voice prompts.	5					AD8209	MCCS MVP Card Services	The Mechanized Voice Prompts (MVP) feature enables service providers to migrate the call processing functionality from the tones-based mechanized calling card system (MCCS) to a system based on voice prompts. MVP enables the service provider to customize messages and provide more information and instructions to users, making calling card services more flexible and user-friendly. With MVP, service providers can customize their voice prompt messages and effectively "brand" their service. Voice messaging changes for service modification, service addition and multiple language applications are all easily applied with MVP.
Added	22	2 °C		Voice Prompts)	This feature enables carriers to migrate the calling processing functionality from the tone- based mechanized calling card system (MCCS) to a system based on voice prompts.	5	10			5668		Mechanized Calling Card Services Voice Prompts	This feature provides the ability to access Operator Choice (OPCHOICE) routing for Universal Access (UA) Mechanized Calling Card Services (MCCS) Voice Prompts (VPROMPTS) functionality. When a UA MCCS VPROMPTS call has been identified, if the OPCHOICE option is selected, OPCHOICE functionality is used to route the call via the given index designated for the particular UA number. If the OPCHOICE option is not selected, the call is routed via table MVPRTE. This feature also increases the number of UA MCCS Voice Prompts announcement sets supported by table VPROMPTS from 100 to a maximum of 1024. This feature allows carriers to provide an increased number of customized voice prompts to customers and to resellers who offer their own calling card services.
Added	22	2 C		Query	This feature adds two digits parameters to the IN1 MCCS TCAP INVOKE message, the Calling Party Address Digits parameter and the Called Party Address Digits parameter.	6				9886		Calling-Called Number Query	This feature adds two digits parameters to the IN1 MCCS TCAP INVOKE message, the Calling Party Address Digits parameter and the Called Party Address Digits parameter.
	22	2 C	RDS0005		This feature enhances the Calling Card Service by allowing the end user to enter a 4-digit Quick Call personal identification number (PIN), rather than a 14-digit TCN, if the dialed number and billing number are the same.	7						Quick Call	This feature enhances the Calling Card Service by allowing the end user to enter a 4- digit Quick Call personal identification number (PIN), rather than a 14-digit TCN, if the dialed number and billing number are the same. The switch creates the subscriber's 14-digit TCN by appending the 4-digit Quick Call PIN to the 10-digit Directory Number. For Quick Calls, the 10-digit dialed number must be the same as the first 10 digits of the TCN.

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Issue 2		Order Cede	Order Code Name	Order Code Description	NCS Ris	Enh	MD RIs	Repl Ord	PCID		Feature Name	Feature Description
At NCS10, Voice Mail Easy Access can be ordered via RES00090			CSTC Voice Mail Easy Access	This feature provides residential end users an integrated access to a voice messaging service from an end office by simply dialing a vertical star access code ("XX) from their home telephone set. Optionally, the subscriber may have to enter a Personal Identification Number (PIN). This Order Code is used for Voice Mail Easy Access prior to NCS10.	8	KIS	MD KIS	Code	PCID	ACTID	Voice Mail Easy Access	This feature Description This feature provides residential end users an integrated access to a voice messaging service from an end office by simply dialing a vertical star access code ('XX) from their home telephone set. Optionally, the subscriber may have to enter a Personal Identification Number (PIN). This Order Code is used for Voice Mail Easy Access prior to NCS10.
Added	26 (CSTC0029		This feature keeps out-of-service lines connected to the service provider's network. With this feature, a terminated line is effectively out of service (it no longer has a directory number), but remains connected to the network so that the next resident has dial tone and can call the network provider's service office to get the line activated.	10				11524	AJ5121	Restricted Dial Tone - Residential	A line with Restricted Dial Tone (RSDT) receives special dialing restrictions that prohibit incoming calls and restrict outgoing calls. With RSDT, outgoing calls can be limited to service provider numbers and emergency services only. CSTC0029 provides transparent management of RSDT lines through two simple Service Order (SERVORD) commands. To activate and deactivate Restricted Dial Tone for a line, the service provider simply uses the same SERVORD commands ('OUT" and "NEW") used to place a line out of and back into service. The provisioning simplification offered by CSTC0029 saves the service provider from having to make any Operations Support System (OSS) changes to assign/unassign Restricted Dial Tone lines. Also, since the line remains connected to the service provider's network — even after regular telephone service to that line has been terminated — a new subscriber can have the provider turn up service on that line quicky. This translates into savings on operational costs and enhances customer service by bringing the new subscriber's service up faster.
Added ACTID	26 (Trunks	This feature provides Calling Line Identification (CLID) on calls originating from PX trunks, on a per-trunk group basis. It also provides the option of blocking the presentation of CLID on calls of this type, also on a per trunk group basis.	8				10447	AJ4372	CLID Delivery on PX Trunks	Due to the limitations of Per-Trunk Signaling (PTS), which is the signaling used by PBX (PX) trunks, the messaging capability necessary to provide CLID on calls originating from PX trunks is not available. This feature compensates for the PTS limitations by allowing the teloc to store on the host DMS end-office a directory number (DN), and optionally name, for each PX trunk group. On a call originating from a PX trunk, this CLID information is sent to the called party either on the host DMS end-office, or on a remote office connected via Common Channel No. 7 (CCS7) messaging. The information stored on the DMS end office also identifies the trunk groups which should have CLID information blocked.
Added	42 & (26	CSTC0101	Prevention	This feature offers enhanced revenue protection against certain forms of direct-dial 900-service fraud. This feature is primarily directed to Canadian carriers, and enhances revenue protection by preventing end users from directly dialing the ten-digit DN associated with a 900 special billing number. Note: This feature can also be deployed in the U.S., on specific implementations of 800/900 service, and should be assessed for applicability on a case-by-case basis.	10				10448	AJ4374, AJ4836	900 Fraud Prevention	This feature helps prevent 1-900 fraud perpetrated by callers directly dialing a client ten-digit directory number (DN), instead of the published 900 number, to avoid billing. If the system receives a call with a ten-digit DN that is associated with a 900 special- billing number, the switch verifies this number was not dialed directly by the end-user by checking the 800 service indica- tor and OCN (original called number – 900, 8XX). Calls not made by dialing 1+900+XXX+ XXXX are considered fraudulent 900 calls and are routed to a not-in-service treatment.
	34 [DCR00001		This feature provides an automatic, intelligent network management system that uses switch and traffic information to automatically re-route overflow traffic and gives toll and local networks the ability to make routing decisions based on the actual moment-to-moment status of a network.	5						Dynamically Controlled Routing Base	This feature provides an automatic, intelligent network management system that uses switch and traffic information to automatically re-route overflow traffic and gives toll and local networks the ability to make routing decisions based on the actual moment- to-moment status of a network.

Change In Issue 2					1st NCS	Enh		Repl Ord				
Added			Order Code Name DCR Mult. Net. Access	Order Code Description DCR network elements (NEs) can be given the capability to interface to more than one network processor (NP). An intelligent NE equipped with MNA is capable of supporting up to six DCR networks. Routing within each DCR network is controlled by a single NP. The MNA NE communicates congestion and recommendation information to the appropriate NP. A network naming protocol is used to identify which network and NE is participating in and which NP and MNA NE communicates with. The MNA capability enables a gateway NE to participate in the routing of DCR intra-network and inter-network traffic.	Ris 7	Ris	MD RIS	Code	709	ACTID	Feature Name Multiple Network Access (MNA)	Feature Description DCR network elements (NEs) can be given the capability to interface to more than one network processor (NP). An intelligent NE equipped with MNA is capable of supporting up to six DCR networks. Routing within each DCR network is controlled by a single NP. The MNA NE communicates congestion and recommendation information to the appropriate NP. A network naming protocol is used to identify which network and NE is participating in and which NP and MNA NE communicates with. The MNA capability enables a gateway NE to participate in the routing of DCR intra- network and inter-network traffic.
	34	DCR00003	DCR Dual X.25 Link	This feature supports two digital DCR links to enhance the availability of DCR services on a switch and is intended for network providers who require high-availability DCR switches. It also supports a backup communication facility for DCR messages between the DMS switch and a centralized Network Processor.	5						Dual X.25 Links	This feature supports two digital DCR links to enhance the availability of DCR services on a switch and is intended for network providers who require high- availability DCR switches. It also supports a backup communication facility for DCR messages between the DMS switch and a centralized Network Processor.
	34	DCR00004	DCR Universal Translation	This feature provides a mechanism to turn ON and OFF the access of the DCR algorithm to universal translations. This will allow the use of DCR selectors in universal translation routing tables (ACRTE, CTRTE, FTRTE, NSCRTE, OFCRTE, and PXRTE).	7					AQ1553, AQ1554	Dynamically Controlled Routing (DCR) in Universal Translations	This feature provides a mechanism to turn ON and OFF the access of the DCR algorithm to universal translations. This will allow the use of DCR selectors in universal translation routing tables (ACRTE, CTRTE, FTRTE, NSCRTE, OFCRTE, and PXRTE).
	4	DTP00001	DTP Datapath	This feature offers cost-effective lower- bandwidth applications via twisted-pair for switched data services in offices that have not yet implemented National ISDN data services.	5					AC0509	Automatic Modem Insertion	The Automatic Modem Insertion (AMI) feature enables an outbound modem pool (OMP) element to be inserted automatically into the path of a Datapath call. Outbound modem pooling is required if a call is routed over analog facilities or if the call terminates on a modem. The AMI feature frees the end user from manually inserting modem pooling and relieves the uncertainty of whether the far-end modem has answered the call it a speakerless data unit is used. Existing modem pooling after hearing carrier tone that indicates the far-end modem has answered the call. With a speakerless data unit, the user must press the NSR key continuously until the call is completed. Late activation of the NRS feature can result in the answering modem indicates the safe. The ANI feature ferminates this uncertainty by: Attaching an Audio Tone Detector (ATD) to the line, Detecting modem answer tone, and Inserting a modem pool automatically.
	4	DTP00001	DTP Datapath	This feature offers cost-effective lower- bandwidth applications via twisted-pair for switched data services in offices that have not yet implemented National ISDN data services.	5					AC0545	Closed User Groups & Loopback S/W for DIALAN Service	This feature, in conjunction with firmware feature AC0544, enhances the Asynchronous Interface Line Card (AILC) used for DIALAN Service through: • Implementation of Closed User Groups (CUC) for DIALAN Service and • Two additional maintenance loopback points for fault detection for DIALAN lines. The CUG restricts access into or out of a defined group of data lines by means of compatibility tests on assigned CUG identifiers. The feature provides the CUG option on the enhanced AILC via service order or Table Control. DIALAN Service currently provides a single loopback located at the AILC. DIALAN Service Plus adds two loopbacks—one at the central office Integrated Voice and Data Multiplexer (IVDM) and a second at the clospback loopmation to the appropriate IVDM. This feature

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	4	DTP00001	DTP Datapath	This feature offers cost-effective lower- bandwidth applications via twisted-pair for switched data services in offices that have not yet implemented National ISDN data services.	5					AC0616	CSA/UL Compliant Data Line Card	This feature supports the new NT6X71AC data line card, which is issued to meet new CSA/UL safety requirements of 600 volt power cross. Apart from this safety enhancement, the new card is functionally the same as its predecessor, the NT6X71AB, and includes all of its previously available capabilities.
	4	DTP00001	DTP Datapath	This feature offers cost-effective lower- bandwidth applications via twisted-pair for switched data services in offices that have not yet implemented National ISDN data services.	5					AC0565	Datapath Critical Path Restoration	The Critical Path Restoration (CPR) feature enables a Datapath call to be reestablished automatically if it should be disconnected due to power loss, switch reset in the customer premises equipment (CPE), or other inadvertent network disruptions. Some data connections, such as those between a host computer and its printer or remote terminal, must be maintained permanently. The CPR feature reestablishes a dropped connection by requesting the originating data unit to reinitiate the call to the same directory number (DN). The DN is datafilled at subscription. Feature activation is accomplished by datafilling "CPR" as a key set feature and enabling the Auto Originate (AUTOORIG) option in the user's data unit. No special hardware or firmware is required for this feature. Since a call reestablished by CPR is likely to be "permanent," flat rate billing is recommended for CPR calls. The CPR
	4	DTP00001	DTP Datapath	This feature offers cost-effective lower- bandwidth applications via twisted-pair for switched data services in offices that have not yet implemented National ISDN data services.	5					AC0615	ISDN Inbound Modem Pooling	feature is compatible with most existing features for data units. CPR functions This feature allows terminals in non-ISDN (e.g., POTS) networks using voiceband modems to establish calls to ISDN circuit-switched data terminals/terminal adapters with T-Link rate adaption. This capability is provided using a Synonym Directory Number (described below). Inbound Modem Pooling employs a group of modems of various speeds at the central office to convert incoming data from analog to a digital format, thereby allowing ISDN interworking with analog facilities. Each modem is wired to a Meridian Data Unit (MDU) (see figure below). A modem pool member from the specified pool is automatically inserted into the call path when an ANSWER message is received from the terminating ISDN terminal. ISDN and Datapath
	4	DTP00001	DTP Datapath	This feature offers cost-effective lower- bandwidth applications via twisted-pair for switched data services in offices that have not yet implemented National ISDN data services.	5					AC0547	Outbound Modem Pooling for ISDN Circuit Switched Data	This feature, based on the Datapath Modern Pooling feature, allows ISDN terminals and terminal adapters using T-Link rate adaption to send synchronous and asynchronous data from the ISDN to a destination in the POTS network over analog facilities. Modern pool activation is automatic, requiring no user intervention. A modern pool is a group of moderns of various speeds (1.2 kbps through 9.6 kbps), each connected to a Meridian Data Unit. Moderns of a particular speed are assigned directory numbers in a hunt group. When a circuit-switched data call is completed to an address within an analog network or has been routed over analog facilities, an available modern in the hunt group is automatically inserted at the point the call enters
	4	DTP00001	DTP Datapath	This feature offers cost-effective lower- bandwidth applications via twisted-pair for switched data services in offices that have not yet implemented National ISDN data services.	5					AC0534	Software Definition of 6X71AC & 6X76AC Datapath Line Cards	This feature: • brings the Standard Datapath line card (NT6X71) into compliance with newly issued Underwriters Laboratory and Canadian Standards Association standards, and • allows both the Standard Datapath line card (NT6X71AC) and the Asynchronous Interface Line Card (AILC) (NT6X76AC) to be datafilled in DMS data tables and maintained through the Maintenance and Administration Position (MAP). The new line cards continue to be fully compatible with the existing Datapath line cards (NT6X71AB, NT6X76AA). This feature creates no new interactions and imposes no new restrictions or limitations. The AILC is an integral part of DIALAN
	4	DTP00001	DTP Datapath	This feature offers cost-effective lower- bandwidth applications via twisted-pair for switched data services in offices that have not yet implemented National ISDN data services.	5					AC0617	TCM Sync Loss Robustness	This feature minimizes the effects of time compression multiplexing (TCM) synchronization losses of short duration by making the DMS more tolerant of momentary TCM sync hits, resulting in increased system robustness and fewer lost data calls.
	4	DTP00003	DTP DataCall Tester	This feature provides a simple way for service testing personnel to verify data network performance and measures network performance through Bit Error Rate Testing	5						DataCall Tester	This feature provides a simple way for service testing personnel to verify data network performance and measures network performance through Bit Error Rate Testing (BERT) and permits control by user commands from the DataCall Tester Map level and stores test results for easy retrieval.

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Issue 2		0	Outra Outra Nama	Orden Orde Decemintion	NCS	Enh		Repl Ord		ACTID	Frature News	Facture Description
Changed App from 4 to 42			Order Code Name DTP D-Path Prvsng CAN.	Order Code Description This feature, available in the Canadian market only, allows subscribers in the public network to use data units to connect to a special POTS version of Datapath. In the same switch, POTS Datapath and Centrex Datapath services co- exist and function independently (interworking between the two services is through standard POTS/Centrex interfaces).	RIs 6	KIS	MD RIS	Code	PCID 1262	ACTID	Feature Name Datapath Provisioning	Feature Description This feature, available in the Canadian market only, allows subscribers in the public network to use data units to connect to a special POTS version of Datapath. In the same switch, POTS Datapath and Centrex Datapath services co-exist and function independently (interworking between the two services is through standard POTS/Centrex interfaces).
	10	ENS00001	ENS LDT PSAP	This feature provides 911 calls to a customer premises-based Public Service Answering Position (PSAP) through the Line Appearance on a Digital Trunk (LDT) node of the Subscriber	5					NC0294	Enhanced 911 (E911) Tandem	This package provides capabilities that allow one office to serve as tandem access and receive 911 emergency calls from other end offices, as well as from customers served by the same E911 tandem office. The tandem office routes an emergency call, using the Automatic Number Identification (ANI) of the calling party, to the calling
	10	ENS00001	ENS LDT PSAP	This feature provides 911 calls to a customer premises-based Public Service Answering Position (PSAP) through the Line Appearance on a Digital Trunk (LDT) node of the Subscriber Carrier Module-100 Urban (SMU).	5					NC0294	Local Access to E911	This feature provides cost savings for customers by making the loop-around trunks used by local access E911 calls unnecessary. Specifically, this feature provides ORIGHOLD, ringback, and ROH for local calls to E911 without the use of loop- around trunks.
	10	ENS00002	ENS ACD PSAP	This feature provides the same E911 Tandem capability as the LDT PSAP in ENS00001, but routes calls to a Meridian Automatic Call Distribution (ACD) group that is defined as a PSAP.	5					AF2146	E911 Direct Access to ALI Database	This feature provides interfaces that help the E911 tandem to supply Automatic Location Identification (ALI) service to the PSAPs without the need for extensive, non- switch-based equipment. With this feature, E911 subscribers can replace their ANI controller circuits with direct links from the tandem to the ALI database or controller. The interface is between a DMS Family switch serving as an E911 tandem and external 911 equipment previously connected to an ANI controller. This interface
	10	ENS00002	ENS ACD PSAP	This feature provides the same E911 Tandem capability as the LDT PSAP in ENS00001, but routes calls to a Meridian Automatic Call Distribution (ACD) group that is defined as a PSAP.	5					AF2759	E911 Direct Access to AT&T ALI Controller	This feature provides an interface that allows the E911 tandem to supply Automatic Location Identification (ALI) service to the Public Safety Answering Points (PSAPs) without the need for extensive, non-switch-based equipment. With this feature, E911 subscribers can replace their Automatic Number Identification (ANI) and ALI equipment with direct links from the tandem to the ALI database or controller. The interface between a DMS serving as an E911 tandem and external 911 equipment treplaces the ANI controller. This interface comprises assochronous. ASCII data links
			ENS ACD PSAP	This feature provides the same E911 Tandem capability as the LDT PSAP in ENS00001, but routes calls to a Meridian Automatic Call Distribution (ACD) group that is defined as a PSAP.	5					AF2739	E911 Integrated PSAP ACD Functionality	Enhanced 911 (E911) Automatic Call Distribution (ACD) combines the functions of Meridian ACD and E911 service, allowing Meridian ACD groups to serve as E911 Public Service Answering Points (PSAPs). This capability is beneficial to small municipalities that cannot afford their own PSAP equipment and to large municipalities considering modernization of existing PSAP equipment. This type of ACD group distributes the 911 calls to a predefined set of answering positions staffed by emergency service personnel. The call terminates by means of a voice channel to a Business Set customized for use by the PSAP attendants. This functionality is implemented by assigning option ACD PSAP to the Meridian ACD group designated to serve as E911 PSAPs. The DMS Family switching system also interfaces directly to an external database using a form of ASCII protocol. Through this interface, the switch drives the external database to transmit the data associated with the telephone number of the calling line to a display terminal that is collocated with the Business Set. The received data are displayed on the PSAP attendant's terminal. This application re This package (NTXF61AA) serves as an alternative to NTX447AA and works in conju
	10	ENS00002	ENS ACD PSAP	This feature provides the same E911 Tandem capability as the LDT PSAP in ENS00001, but routes calls to a Meridian Automatic Call Distribution (ACD) group that is defined as a PSAP.	5					NC0317	E911 Remote Call Event Record	This feature gives PSAPs the capability of tracking abandoned calls as well as providing administrative advantages many PSAPs require. These benefits stem from the feature's ability to allow Remote Call Event Records (RCERs) to be transmitted over an asynchronous ASCII Multi-Protocol Controller (MPC) link. RCERs are very similar to the currently used E911 212 logs and contain specific data pertaining to the call event (e.g., time call was answered, transferred, and disconnected). Two options are provided for data format. The BRIEF format is one line per call (i.e., only the data line is sent over the MPC link). The LONG format is three lines per call (i.e., a header

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			Order Code Name ENS ACD PSAP	Order Code Description This feature provides the same E911 Tandem capability as the LDT PSAP in ENS00001, but routes calls to a Meridian Automatic Call Distribution (ACD) group that is defined as a PSAP.	RIs 5	RIS	MD RIS	Code	PCID	ACTID AF2145	Feature Name E911 Single Button Transfer Operation	Feature Description This feature allows a Public Safety Answering Point (PSAP) agent to transfer a call by activating a single, predefined feature key on his or her Business Set. The E911 agent can define the Quick Conference Key (QCK) as a selective or fixed transfer. With this feature, all the actions previously necessary to transfer a call are eliminated (e.g., setting up a conference using the conference key or flash signal, using a speed calling key, etc.). This feature can be assigned to almost any Business Set, not just those used for E911 functionality.
	10	ENS00002	END ACD PSAP	This feature provides the same E911 Tandem capability as the LDT PSAP in ENS00001, but routes calls to a Meridian Automatic Call Distribution (ACD) group that is defined as a PSAP.	5					AF2147	Emergency Directory Number Routing Capability	This feature, Emergency Directory Number Routing (EDNR) Capability, allows the E911 tandem office to route or transfer selectively an E911 call to an agency that is not an E911 PSAP or that is not served by the E911 tandem office. The EDNR functionality was developed to allow tandem-to-tandem routing and selective transfer from an E911 PSAP to a non-PSAP agency.
	10	ENS00002	ENS ACD PSAP	This feature provides the same E911 Tandem capability as the LDT PSAP in ENS00001, but routes calls to a Meridian Automatic Call Distribution (ACD) group that is defined as a PSAP.	5					AG1840	Enhanced Data Transfer for SMDR	This feature supports a new interface that considerably enhances both the throughput and the robustness of ASCII data transfer in Station Message Detail Recording (SMDR) applications. These enhancements are transparent with respect to the datalink protocols defined for use with ASCII SMDR data access systems. This package requires the Multi-Protocol Controller (MPC) circuit board.
	10	ENS00002	ENS ACD PSAP	This feature provides the same E911 Tandem capability as the LDT PSAP in ENS00001, but routes calls to a Meridian Automatic Call Distribution (ACD) group that is defined as a PSAP.	5					NC0294	Local Access to E911	This feature provides cost savings for customers by making the loop-around trunks used by local access E911 calls unnecessary. Specifically, this feature provides ORIGHOLD, ringback, and ROH for local E911 calls without the use of loop-around trunks.
	10	ENS00004	ENS Large SRDB	This feature provides an increase in the maximum capacity of the Selective Routing Database (SRDB) to 32 million entries (or all possible entries in a four area code serving area) which significantly expands switch-based E911 selective routing based on the Directory number, thousands group, NXX or Numbering Plan Area.	5					NC0162	Dial-Up into ALI Database for SRDB Update	This feature allows a DMS switching system serving as an E911 access tandem to schedule periodic events that will initiate: the asynchronous transfer of recent change information from the Automatic Location Identification (ALI) database and the subsequent update of the E911 Selective Routing Database (SRDB). Transfer is accomplished over a modem connection, which may be either dial-up or dedicated, between the Multi-Protocol Controller (MPC) on the DMS and the ALI database. The Kermit protocol, also implemented on the DMS by this feature, is used to transfer the files. To support the update, this feature provides table control, a CI command to
	10	ENS00004	ENS Large SRDB	This feature provides an increase in the maximum capacity of the Selective Routing Database (SRDB) to 32 million entries (or all possible entries in a four area code serving area) which significantly expands switch-based E911 selective routing based on the Directory number, thousands group, NXX or Numbering Plan Area.	5					AN0102	ENS Large Selective Routing Database	This software supports an increase in the maximum capacity of the Selective Routing Database (SRDB) to 32 million entries—or all possible entries in a four area code serving area. This increase significantly expands switch-based E911 selective routing, based on the individual Directory Number, thousands group, NXX, or Numbering Plan Area (area code). Selective Routing helps each subscriber to reach the most appropriate Emergency Response Center, based on geographic location. ENS00004 replaces ENS00003 for all shipments starting in the NA004 time period.
	10	ENS00004	ENS Large SRDB	This feature provides an increase in the maximum capacity of the Selective Routing Database (SRDB) to 32 million entries (or all possible entries in a four area code serving area) which significantly expands switch-based	5					AN0102	Large Capacity SRDB	This expanded-capacity database offers a number of benefits to the network R large-capacity Selective Routing Database (SRDB) has three key market benefits: • Addresses the increased capacity requirements of the largest metropolitan areas • Permits one-to-one correspondence between SRDB entries and served DNs • Provides backup capacity for neighboring SRDBs The current SRDB supports 800.000 entries in the DMS SuperNode system. The

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1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			ENS Large SRDB	This feature provides an increase in the maximum capacity of the Selective Routing Database (SRDB) to 32 million entries (or all possible entries in a four area code serving area) which significantly expands switch-based E911 selective routing based on the Directory number, thousands group, NXX or Numbering Plan Area.	5					NC0337	SRDB Memory Management	This feature provides a way to determine information regarding the memory use and capacity consumption of table E911 Selective Routing Database (SRDB) memory. This information is generated during table updates when certain threshold values are reached and can also be generated on demand.
	10	ENS00004	ENS Large SRDB	This feature provides an increase in the maximum capacity of the Selective Routing Database (SRDB) to 32 million entries (or all possible entries in a four area code serving area) which significantly expands switch-based E911 selective routing based on the Directory number, thousands group, NXX or Numbering Plan Area.	5					NC0501	SRDB Update Enhancements	Now the latest changes in information about callers, including such items of interest to PSAPs as health conditions, can be made quickly and easily. Currently, when tape and file formats are used at the MAP position to make updates to the SRDB data base, it is often necessary to transfer the information from one format to another. This feature makes it possible to enter the necessary information directly into the DMS without the delays and inconvenience associated with reformatting. This package provides access to Kermit protocol.
	10	ENS00005	ENS 911	This feature provides support for the implementation of E911 services and includes Virtual Facility Group support and Ringback to E911 caller capabilities.	5	6				AN1921	Data Enhancements	This standard feature of ENS00005 enhances the following data portions of E911 operation: • Introduce Call Park for Automatic Call Distribution Public Safety Answering Point (ACD PSAP) centers to offer more options for call processing. • Support X.25 links to Automatic Location Information database as an efficient, high-speed option for Selective Routing Database (SRDB) updates. • Enhance logs for SRDB updates to help make the update process more informative. These enhancements enable the network provider to better manage and operate the E911 network in a variety of environments. For example, the Call Park feature is important for small centers having limited call coverage options, while the X.25 protocol for data transport.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
	10	ENS0005	ENS 911	This feature provides support for the implementation of E911 services and includes Virtual Facility Group support and Ringback to E911 caller capabilities.	5	6			AF6225	Enhanced Line Appearance on a Digital Trunk Alarms	This feature, will raise a Minor, Major, or Critical switch alarm, depending on a defined percentage of trunk wink failures over Enhanced 911 Line Appearance on a Digital Trunk (LDT) links to a customer premises PSAP. This new ENS00005 feature permits the network provider to define: • The alarm threshold, based on the percentage of trunk members in a trunk group that enter a "System Busy" (SYSB) state. When the DMS SuperNode E911 tandem detects a wink failure, it marks the trunk as System Busy. • The severity of the alarm (major, minor, or critical). This expanded operations, administration, and maintenance (OA&M) feature enhances service reliability by alerting switch technicians to potential problems in a timely manner. This offers maintenance personnel greater opportunity to isolate and remedy possible trunk fault conditions become they affect the quality of service.
			ENS E911	This feature provides support for the implementation of E911 services and includes Virtual Facility Group support and Ringback to E911 caller capabilities.	5					Local Access to E911	This feature provides E911 Orighold and Ringback functionality for local access 911 calls routed through an E911 tandem VFG. Orighold prohibits the originator of a 911 call from disconnecting the call and gives the PSAP operator an audible tone if the originator goes on-hook. Ringback allows the PSAP operator to ring the subscriber's phone or if the phone is off-hook, to apply receiver-off-hook (ROH) treatment so someone at the subscriber's location can be alerted that a 911 call is in progress.
	10	ENS00005	ENS E911	This feature provides support for the implementation of E911 services and includes Virtual Facility Group support and Ringback to E911 caller capabilities.	5				NC0030	Ringback to E911 Callers	If an E911 caller reaches a PSAP agent and is unable to communicate, this feature provides the ability for the PSAP agent to initiate Ringback against the caller's line in hopes of attracting the attention of someone else at the caller's location. If the caller's set is on-hook, the line is rung. If the caller's set is off-hook, Receiver Off-Hook (ROH) treatment is initiated, provided the end office is capable of providing ROH treatment when a ringback signal is received. The Ringback feature is activated by a hookswitch flash followed by an access code. For PSAP agents using Business Sets to which the Quick Conference (QCK) key feature has been assigned, Ringback can
			ENS E911	This feature provides support for the implementation of E911 services and includes Virtual Facility Group support and Ringback to E911 caller capabilities.	5					VFG Support for E911(Local and/or Incoming ISUP/ANI Calls)	This feature uses a Virtual Facility Group (VFG) to eliminate the need for loop-around trunks for local E911 calls when the local call is served by an end office that is also an E911 tandem. The VFG accomplishes selective routing and transfer by using software to simulate a loop-around trunk. It does so not only for local calls but also for incoming Integrated Services User Part (ISUP), Super CAMA, and TOPS trunks coming into the tandem, thus increasing the overflow capabilities of E911 calls. Calls routed along the VFG can be choked to provide ANI information for routing calls to the appropriate PSAP. The ability to retrieve ANI information from ISUP's CCS7-based
	10	ENS00008	ENS Enhanced Called Party Hold	This feature allows a DMS E911 Tandem switch to hold a 911 call even if the calling party is forced to go on-hook before the call is answered. The called party hold begins as soon as the tandem detects the seizure of an E911 trunk from an end office or through the E911 Virtual Facility Group (VFG).	6				AN1794, AN1804	Enhanced Call Party Hold	With this feature, the DMS SuperNode E911 Tandem will hold a 911 call even if the calling party is forced to go on-hook before the call is answered. The called party hold begins as soon as the tandem detects the seizure of an E911 trunk from an end office or through the E911 virtual facility group (VFG). This safeguard, complete with automatic number identification (ANI) retention and
	10	ENS00009	ENS Conferencing Compatibility	This feature allows a DMS E911 Tandem switch to hold a 911 call even if the calling party is forced to go on-hook before the call is answered. The called party hold begins as soon as the tandem detects the seizure of an E911 furnk from an end office or through the E911 Virtual	6				AN1929, AN1949	Conferencing Compatibility	Currently, Public Safety Answering Points are limited to three-party conferences only. This feature introduces the support of interworking E911 calls with: • Flexible station controlled conference feature. • Meridian Business Set 30-port conferencing feature.

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			Order Code Name E911 Routing Via AIN	Order Code Description This feature uses Advanced Intelligent Network (AIN) trigger and response functions to route E911 calls and helps simplify the termination of wireless 911 calls.	Ris 8	RIs	MD Ris	Code	PCID		Feature Name E911 Routing via AIN	Feature Description This optional feature uses Advanced Intelligent Network (AIN) trigger and response functions to route E911 calls. Targeted for wireless 911 calls, this feature documents existing AIN scenarios that can be used to enable service control point (SCP) based routing to terminate 911 calls.
	10	ENS00012	ENS E911 Wireless Ph I	This feature provides the functionality to comply with FCC Docket 94-102 Phase I for wireless 911 callers and enables wireless end offices to transmit both the callback number and the Cell Site/Sector information for a wireless 911 caller.	9					AF7231, AF7232, AF7236, AF7237	E911 Wireless Phase 1	ENS00012 enables wireless end offices to transmit both the callback number and the CellSite/Sector information for a wireless 911 caller. This feature modifies the selective routing phase of E911 and the PSAP interfaces to route this wireless location information. This feature, together with ENS00011, brings the DMS system into full compliance
Added	10	ENS00012	ENS E911 Wireless Ph I	This feature provides the functionality to comply with FCC Docket 94-102 Phase I for wireless 911 callers and enables wireless end offices to transmit both the callback number and the Cell Site/Sector information for a wireless 911 caller.	9	10			11932	AF7477	Incoming Wireless Calls (Multifrequency)	with Phase 2 of FCC-mandated requirements for wireless 911 service, and provides an exhanced local of exoting for windows 011 exiltors applications of a collored local of exoting the windows 011 exiltors applications of a collored local of the service is switches that do not have SS7 trunking capabilities. This feature — together with ENS00011 E911 Routing via AIN — brings the DMS system into full compliance with current Phase 2 FCC-mandated requirements for wireless 911 service using MF technology, and provides an enhanced level of service for wireless 911 callers.
	10	ENS00013	E911 Numbering Plan Digit (NPD) per PSAP	This feature allows the provisioning of E911 Numbering Plan Digits (NPD) for each PSAP, instead of only one for each switch and allows each PSAP that has NPDs provisioned to serve its own set of four NPAs.	9					AF7233, AF7267	E911 Numbering Plan Digit (NPD) per PSAP	This feature allows the provisioning of E911 NPDs for each PSAP, instead of only one for each switch. Previously, an E911 tandem could serve only four NPA-NPD combinations. With this feature, a tandem is not limited by the NPD table. Each PSAP that has NPDs provisioned can serve its own set of four NPAs. With ENS00013, E911 tandems can increase their capacity without replacing or updating customer premises equipment (CPE). This permits 911 providers to serve a
	10	ENS00014	ENS E911 ANI on PRI	This feature allows the selection of a source for ANI on 911 calls originating from PRI trunks that route from the end office to the E911 Tandem over either Emergency Service trunks or E911 Virtual Facility Groups.	9					AF7234	E911 Automatic Number Identification (ANI) on PRI	wider area and a larger customer base. This feature enables the network provider to select the source of 911 ANI for emergency calls originating from Primary Rate Interface (PRI) trunks that route from the end office to the E911 Tandem over either Emergency Service (ES) trunks or E911 Virtual Facility Groups (911VFGs). Using a parameter on the ES trunk or 911VFG, either the Calling Party Number or the Billing Number may be selected as the source for 911 ANI information. For calls originating from a PBX with PRI connectivity, this feature allows the network provider to control which types of numbers are sent to the E911 system for routing
	30	ENSV0001	ENSV Enhanced Services	This software includes a collection of optional, special capabilities that enhance the basic functionality of TOPS call processing in various ways.	5	9				AF7021	Carrier Selection	and display. This enhancement automates carrier selection for certain types of operator-assisted calls. This efficiency can free operators to handle other revenue-generating services.
	30	ENSV0001	ENSV Enhanced Services	This software includes a collection of optional, special capabilities that enhance the basic functionality of TOPS call processing in various ways.	5						Enhanced Services	This software includes a collection of optional, special capabilities that enhance the basic functionality of TOPS call processing in various ways.

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			Order Code Name ENSV Enhanced Services	Order Code Description This software includes a collection of optional, special capabilities that enhance the basic functionality of TOPS call processing in various ways.	Ris 5	9 9	MD RIS	Code	PCID		Feature Name Sub-Period Rating	Feature Description This enhancement permits the service provider to specify in the TOPS Internal Rating System a new "Sub-Period Rating" time period for certain types of calls.
			ENSV Auto Coin Toll Service	This feature automates the processing of coin deposits at pay phones and allows the dialing of 1+ coin calls from a coin telephone station without operator intervention.	5					AL0011	ACTS Coin Tone Generation Test	This feature enables a telephone operating company craftsperson to dial a seven- digit test number from a coin phone to determine whether the coin box is sending the correct signaling to the ACTS system. The feature also offers the capability to identify defective coin detection circuits from the Maintenance and Administration Position (MAP) by turning down only the circuit being tested. This feature requires
	30	ENSV0003	ENSV TOPS Alternate Ann	This feature provides customized announcements for Automated Coin Toll Service (ACTS) or calls billed automatically to calling cards through Exchange Alternate Billing Service (EABS).	5						TOPS Alternate Announcement	This feature provides customized announcements for Automated Coin Toll Service (ACTS) or calls billed automatically to calling cards through Exchange Alternate Billing Service (EABS).
changed App from 30 to 42	42	ENSV0004	ENSV Screened Serv Rout	This feature developed for the Canadian market gives operators enhanced translation capabilities for emergency numbers by providing the capability to associate an originating telephone number with emergency service numbers closest to the subscriber's location.	5			'	1016	AF6512	Screened Service Routing	This feature developed for the Canadian market gives operators enhanced translation capabilities for emergency numbers by providing the capability to associate an originating telephone number with emergency service numbers closest to the subscriber's location.
	30	ENSV0005	ENSV External Audio Response Host & Remote	This feature provides operators a tool to deliver frequently spoken phrases for them and provides an open interface between the switch and an external personal audio response system which is used by operators to record phrases in their own voices and then play the recording to save their voices.	5					NC0003	TOPS External Personal Audio Response System—Host	This feature interfaces with an external Personal Audio Response System (PARS) provided by a third-party vendor. The PARS presents custom announcements to a subscriber upon call arrival at a TOPS position. The announcements are determined by the attributes sent from TOPS by means of the PARS protocol to the third-party system. For example, if a Directory Assistance (DA) call arrives at the TOPS position, PARS would use the call attributes to identify the DA call and then play an announcement such as "What city, please?" to the subscriber. The playing of these pre-recorded announcements frees the operator from repeating the same phrase for each call type and provides a brief rest between calls. PARS also helps to ensure that different parts of each call are answered in a consistent voice. The PARS system must be provided by a third-party vendor. The interface provided by this
	30	ENSV0005	ENSV External Audio Response Host & Remote	This feature provides operators a tool to deliver frequently spoken phrases for them and provides an open interface between the switch and an external personal audio response system which is used by operators to record phrases in their own voices and then play the recording to save	5					AF2601	TOPS External Personal Audio Response System—Remote	This feature provides the Personal Audio Response System (PARS) capability for an Operator Centralization Remote office. This feature requires Multi-Protocol Controller (MPC) datalinks for messaging between a standalone or host DMS TOPS office and PARS.
	30	ENSV0006	ENSV 2 Digit ANI-TOPS Office	This feature allows numbers to be identified and billing restrictions applied from two-digit ANI associated with special terminal types such as a smart phone.	5					NC0149	Two-Digit ANI—TOPS Office	This feature allows the DMS TOPS switch to recognize and make use of a two-digit code in an Automatic Number Identification (ANI) spill, simplifying identification of restricted billing numbers in table lookup. Calls that signal with these non-standard ANI ID digits are called Special Line Traffic (SLT); these can be combined with currently existing traffic on TOPS trunks. A new table, SLTANIID, is created for this feature. When the TOPS witch receives the two-digit ANI code, the ANI ID is screened against table SLTANIID, and if the entry is found, the specific billing
	30	ENSV0007	ENSV PrePaid Coin	This feature enables collecting overtime charges on payphones before the charges are incurred. Callers who do not deposit the required coins are either routed to an operator or disconnected, as defined in the switch datafill.	5					AN0408	PrePaid Coin Overtime	This feature enables collecting overtime charges on payphones before the charges are incurred. Callers who do not deposit the required coins are either routed to an operator or disconnected, as defined in the switch datafill.

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			Order Code Name ENSV Enhanced TOPS Operation Centralization	Order Code Description This feature provides an increase in traffic engineering levels, permitting more than 150 operator positions' worth of traffic to come from each of 15 remote TOPS offices to a host office and also allows an increase in the distance limitation to enable the use of satellite links. The Digital Carrier Module (DCM) peripheral which is	RIs 5	RIs	MD RIs	Code	PCID	AN1132	Feature Name Enhanced TOPS Operator Centralization	Feature Description This feature provides an increase in traffic engineering levels, permitting more than 150 operator positions' worth of traffic to come from each of 15 remote TOPS offices to a host office and also allows an increase in the distance limitation to enable the use of satellite links. The Digital Carrier Module (DCM) peripheral which is traditionally used for OC data links is replaced by the Enhanced TMS peripheral to allow these enhancements.
	30	ENSV0009	ENSV External RTRS Interface	This feature provides an interface between the switch and an external rating device.	5	9				AF7163	External Rater Protocol Changes	This feature adds the Service Provider ID (SPID) to the External Rater Interface. It adds the Calling Account Owner (AO) SPID to the query messages sent to the Real Time Rating System (RTRS) and it modifies the XRATE Command Interpreter tool to provide the ability to set the Calling AO SPID for External Rater Database verification.
	30	ENSV0009	ENSV External RTRS Interface	This feature provides an interface between the switch and an external rating device.	5					AN1457	External RTRS Interface	This feature provides a CCS7 signaling interface between the DMS TOPS switch and an external real-time rating system to permit more flexibility in screening and rating intraLATA calls. Using the external rater enabled by this feature, service providers can rate on various bases depending on parameters and requirements they define. Rating could be done, for example, on the basis of NXX alone, permitting county-wide "local" calling areas containing multiple NXXs. The internal rating system with which TOPS is now equipped permits rating of calls on a NPA-NXX basis.
Added	30	ENSV0009	ENSV External RTRS Interface	This feature provides an interface between the switch and an external rating device.	5	10	1	I	1351	AF7497	Real-Time Rater Enhancements	This feature modifies TOPS call processing of time and charge calls when a rating failure occurs. If there is a failure to obtain a time and charge from either the internal or external rating system, the call automatically routes to an operator. This feature also supports Rate Quotation and Protocol Versioning capabilities. To enhance subscriber satisfaction, this feature expands existing rater capabilities by automatically providing operator backup in the event of a rating failure.
	30	ENSV0010	ENSV Auto Country Direct	This feature enables the TOPS switch to receive and process International Free Phone (IFP) country direct calls.	7					AN1339, AN1568, AN1666, AN1340	Country Direct Billing Service	Country Direct Billing Service allows a caller in a foreign country to dial an access code to reach a multilingual operator in the country in which the call is to be billed (most likely the party's home country) for assistance in the completion of the call, thus avoiding potential language-barrier confusion.
	30	ENSV0011	Enhanced OC-Increase Remote Support	This feature allows a TOPS Host office to support 31 remote TOPS offices in a basic operator centralization configuration which is an increase from the original 15 remote offices.	5					AN1133	Enhanced TOPS OC-Increased Remote Support	This feature allows a TOPS Host office to support 31 remote TOPS offices in a basic operator centralization configuration which is an increase from the original 15 remote offices.
	30	ENSV0013	MDS-Offer of Service Prompt	This feature offers to connect a calling party to a high-demand call completion service when the destination is busy or does not answer and enables the caller to leave a message for the called party through a network message store and forward system.	7					AN1542	Busy Detect for AudioGram Delivery Service	AudioGr am Delivery Service (ADS), formerly called Message Delivery Service (MDS), enables the caller to leave a message for the called party through a network message store-and-forward system. Presently, the Automated Alternate Billing Service (AABS) system acts as a gateway for this service. The Voice Services Node announces an offer of service for all collect calls and calls billed to calling cards or third parties before releasing the call for
	30	ENSV0014	ENSV Operator Services AIN	This feature supports AIN capabilities in the operator services environment by enabling fast, flexible development of new services, including third-party services which are external to the TOPS switch.	7		9	OSAN0002		AN1527, AN1530, AN1532, AN1537, AN1625, AN1867, AN1866, AN1866, AN1629, AN1535, AN1531, AN1529, AN1528	Operator Services System AIN (OSSAIN)	KEY CAPABILITIES Operator Services AIN facilitates a wide variety of new services, including third-party vendor services. In NA006, the TOPS switch supports AIN principles in the operator services environment with the following capabilities: • TOPS Programmable Switch (TPS) data communications—Provides datafilling of TPS nodes on the DMS switch, message routing of Open Automated Protocol (OAP) messages on the DMS switch, and usage monitoring of TPS services. • TPS protocol—Defines the OAP for interfacing between the switch and service node for the TPS product. This feature also provides the OAP software for the TPS. • TPS call processing—Provides the base software architecture for TPS call processing. • TPS transitions—Allows calls to flow to and from new systems—and interact with existing systems. This allows services to be created using building blocks: TPS functione using automated.

Change In Issue 2					1st NCS	Enh		Repl Ord				
	Арр	Order Code	Order Code Name	Order Code Description	RIs	Rls			PCID	ACTID	Feature Name	Feature Description
	30	ENSV0017	-	This feature allows a service provider to provision and process Service Provider Identifiers (SPIDs) for a Directory Number and provides branding options for new service providers.	7		9	UNBN0005, UNBN0001			Branding for TOPS via SPID	This feature allows a service provider to provision and process Service Provider Identifiers (SPIDs) for a directory number (DN). Key capabilities include: • Datafilling an account owner (the company responsible for an end user's service) SPID per DN. • Front-end call branding per account-owner SPID using switch-based Digital Recorded Announcement Machines (DRAMs) or Enhanced DRAMs (EDRAMs). • Recording the account-owner SPID on automatic message accounting (AMA). • Displaying account-owner SPID on automatic message accounting (AMA). • Displaying account-owner SPID one the operator position (TOPS MP and OPP compatible positions). • Sending the account-owner SPID over the standard directory assistance protocol. Provisions of the Telecommunications Reform Act create the opportunity for established service providers to resell Local Exchange Carrier operator services to new providers (also known as unbundling). This feature facilitates unbundling by providing branding mechanisms for new providers.
	30	ENSV0018	Charges	This feature provides a method to give estimated charge information for a future time period for a standard sent-paid call.	7					AF6426	Estimated Call Charges	This feature gives operators increased flexibility in estimating call charges by expanding the rate queries to include a future time. Optional ENSV0018 defines new functions for use at TOPS IWS positions, including: • Entering estimated call charge mode. • Entering a time and date different from the displayed date. • Performing a charge calculation for the displayed information. This feature enables operators to provide charge information on a wider range of calls. Currently, operators can estimate charges for sent-paid coin calls and hotel/motel calls, and can provide time and charges information for collect calls after completion. With this feature, subscribers will be able to receive an estimate of the charge for a standard sent-paid call at some time in the future when rates may be different from those in effect at the current moment.
	30	ENSV0020	ENSV OSSAIN Enhancements	This feature supports AIN capabilities in the operator services environment such as OSSAIN Centralization which allows multiple switches to share the services of centralized OSSAIN service nodes, and Simultaneous Connections which makes it possible to attach two adjunct nodes to a call simultaneously.	7		9	OSAN0003		AF6493, AF6495, AN1536, AN1899, AN1926	Operator Services System AIN (OSSAIN) Enhancements	Ope rator Services AIN includes node centralization and support of FCC requirements for local competition. In NCS07, the TOPS switch supports the following AIN capabilities in the operator services environment: • OSSAIN Centralization—Allows multiple switches to share the services of centralized OSSAIN service nodes. • Maintenance Enhancements—Provides an interface to TOPS, along with associated infrastructure enhances, allowing services to be deployed independent of switch software releases. • Simultaneous Connections—Makes it possible to attach two adjunct nodes (either two service nodes or an operator and a service node) to a call simultaneously. • Enhancements II—Includes the DMS system-derived answer and conversation times for calls to synchronize DMS system and Service Node (SN) billing activities,
	12	EQA00001	EQA-Local	This feature permits direct connection to interexchange and international carriers on a per- call basis or by presubscription.	5					AF1778	Feature Group B on Access-to- Carrier Trunks	This feature supports Feature Group B (FGB) signaling on Access to Carrier (ATC) trunks and provides a 5-second timeout while waiting for off-hook from the interLATA carrier. Before this feature, Feature Group B signaling was supported only on Operator Centralization (OC) trunks to FGB carriers and on ATC trunks to FGB carriers in offices that had TOPS. Additionally, the Bellcore FGB specification required that 4- to 8-second timing for off-hook should be done on all outgoing trunks to FGB carriers.

Change In Issue 2					1st NCS	Enh		Repl Ord				
1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
		EQA00001		This feature permits direct connection to interexchange and international carriers on a per- call basis or by presubscription.	5						FGD Carrier Code Expansion	This feature expands the existing equal access code of 10XXX to 101XXXX. The feature provides for a transition during which either 10XXX or 101XXXX can be dialed to reach a specified carrier. During the transition, new carriers will be assigned in the 5XXX and 6XXX range. The new assignments must be reached by the seven-digit access. At the end of the transition, all carrier access will be made using seven digits. The XXX assignments will become 0XXX.
	12	EQA00001	EQA-Local	This feature permits direct connection to interexchange and international carriers on a per- call basis or by presubscription.	5					AN0173	FGD Carrier Code Expansion E800/PVN	This software supports Carrier Identification Code (CIC) expansion for Enhanced 800 (E800) Service and Private Virtual Network (PVN). The CIC expansion plan, as detailed in Bellcore TR-NWT-001050, requires the service switching point (SSP) to accept four-digit CICs from the service control point (SCP) instead of the current three-digit CICs. This software also supports CIC expansion for Equal Access Alternate Switching Points (EASPs) and Cellular Mobile Carrier (CMC) Type 2A calls.
	12	EQA00002	EQA-Toll	This feature enables a DMS Access Tandem switch to collect and process interLATA traffic from many end offices at a single site, rather than provide trunks from each end office to each interexchange carrier.	5					AN0174	Carrier Code Expansion for LEAS	This feature supports Feature Group D (FGD) CIC expansion for LATA Equal Access System calls using both multifrequency (MF) and Common Channel Signaling No. 7 (CCS7) signaling. This feature also supports CIC expansion for the Equal Access Intermediate Tandem (EAIT).
	12	EQA00002	EQA-Toll	This feature enables a DMS Access Tandem switch to collect and process interLATA traffic from many end offices at a single site, rather than provide trunks from each end office to each interexchange carrier.	5					AG1913	CRM/CRA Optionality for AT-IEC Connectivity	This feature provides the option of sending and receiving the circuit reservation message (CRM) and circuit reservation acknowledgement (CRA) message, respectively, for access tandem to IEC connectivity on a per carrier basis. The administration of this feature is managed in Table OCCINFO, which introduces a new field (CRM/CRA) that allows the value to be reset to "No."

Change In Issue 2					1st NCS	Enh		Repl Ord				
	12	EQA00002	Order Code Name EQA-Toll	Order Code Description This feature enables a DMS Access Tandem switch to collect and process interLATA traffic from many end offices at a single site, rather than provide trunks from each end office to each interexchange carrier.	RIs 5	RIs	MD RIS	Code	PCID	ACTID NC0335	Feature Name FGD Carrier Code Expansion	Feature Description This package expands the existing equal access code of 10XXX to 101XXXX. The package provides for a transition during which either the 10XXX or the 101XXXX can be dialed to reach a specified carrier. During the transition, new carriers will be assigned in the 5XXX and 6XXX range. The new assignments must be reached by the seven-digit access. At the end of the transition, all carrier access will be made using seven digits. The XXX assignments will become 0XXX.
	12	EQA00003	EQA Cellular Interconnect- EO	This feature is intended for end offices connected to cellular mobile carrier switching systems, and provides AMA records for cellular calls.	5					AF1394	Type 1 Cellular Interconnect	Type 1 Cellular Interconnect allows the completion of calls between a Cellular Mobile Carrier (CMC) and either a line or trunk located on the same central office (Class 5) that is serving the CMC. The feature handles the call and ensures correct Automatic Message Accounting (AMA) records for call billing. This feature is the second in a series of features that supports the access and processing of calls between CMCs and the central offices and tandems that service them. This feature does not require Equal Access software to function properly.
	12	EQA00004	EQA Cellular Interconnect	This feature is intended for a DMS Access Tandem switch which is connected to cellular mobile carrier switching systems, and provides AMA records for cellular calls.	5					AF1451	Multifrequency Monitor for Type 2A Cellular Interconnect)	Multifrequency (MF) Monitor for Type 2A Cellular Interconnect improves billing procedure by allowing the access tandem to monitor the MF digit stream of Feature Group D calls from a cellular mobile carrier (CMC) in order to include calling and called numbers in Automatic Message Accounting (AMA) records for compliance with Bellcore FSD 20-25-0100. The signaling on Feature Group D calls from a CMC over a Type 2A interconnection to an interexchange carrier (IC) is identical to that provided on connections from Equal Access End Offices. The access tandem receives the signal from the CMC, establishes the connection to the IC, and puts the connection through. The MF outpulsing, consisting of the calling and called numbers, then passes directly from the CMC to the IC normally undetected by the access tandem. This feature permits the DMS access tandem to attach an MF monitor to collect the
	12	EQA00004	EQA Cellular Interconnect	This feature is intended for a DMS Access Tandem switch which is connected to cellular mobile carrier switching systems, and provides AMA records for cellular calls.	5					AL0380	Type 2A Cellular Interconnection	This feature allows Type 2A interconnection from a Cellular Mobile Carrier (CMC) to a DMS switching system. Calls can be routed to an interexchange carrier, to another CMC, or to a termination within the Local Access and Transport Area (LATA). Special billing records (call codes 64 and 66) are generated for calls originating from or terminating to a CMC. Structure codes 00625 and 00627 are provided for standard and long duration originating CMC calls, respectively.
	12	EQA00005	EQA Intermediate Tandem	This feature provides Equal Access capabilities for long distance carrier service to subscribers who are served by non-conforming end offices by means of an Equal Access Intermediate Tandem.	5					AF2016	Equal Access Intermediate Tandem	This feature allows the telephone operating companies to extend Equal Access (EA) capabilities for long distance carrier service to subscribers served off non- conforming end offices by means of an Equal Access Intermediate Tandem (EAIT). In some rural areas served by independent telephone companies, there are clusters of small electromechanical end offices with the nearest access tandem office too far away for economical provisioning of Equal Access-like service. This feature provides a DMS office with the capability of transferring InterLATA carrier (IC) calls incoming from non-conforming end offices to an access tandem. Alternatively, the calls can be routed directly to an IC, provided the IC has a point-of-presence (POP) at the EAIT office.
	12	EQA00006	EQA C7ISUPIrita CntnEAEO	This feature allows the local exchange carrier's EAEO to send Feature Group B and D signaling containing carrier information to the access tandem by means of CCS7 signaling.	5					AG1253	CCS7 End Office (EO) to Access Tandem (AT) Signaling	This feature allows the local exchange carrier's equal access end office (EAEO) to establish interLATA connection for signaling containing carrier information to the Access Tandem (AT) by means of CCS7 signaling.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name EQA C7ISUPIrita CntnEAEO	Order Code Description This feature allows the local exchange carrier's EAEO to send Feature Group B and D signaling	RIs 5	Ris	MD RIS	Code	PCID	ACTID AF2105	Feature Name Feature Group B (FGB) Interworking with CCS7	Feature Description This feature is included in the interLATA CCS7 packages for both the DMS end office and DMS access tandem.
				containing carrier information to the access tandem by means of CCS7 signaling.								
	12	EQA00006	EQA C7ISUPIrita CntnEAEO	This feature allows the local exchange carrier's EAEO to send Feature Group B and D signaling containing carrier information to the access tandem by means of CCS7 signaling.	5					AG1639	ISUP Equal Access End Office—IEC	This feature allows the local exchange carrier's EAEO to establish interLATA connection for CCS7 trunk groups that connect directly from the EAEO to the Interexchange Carrier (IEC).
	12	EQA00006	EQA C7ISUPIrita CntnEAEO	This feature allows the local exchange carrier's EAEO to send Feature Group B and D signaling containing carrier information to the access tandem by means of CCS7 signaling.	5					AG1539	ISUP OA&M Enhancements for InterLATA Connection	This feature implements several portions of Bellcore TR-394, including: the capability to complete 958, 959, and 10x test calls from the DMS to an IEC, and on a per-IEC basis, new operational measurements (OMs) that peg the number of Exit Message (EXM) timeouts and priority initial address messages (IAMs).
			EQA EA Alt Sw Point	This feature provides the capability to continue Equal Access services if trunking to an access tandem fails by rerouting traffic through an Equal Access Switching Point (EASP) to minimize disruption of service during emergency conditions such as natural disasters or severed trunk facilities. This capability is in compliance with the emergency operation portion of Bellcore	5						Equal Access for Alternate Switching Point	This feature provides the capability to continue Equal Access services if trunking to an access tandem fails by rerouting traffic through an Equal Access Switching Point (EASP) to minimize disruption of service during emergency conditions such as natural disasters or severed trunk facilities. This capability is in compliance with the emergency operation portion of Bellcore FSD 20-24-0000, InterLATA- Carrier/International-Carrier Interconnection.
	12	EQA00008	EQA POTS IraLATA PICeaeo	This feature allows POTS and coin line users to select their carrier of choice to provide intraLATA service similar to the way they choose a Primary InterLATA Carrier (PIC) for interLATA services.	5						POTS IntraLATA Primary InterLATA Carrier Equal Access End Office	This feature allows POTS and coin line users to select their carrier of choice to provide intraLATA service similar to the way they choose a Primary InterLATA Carrier (PIC) for interLATA services.

Change In Issue 2					1st NCS	Enh		Repl Ord				
		EQA00009	Order Code Name EQA IBN IraLATA PIC EAEO	Order Code Description This feature allows MDC subscribers to select their carrier of choice to provide intraLATA service similar to the way they choose a Primary InterLATA carrier (PIC) for interLATA services. This selection can be per individual station or on a per customer-group basis.	<u>Ris</u> 5	Ris	MD RIS	Code	PCID	ACTID	Feature Name Integrated Business Network IntraLATA Primary InterLATA Carrier Equal Access End Office	Feature Description This feature allows MDC subscribers to select their carrier of choice to provide intraLATA service similar to the way they choose a Primary InterLATA carrier (PIC) for interLATA services. This selection can be per individual station or on a per customer-group basis.
	12		EQA Enhanced WATS Operations (POTS)	This feature provides enhancements to basic WATS service features which include expanding the range of outward WATS band numbers from 0 to 126, allowing inband screening of interLATA WATS calls to be optionally disabled on a per- carrier basis and extends the number of carriers that can be assigned to an enhanced WATS line to a total of five.	5					AF1092	Enhanced Wide Area Telephone Service	Enhanced Wide Area Telephone Service (WATS) allows the DMS switching system to handle multi-jurisdictional, WATS-like service. This capability was identified by the Federal Communications Commission (FCC) as a further extension of the Equal Access capability already provided in normal toll service. This feature permits the screening of calls to other carriers on an optional basis for the purpose of providing WATS-like service to that carrier for their customers. The feature also allows local calls to be placed from and to terminate to lines that are marked as WATS lines, permitting the application of a universal access line from an end user. Thus, Enhanced WATS permits better use of facilities and the possibility for wider deployment of WATS-like services to small businesses through other carriers.
	12	EQA00011	EQA Equal Access OSS	This feature in an Equal Access End Office provides the operator services center with all the information necessary to process calls arriving on a single combined trunk group. This enables the combination of operator traffic with non- operator traffic on the same trunk group.	5						Equal Access Operator Services System	This feature in an Equal Access End Office provides the operator services center with all the information necessary to process calls arriving on a single combined trunk group. This enables the combination of operator traffic with non-operator traffic on the same trunk group.
	12		EQA C7ISUPlerLta Conn.AT	This feature transmits Feature Group D (FGD) signaling by CCS7 trunking between an Equal Access End Office and an Interexchange Carrier.	5					AF2105	Feature Group B (FGB) Interworking with CCS7	This feature provides the capability to interwork CCS7 with Feature Group B (FGB), Equal Access Plan, and Non Equal Access Plan In-Band Signaling for 950-wxxx Dialing Plan.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name EQA C7ISUPlerLta	Order Code Description This feature transmits Feature Group D (FGD)	RIs 5	RIs	MD RIs	Code	PCID	ACTID AG1254	Feature Name ISUP Access Tandem FGD	Feature Description This feature allows the local exchange carrier's AT to transmit Feature Group D
			Conn.AT	signaling by CCS7 trunking between an Equal Access End Office and an Interexchange Carrier.							Signaling	(FGD) signaling containing carrier information between the EAEO and the IEC's switch by means of CCS7 signaling.
	12	FQA00012	EQA C7ISUPlerLta	This feature transmits Feature Group D (FGD)	5					AG1576	ISUP Access Tandem FGD	This feature provides the capability for calls received at the AT in multifrequency FGD
	12		Conn.AT	signaling by CCS7 trunking between an Equal Access End Office and an Interexchange Carrier.							Signaling II	signaling to interwork with CCS7 trunk groups that connect the AT to the IEC.
	12	EQA00012	EQA C7ISUPlerLta Conn.AT	This feature transmits Feature Group D (FGD) signaling by CCS7 trunking between an Equal Access End Office and an Interexchange Carrier.	5					AG1539	ISUP OA&M Enhancements for InterLATA Connection	This feature is included in the interLATA CCS7 packages for both the DMS end office and DMS access tandem.
	12	EQA00012	EQA C7ISUPlerLta Conn.AT	This feature transmits Feature Group D (FGD) signaling by CCS7 trunking between an Equal Access End Office and an Interexchange Carrier.	5					AF2361	LEAS Interworking on ISUP Trunks	This feature increases network flexibility and enhances LEAS by enabling calls that are routed by LEAS software to use CCS7 Access To Carrier (ATC) trunk groups. The generic LEAS package allows an access tandem to receive Centralized Automatic Message Accounting (CAMA) signaling, identify a primary interLATA carrier associated with the Automatic Number Identification (ANI) received, and choose the appropriate trunk group using Feature Group D signaling to that carrier.
	12	EQA00012	EQA C7ISUPlerLta Conn.AT	This feature transmits Feature Group D (FGD) signaling by CCS7 trunking between an Equal Access End Office and an Interexchange Carrier.	5					AF2331	TOPS Trunk Groups Interworking with CCS7	This feature provides the TOPS Access Tandem (AT) with the capability to interwork incoming TOPS in-band trunks with ATC CCS7 trunks for non-operator type calls. The types of in-band signaling supported by this feature are: Traditional (BELL) Operator Services Signaling, Interim Operator Services Signaling (OSS), Equal Access Feature Group D (EAFGD), Combined FGD (COMFGD), Exchange Access Operator Services Signaling (EAOSS), and Equal Access Plan FGD cut through signaling. CCS7 trunks do not support operator functions such as operator hold, coi control, and re-ring control. Therefore, only non-operator thandled calls are supported results.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	12	EQA00015	EQA IntraLATÀ PIC Enhancement Phase 1	This feature provides enhancements to primary interexchange carrier operations which include the flexibility for local exchange handling of 1+ intraLATA toll traffic for coin collection, the option of routing of 0+7/10 -digit local calls through designated interexchange carriers, the flexibility in the routing of 0-operator calls, and the flexibility of enabling or disabling subscriber casual dialing.	6					AN1813, AN1814	IntraLATA PIC Enhancements Phase 1	This optional software offers the following key enhancements to primary interexchange carrier operations: • Provides flexibility for local exchange handling of 1+ intraLATA toll traffic for coin collection. • Offers the option of routing of 0+ 7/10-digit local calls through designated interexchange carriers. • Delivers flexibility in the routing of zero-minus ("0-") operator calls. • Introduces the Full Carrier Toll Denied (FCTD) line option to prevent "carrier hopping" by subscribers who are behind in carrier bill payments and simplifies carrier toll denial capabilities for subscribers that have requested toll denial (such as telephones in lobbies). Options include blocking a line's access to all carriers or allowing access only to specified carriers. This feature removes a previously imposed limit on the number of denied carriers and significantly streamlines the administration of the lines and carriers involved. • Provides the flexibility of enabling or disabling subscriber casual dialing. This choice
	12	EQA00019	EQA IntraLATA PIC Enhancement Phase 2	This feature provides IntraLATA (LPIC) privileges to Enhanced Wats subscribers	6					AF6479, AF6481, AF6480	LPIC on Enhanced WATS for POTS and RES	This feature extends intraLATA Primary Interexchange Carrier (LPIC) privileges to Enhanced WATS subscribers. LPIC privileges permit subscribers linked to Equal Access End Offices to choose a carrier for IntraLATA toll service. An interLATA or intraLATA WATS call handled by a local provider generates an Automatic Message Accounting (AMA) 114 billing record. An AMA 068 record would be generated when the local provider is the presubscribed intraLATA carrier. This feature enables the network provider to offer LPIC privileges across appropriate classes of service. By offering the Enhanced WATS subscriber the same LPIC privileges as other subscribers, the service provider can fulfill a significant subscriber need and increase the overall level of subscriber satisfaction.
Added	12	EQA00019	EQA IntraLATA PIC Enhancement Phase 2	This feature provides IntraLATA (LPIC) privileges to Enhanced Wats subscribers	6	10	1		6155	AF7540, AF7559	LPIC on Enhanced WATS for MDC	This feature extends IntraLATA Primary Interexchange Carrier (LPIC) privileges to Enhanced Wide-Area Telephone Service (WATS) subscribers. LPIC privileges permit subscribers linked to Equal Access End Offices to choose a carrier for IntraLATA toll service. EQA00019 introduced LPIC privileges to Enhanced WATS service over POTS and RES lines. Now, in NCS10, these capabilities expand to include Meridian Digital Centrex lines.
	12	EQA00024	Override LPIC Privilege	This feature allows the local service provider instead of a line-based Primary InterLATA Carrier to handle special intraLATA toll calls regardless of whether the subscriber has designated an intraLATA PIC and also supports LATAs that overlap state boundaries.	6					AN1811	Override for IntraLATA Privilege Calls	This feature permits the local service provider to complete special intraLATA toll calls as permitted by public utilities commissions, regardless of whether the subscriber has designated an intraLATA PIC. To designate a call for a particular intraLATA carrier, the subscriber dials specific carrier digits. The feature also supports LATAs that overlap state boundaries, enabling all calls within the LATA to be handled as intraLATA calls regardless of state jurisdiction. With the implementation of basic intraLATA PIC, "555" and other jurisdiction dialing plan calls are routed to the presubscribed intraLATA carrier. With this feature, and regulatory approval, these calls and associated revenue can be retained by the local service provider.
	12	EQA00025	EQA Call Attribute Control	This feature can selectively block casually dialed local calls by interpreting calls with the equal access call attribute to be considered "local" and prevents the unnecessary use of an IEC's network to loop the calls back to the local carrier.	6					AF6530, AF6533		Today, when a subscriber includes a carrier access code (CAC) when dialing, the call routes to the specified interexchange carrier (IEC). However, if a local call begins with a CAC, the call routes to the IEC and then back to the local carrier. This changes the handling of the call from an intraLATA local call into an intraLATA toll call. EQA00025 selectively blocks casually dialed local calls by interpreting calls with the equal access call attribute to be considered "local." Blocking the local call prevents the unnecessary use of an IEC's network to loop the calls back to the local carrier.

Change In Issue 2			Orden Orde News	order Orde Description	1st NCS	Enh		Repl Ord	DOID	ACTID		For the Description
			Order Code Name EQA International PIC	Order Code Description This feature allows subscribers to choose a primary international carrier that may be different from other preselected carriers.	RIs 6	RIS	MD RIS	LOGE	PCID	ACTID AF6483, AF6486, AF6484, AF6485	Feature Name Carrier Preselection for International Calls	Feature Description This feature enables subscribers to preselect a primary international carrier in addition to their interLATA primary interexchange carrier (PIC) and intraLATA primary interexchange carrier (LPIC). Bypass and blocking arrangements currently in place for international carriers are not affected by this feature. Because the Federal Communications Commission (FCC) believes that a separate presubscription choice for international calling is consistent with the intent of the U.S. Telecommunications Reform Act, the capabilities available with EQA00026 may appear in future regulatory mandates.
												Allowing preselection of an international carrier different from the other primary carriers simplifies the dialing of international calls and gives the subscriber greater flexibility in the choice of carriers—an important consideration for multinational businesses. EQA00026 can help broaden subscriber satisfaction and loyalty by
	12	EQA00027	ISUP Intermediate Tandem	This feature enables the DMS Access Tandem to interconnect with another tandem and operate as an Intermediate Tandem and provides the ability to forward from an end office to the second tandem GR-394 parameters received on an incoming CCS7 trunk.	9					AF7127, AF7128, AF7131, AF7301		This feature enables the DMS Access Tandem (AT) to interconnect with another tandem and operate as an Intermediate Tandem for enhanced routing of traffic and accurate billing of calls. New capabilities include the ability to forward from an end office to the second tandem (Nortel's or another vendor's tandem) GR-394 parameters received on the incoming CCS7 trunk. This feature relays an Exit Message (EXM) from the second tandem back to the end
	30	EWS\$0001	EWSS Enhanced W/S Software	This feature provides support for workstation communication with TOPS Host and TOPS remote switches.	5					AF2018	Two-Terminal Directory Assistance/Intercept	This feature provides the interface to the DMS to support Directory Assistance using existing DA terminals provided by other vendors in conjunction with a second terminal. Operators can receive DA requests from the TOPS switch through the second terminal while using the existing DA terminal to search the DA database for the requested listing. The second terminal is used to provide the voice connection to the DMS and call processing control. This feature provides the audio and data connectivity to the DMS for the TOPS MPX system. The second terminal is required in order for this feature to operate properly. Northern Telecom does not offer such a terminal; however, specifications and plans have been provided to other vendors to facilitate development from outside sources.
	30	EWSS0002	EWSS Auto OIA Session Start	This feature allows the automatic initiation of an Open Information Access (OIA) session based on call information after the switch sends a message to the TOPS Position Controller or TOPS MPX-IWS during initial position seizure, requesting the start of an external database session for the operator.	5					AF2703		This feature enhances the current operation of the Operator Reference Database (ORDB) application by automatically initiating an ORDB session for certain call types when the call arrives at an operator position. This new capability eliminates keystrokes and provides quicker database access for the operator. A new message is sent from the DMS central controller to the TOPS MP or MPX position based on the datafill in new table OIASTART. For call-origination types datafilled into the new table, an auto-initiation message is sent to the operator position during the initial position seizure. Thus, when the operator receives the call, the ORDB session is active and ready to proceed. (Note: Automatic session initiation is supported only for initial position seizure; no message is sent for transfers or recealls.). The first application of this new capability provides automatic ORDB session initiation for calls with the origination type for Blind and Disabled customers. I
	30	EWSS0003	EWSS TOPS DA Subtending TMS	This feature is required for TOPS MPX and TOPS MPX-IWS workstation and connects TOPS operator terminals to the switch using the TOPS Message Switch (TMS) which allows signaling at speeds up to 56kbps using X.25 links compared to the previously available 300 or 1200 baud ASCII signaling.	5					AF2597	Switch (TMS)	This feature expedites message routing in the TOPS Message Switch (TMS) by allowing the use of the CCITT Link Access Procedure of D-Channel (LAPD) protocol for D-Channel Handler (DCH)-to-DCH links and for DCH-to-TOPS Position Controller (TPC) links. Use of the LAPD protocol saves memory usage in the DCH and lays the groundwork for future TMS development. The current X.25 protocol that is used with the DCH-to-DCH and DCH-to-TPC links is still supported; the protocol choice is now optional and should be coordinated with the database vendor.

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		de Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
30	EWSSO	03 EWSS TOPS DA Subtending TMS	This feature is required for TOPS MPX and TOPS MPX-IWS workstation and connects TOPS operator terminals to the switch using the TOPS Message Switch (TMS) which allows signaling at speeds up to 56kbps using X.25 links compared to the previously available 300 or 1200 baud ASCII signaling.	5					AF1652	TMS Datafill and Maintenance (old F7368)	With the TOPS Message Switch (TMS), Northern Telecom introduces a significant architectural enhancement to the TOPS system. Using ISDN technology, the TMS provides faster and more efficient routing between the TOPS MP positions and external DA, Operator Reference Database (ORDB), or service databases (see figure). Among the benefits of TMS are: further potential reduction in AWT for operator assisted, Toll and Assistance type calls, facility savings for database access and position messaging, multiple database access through the TMS data ports, and maintenance improvements for datalink management and position management through the DMS MAP position.
30	EWSSO	03 EWSS TOPS DA Subtending TMS	This feature is required for TOPS MPX and TOPS MPX-IWS workstation and connects TOPS operator terminals to the switch using the TOPS Message Switch (TMS) which allows signaling at speeds up to 56kbps using X.25 links compared to the previously available 300 or 1200 baud ASCII signaling.	5					AF1472	TMS Maintenance	With the TOPS Message Switch (TMS), Northern Telecom introduces a significant architectural enhancement to the TOPS system. Using ISDN technology, the TMS provides faster and more efficient routing between the TOPS MP positions and external DA, Operator Reference Database (ORDB), or service databases (see figure). Among the benefits of TMS are: further potential reduction in AVIT for operator assisted, Toll and Assistance type calls, facility savings for database access and position messaging, multiple database access through the TMS data ports, and maintenance improvements for datalink management and position management through the DMS MAP position.
30	EWSSO	03 EWSS TOPS DA Subtending TMS	This feature is required for TOPS MPX and TOPS MPX-IWS workstation and connects TOPS operator terminals to the switch using the TOPS Message Switch (TMS) which allows signaling at speeds up to 56kbps using X.25 links compared to the previously available 300 or 1200	5					AF2070	TOPS ORDB Access Via TMS	This feature provides TOPS Position Controller (TPC) software that allows access to the Operator Reference Database (ORDB) by means of the TOPS Message Switch (TMS). The Open Information Access interface is used. Accessing the ORDB using the TMS allows for facilities concentration, which can result in decreased need for front-end processors as required by the ORDB vendor. In addition, this capability provides more stable and reliable access to ORDB for the operator, since load
30	EWSSO	04 EWSS TOPS Open Position Protocol	baud ASCII sionaling. This feature provides the Open Position Protocol interface for TOPS MPX-IWS workstations and allows the interaction between the workstation and the switch to be programmed and allows the operator position to request information from the switch and interpret responses from the switch.	5						TOPS Open Position Protocol	balancing and alternate routing of messages (link switching) become possible using. The TOPS MPX-IWS base platform supports an interactive, open protocol between operator positions and the TOPS switch - the Open Position Protocol (OPP). The OPP interface, originally defined by Nortel, has been substantially used by Bellcore as the foundation for the Intelligent Workstation System (IWSS) position-to-switch protocol. This robust interface allows the interaction between the workstation and the switch to be programmed; the position can request information from the switch and interpret responses from the switch. OPP supports all current TOPS switch features,
		05 EWSS TOPS Incr Multiplex	This feature decreases the number of Virtual Position Controllers (VPCs, aka Type 2, or gateway positions) that are required to support a cluster of operator positions on a LAN for TOPX MPX or other Open Position Protocol (OPP) compliant lossitions.	5					AF3003	TMS to Position Data Link Multiplexing	This feature decreases the number of Virtual Position Controllers (VPCs; also known as Type 2, or gateway positions) that are required to support a cluster of operator positions on a local area network (LAN) for TOPS MPX or other OPP-compliant positions. Previously, two VPCs, each equipped with a datalink to the TOPS Message Switch (TMS), were recommended in every cluster of four operator positions: with this software, two VPCs can support between 16 and 20 operator
		06 EWSS TMS Networking	This'feature allows the direct communication among active TOPS Message switches (TMS) in the same DMS TOPS switch which results in the consolidation of DS-1 links to external databases.	5					AF2592	TMS Datafill for Intra/Inter-Office TMS Networking	This feature enables customers to network their TOPS Message Switches (TMSs) both within a central office and between central offices by: providing DS-0 and DS-1 sharing functionality and eliminating the need for two DS-1s per TMS to be provisioned for inter-DCH communications. For OIA database applications with low volume traffic (such as ORDB), this feature significantly reduces the number of external database links required for a host TOPS office through DS-1 sharing. For example, in a two-TMS configuration, the number of DS-1 links required is reduced from four to two; in a three-TMS configuration, from six to two; and in a four-TMS
30	EWSSO	07 EWSS TMS Proc Upgrade	This feature provides improved message processing of the TOPS Message Switch (TMS) by using XPM+ technology and provides the Computing Module and XPM software changes to support the Unified Processor, Enhanced ISDN	5						Enhanced TOPS Message Switch	This feature provides improved message processing of the TOPS Message Switch (TMS) by using XPM+ technology and provides the Computing Module and XPM software changes to support the Unified Processor, Enhanced ISDN Signaling Processor (EISP), and the Enhanced D-Channel Handler (EDCH).

Change In ssue 2					1st NCS	Enh		Repl Ord				
			Order Code Name	Order Code Description	RIs	Rls	MD RIs	Code	PCID		Feature Name	Feature Description
	44	GETS0001	GETS Base	This feature allows Government authorized users	8					AQ1572,	GETS Base	With Government Emergency Telecommunications Service (GETS) in the network,
				to receive enhanced routing and priority						AQ1573,		authorized users (at the federal, state, and local level) receive enhanced routing and
	1			treatment through the public switched telephone						AQ1574,		priority treatment through the public switched telephone network during periods
				network during emergency situations by enabling						AQ1575		requiring national security and emergency preparedness (NS/EP) response. This
	24	HSTP0002	HSTP0 DMS ADSL	This feature provides the Nortel 1-Meg Modem	8						Nortel 1-Meg Modem on DMS	This feature provides the Nortel 1-Meg Modem solution to subscribers deriving voic
			Capability	solution to subscribers deriving voice service						AF6472	Remotes Platform	service from Frame-based Remote Line Concentrating Module (RLCM) and Frame
				from Frame-based Remote Line Concentrating								based Line Concentrating Equipment subtending a Remote Switching Center (RSC-
	1			Module (RLCM) and Frame-based Line								S). Voice traffic routes through existing DMS equipment and facilities. The data traf
				Concentrating Equipment subtending a Remote								is typically backhauled by DS-1 inverse multiplexing to a Layer 2 data switch at the
	6	ICM00001	ICM Call Manager I/F	This feature provides Ethernet TCP/IP	8					AU2337	ICM Ethernet TCP/IP Interface	Ethernet TCP/IP is extremely cost-effective and an internationally accepted means
				connectivity between the DMS switch and a								data communication. The use of an Ethernet TCP/IP connection provides a higher
				subscriber's host computer to provide a higher								bandwidth than the existing X.25 transport. Ethernet TCP/IP connectivity to the DM
	I			bandwidth needed to support the increased					1			system is via a Link Peripheral Processor (LPP) Ethernet Interface Unit (EIU).
				demand for computer-telephony integration (CTI)								Depending on the subscriber's configuration, additional customer premise equipment
				on Residential Enhanced Services (RES),								may be required (such as LAN routers).
				Meridian Digital Centrex (MDC), and Meridian								
				Automatic Call Distribution (ACD) lines.					1			
												Easy to install and maintain, the cost-effective Intelligent Call Management (ICM) lin
												offers the bandwidth needed to support the increased demand for computer-telepho
												integration (CTI) on Residential Enhanced Services (RES), Meridian Digital Centres
									1			(MDC), and Meridian Automatic Call Distribution (ACD) lines.
	6	ICM00010	Call Center Server	This feature provides the basic framework to	8					AU2339	ICM DMS Server Interface	ICM00010 enables a subscriber's server to share call processing responsibilities.
				support the development of third-party								This feature introduces Controlled Directory Number (CDN) queues that can be use
				applications (running on the host computer) for								in conjunction with Residential Enhanced Services, Meridian Digital Centrex, and
				subscribers requiring increased Call Control								Meridian Automatic Call Distribution subscribers.
dded	6	ICM00013	Network ICM	This feature ensures that an inter-switched ICM	10				12396	AU2799	Network ICM	This feature enables an inter-switched ICM call to be accurately identified.
				call is accurately identified end-to-end and								Previously, when a call was transferred from one DMS-500 system to another DMS
				transmits the ICM identity of a call between								500 system, some specific call information was not sent to the destination switch.
				separate DMS-500 systems.								This feature provides the following enhancements:
												 Accurately identifies an extended ICM call end-to-end using parameters
												transported to the target switch using the SS7 network. An extended call is a call the
												was transferred, routed by the host computer, redirected, threshold routed, or sent
												from a Network Automatic Call Distribution (NACD) overflow queue. The primary
												information transmitted is the Origination Point Code (OPC) and the Network Call II
												The OPC and Network Call ID together uniquely identify a call within a DMS-500
												switching network. Other information includes a Call History parameter to indicate
												type of Network ICM call, and information about the previous CTI application
												associated with that call.
												Reserves an agent for a specified duration and unreserves an agent at the targ
												 Reserves an agent for a specified duration and unreserves an agent at the target DMS-500 system (under the control of the host computer connected to the target
												 Notifies the host computer if the previously reserved agent has been unreserved
												These new features in ICM00013 enhance agent productivity and help increase the
	6	ICM00020	ICM Call Queue	This feature allows a subscriber's host computer	8					- /	ICM Call Treatments	With ICM00020, the subscriber's host computer can instruct the DMS system to
			Management	to instruct the DMS switch to apply a specific						AU2341		apply a specific treatment to a call placed into either an ACD or Controlled Director
			1	treatment to a call placed into either on ACD or	1			1	1		1	Number (CDN) queue.
				treatment to a call placed into either an ACD or								
				Controlled Directory Number (CDN) queue.								This treatment could include one or a series of the following:

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			Order Code Name	Order Code Description This feature enables the subscriber's host	Ris 9	RIs	MD RIs	Code	PCID	ACTID AU2628	Feature Name Give Multiple Recorded	Feature Description This feature enables the subscriber's host computer to request different indices into
	U	1010100021			3					AU2028	Announcements (RAN)	Table Audio multiple times for a single call held in an ACD or Controlled Directory Number (CDN) queue allowing callers to maintain their priority and place in queue regardless of any treatments given
	6	ICM00050	ICM Enhanced ICM Functionality	This feature reports the current status of a Centrex ACD agent phone and the activation of two agent features.	9					AU2620, AU2618, AU2619	Agent Key Reporting	This feature expands the subscriber host computer's ability to monitor agent activities and introduces new messages that can be sent from the DMS system to the subscriber's business computer. These messages include Agent status query, Agent Line of Business (LOB) reporting, and Agent Emergency Key (EMK) reporting.
Added	6		ICM Enhanced ICM Functionality	This feature reports the current status of a Centrex ACD agent phone and the activation of two agent features.	9	10			12227	AU2801	Variable Wrapup	Currently, the DMS system sends various agent-status ICM messages whenever an agent manually changes states. These states include agent-not-ready, agent-ready, agent-logged out, and agent-logged-in. The addition of the variable wap-up message to the ICM message set enables the client server application to accurately track an agent's status when the variable wrap-up capability is used in the DMS Centrex ACD system. This Variable Wrap-up feature adds new ICM messages that more accurately report the agent's status by using an additional "post-call status" parameter. Agent status indications include variable wrap, release guard, not ready, or logged out. This feature enables third-party Computer-Telephony Integration/Management Information System (CTI/MIS) applications to more accurately report an agent's state call center client-server applications can be enhanced to distinguish and report accurately when an agent is in the permanent make-set-busy state versus the transient variable wrap- up state. Increased reporting enables a call center manager to more accurately monitor each agent's use of make-set-busy and variable wrap-up. Additionally, the manager can make the set of the agent's use of make-set-busy and variable wrap-up.
	44	ISDN0003	ISDN Line Drawer	This feature provides the software for a new ISDN line drawer in all remote Line Concentrating Module-based applications to provide a cost- effective means of provisioning low line-size BRI ISDN service in these remotes.	6					AF6374, AF6375, AF6376, AF6378, AF6379,	ISDN Line Drawer for Remotes (ILDR)	This feature supports up to 28 Basic Rate Interface (BRI) ISDN lines per drawer. Each Remote Line Concentrating Module (RLCM)-based module can support two ILDRs, for a total of 56 ISDN lines per RLCM. • Inserts directly into the slots used by current Line Concentrating Module (LCM) line drawers.
		ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across the network.	5					AJ1485	Cutover (2-Wire Trunks)	This package eases the capping or replacing of an analog office by enabling continuity tests to be performed on trunks between the DNS and other vendor, two- wire switches. The DNS (a four-wire switch) performs the test by emulating at wo- wire switch and initiating and transmitting the appropriate high/low tones. Specifically, this feature modifies control of the table TRKSGRP so that the value "2-wire-2-way" is valid for the field CONTCHK, which specifies the type of continuity testing check used for a trunk subgroup. In addition, this feature enhances the communication
		ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across	5					AJ1040		This feature enhances the ISDN User Part (ISUP) trunk maintenance system by generating Circuit Group Blocking (CGB) and Circuit Group Unblocking (CGU) messages to a far end office that supports Circuit Group Blocking in accordance with Bellcore TR-TSY-000317. These group based messages are sent to prevent the far end office from originating outgoing calls—other than test calls—on blocked trunks (deutified the size/it leatified/test).
	16	ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across	5					AJ1498	DTC7 Module Split	This feature enhances the robustness of the CCS7 network by providing overload protection for the DTC7 when the long buffer resource approaches maximum capacity.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	16	ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across the network.	5					AJ1499	ISUP Maintenance Procedural Enhancements	This feature increases OAM flexibility by providing the operating company with the option to throttle CCS7 User Part log reports (specifically C7UP100 and C7UP300) that are generated when acknowledgement for a release message (REL) or a reset circuit message (RSC) is not received within the specified time frame. Rather than generating another log report every time an ISUP trunk times out, this feature optionally indicates the number and percentage of ISUP trunks in each trunk group that are locked out (LO) at a user-defined interval.
	16	ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across the network.	5					AG1862	ISUP Overload Control Implementation	This feature enhances the robustness of the CCS7 network by identifying and implementing first-level overload controls for ISUP trunks on the CCS7 Digital Trunk Controller (DTC7)—protecting the DTC7 from ISUP overload conditions and allowing it to provide the optimal service for the traffic it handles.
	16	ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across the network.	5					AG1937	ISUP Redirecting Number	This feature provides an optional redirecting number (RDN) parameter to the initial address message (as defined by Bellcore TA-TSY-00853, "ISDN Call Forwarding") on ISDN User Part (ISUP) calls that have been call forwarded more than once. The RDN includes information about the last forwarding directory number (DN) and the reason the call was redirected (i.e., Call Forward Busy, etc.). The feature is implemented for POTS, Centrex, and ISDN calls. Users equipped with appropriate display terminals can visually display the original called number, the DN of the party responsible for call forwarding, and the reason the call was forwarded.
	16	ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across the network.	5					AG1531	ISUP Trunk Options I	The ISUP Glare Control Options feature resolves the conflict that can arise from simultaneous seizure of a two-way trunk from both ends. Northern Telecom's current implementation of glare resolution complies with Bellcore TR-317 specifications, August 1987—glare is resolved on the basis of odd/even circuit identification codes (CICs). This new feature meets the requirements specified in the TR-317 addendum that offers an optional method for managing glare resolution on a per trunk subgroup basis. With this optional method, switching office administrators agree among themselves as to which trunk subgroups they are going to control and which they are going to yield on glare. This feature also applies to TR-394 trunk groups (see the InterLATA CCS7 introduction above) that require per trunk subgroup glare control. The TRKSGRP table has been modified to accommodate either method of glare resolution.
	16	ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides	5					AG1530	ISUP—Blocking on IPML/XPM Outage	This feature provides the capability for sending a blocking (BLO) message to a far end office in the event of an outage on an inter-peripheral message link (IPML) or a digital trunk controller (DTC) that affects an ISUP trunk. The BLO message is sent to

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name	Order Code Description This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across the network.	Ris5	RIs	MD RIs	Code	PCID		Feature Name ISUP—Release with Cause to Treatment Mapping	Feature Description This feature allows the telephone operating company to decide whether local treatment or an ISUP-Release with Cause Message should be sent from the far end office when a call encounters treatment. This feature meets the requirement specified in Bellcore TR-317 addendum Issue 2 and Bellcore TR-394. If local treatment is chosen, a tone or announcement is applied to the calling party from the far end office. If the ISUP-Release with Cause method is selected, a Release with Cause message is sent to the originating office, which maps the cause back to a treatment and then applies that treatment to the calling party. A new table—ISUP treatment—administers which treatment method is applied. This feature also makes the mapping of ISUP-Release with Cause Message indicators to DMS treatments datafillable. Prior to this feature, the mapping from cause to treatment was hardcoded.
	16	ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across the network.	5					AG1532	ISUP—Timer Control	This feature provides the capability to datafill ANSI specified ISUP call processing timers to values within the ranges established by ANSI and Bellcore for both non- equal access and equal access calls. Currently ANSI ISUP timers have hard coded values within their specific range. There are 12 different sets of timers that can be datafilled in Table C7UPTMR.
	16	ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across the network.	5					AJ1486	XPM COT Enhancements for Cutover (2-Wire Trunks)	This package eases the capping or replacing of an analog office by enabling continuity tests to be performed on trunks between the DMS and other vendor, two- wire switches. The DMS (a four-wire switch) performs the test by emulating a two- wire switch and initiating and transmitting the appropriate high/low tones. Specifically, this feature modifies control of the table TRKSGRP so that the value '2-wire-2-way' is valid for the field CONTCHK, which specifies the type of continuity testing check used for a trunk subgroup. In addition, this feature enhances the communication mechanism between the Computing Module (CM) / Central Control (CC) and the Digital Trunk Controller for CCS7 (DTC7) / PCM-30 Digital Trunk Controller (PDTC) so that a new continuity test check type can be recognized by the DTC7.
Added	16	ISP70001	ISP7 Base ISUP	This feature provides support for intra and interLATA trunking using out-of-band signaling to perform call set-up and takedown and provides the signaling platform for extending revenue- generating Intelligent Networking services across the network.	5	10			13283	AF7481	Glare Resolution	Glare occurs when two switches seize a single two-way trunk simultaneously. When a switch encounters glare on a selected trunk member, it attempts to move the call to the next idle trunk member. Before the Glare Resolution feature was available, a call went to treatment if a second routing attempt encountered glare (a condition called double glare), whether there were idle trunk members available or not. The Glare Resolution feature enables the DMS-500 system to resolve double glare on two-way ISUP trunks. With this feature, the switch reroutes these calls based on alternate routes specified by the network operator. If the operator does not specify alternate routes in an appropriate table (such as Table OFRT), the switch sends the call to treatment if double glare is encountered, as it did before this feature was available. This feature does not apply to any call originating on a TOPS trunk group type, or to the forward leg of any operator-assisted call, regardless of the trunk group type used for the forward leg.

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			Order Code Name ISP7 Hop Counter	Order Code Description This feature prevents encless looping of the same message between CCS7 nodes by including a counter (aka "hop" counter) in the Initial Address Message (IAM) in the ISUP portion of a message.	6 6	RIS	MD Ris	Code	PCID	ACTID AG4790, AG4791	Feature Name Prevention of Trunk Looping Caused by ISUP (Item 1.8)	Feature Description If there are incorrect entries in switch translations tables, the Initial Address Message (IAM) in the ISUP portion of the CCS7 protocol may be transmitted back and forth between two switches repeatedly. To prevent call processing from being stalled or halted by this "trunk looping" anomaly, the ISUP portion of the CCS7 protocol includes a counter (known as the "hop" counter) in the IAM. The initial value of the counter, set by the network provider, is decreased with each intermediate switch (or hop between switches) on the signaling path. When zero is reached, the call connections are released, unless zero has been reached at the destination switch. Network providers can set a switch-to-switch IAM transmission maximum that suits their respective inter/intra-CCS7 network infrastructures to prevent infinite transmission loops and help identify potential trunk loop trends for subsequent action.
	16		ISP7 Automatic Congestion Controls	This feature maximizes call completions during high-congestion periods by detecting and responding to CCS7 switching congestion automatically.	8					AF6756, AF6948	Automatic Congestion Controls	This software dynamically regulates the amount of CCS7 traffic issued and received by the DMS system to levels that can be handled most efficiently by the signaling network. There are two components to the Automatic Congestion Control feature: • The DMS system notifies linked switches of its level of congestion, using ISDN User Part (ISUP) signaling. • Upon receipt of a congestion notice from a linked switch, the DMS system responds by reducing traffic to that switch. This optional software helps the DMS system contribute to acceptable levels of CCS7
	16		ISP7 TFP/TFC Routing Options	This feature provides the DMS switch the option to block or cancel traffic to an adjacent switch that is currently congested.	8					AF6757, AF6758, AF6965	Transfer Prohibited/Transfer Controlled Routing Options	network operation during periods of congestion caused by non-focused events (such as earthquakes) or focused events (such as ticket sales). Assigned to individual trunk groups, these controls lessen the risk of CCS7 network. The Transfer Prohibited/Transfer Controlled Routing Options feature promotes CCS7 inetwork robustness by enabling the DMS system to cancel or block calls in response to a transmit congestion (transfer controlled) or isolation (transfer prohibited) message from an adjacent switch.
												Similar to ISP70003, this feature helps the DMS system contribute to acceptable levels of CCS7 network operation during periods of congestion. Under normal conditions, rerouting traffic to tandems does not adversely affect network performance. However, under high call volume conditions, this can result in congestion spreading from central offices to tandems. To help prevent this, the DMS system blocks or cancels calls to adjacent switches that are currently in an overload state. This intervention prevents the congestion from spreading, limits the detrimental effects of high calling patterns, and maintains optimal signaling network operation. The network provider can choose to permit call retrouting on force calls to cancel/block.
	44	ISUP0001	ISUP Cellular	This feature allows cellular service providers to interface with a DMS equal access end office or access tandem over SS7 trunks.	5					AN1287	ISUP Cellular	This feature allows wireless service providers (WSP) to interface with a DMS equal access end office (EAEO) or DMS access tandem (AT) using the CCS7 signaling protocol. Trunk connections on which CCS7 may be used to establish and release call connections include the Type 2A and Type 2B with CCS7 interface. The Type 2A interface provides a connection between a wireless provider and the DMS toll office, which is configured as an AT switch. It enables call completion to and from local exchange carrier (LEC) EAEOs and interexchange carriers through the AT and wireless providers. Type 2B interface provides a connection between a WSP and the DMS EAEO. It enables call completion only to and from the directory numbers served by that end office and the WSPs.

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	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
44	ISUP0001	ISUP Cellular	This feature allows cellular service providers to interface with a DMS equal access end office or access tandem over SS7 trunks.	5	10			13412	AF7509	Cellular Automatic Message Accounting Enhancement	Existing cellular billing records provide a bill number, which is datafilled against the trunk group used by the wireless service provider. Since the real calling number is not recorded, network operators cannot accurately rate the call. The Cellular Automatic Message Accounting Enhancement feature records the real calling number in a module code. Under control of an option assignable on a per-trunk-group basis, this code is then appended to the Cellular Billing Record. This feature works with the ISUP Cellular trunks used by ISUP Cellular features. When this feature is active for a trunk group, it provides accurate billing for all calls, based on the real calling number. The accurate rating of cellular calls enhances revenues for network operators serving wireless service providers.
12	LEA00001	LEAS-Toll	from an non-conforming end office to a DMS access tandem switch for completion to carriers by performing screening and translations						AN0304	Interchangeable NPAs for LEAS	This upgrade of the basic LATA Equal Access System (LEAS) package configures the DMS to accept interchangeable numbering plan area (INPA) codes. With the introduction of interchangeable NPAs, the requirement that the middle digit be a zero or a 1 is removed.
			This feature enables the outing of incoming calls from an non-conforming end office to a DMS access tandem switch for completion to carriers by performing screening and translations functions similar to those in an Equal Access end office.	5					AL0290	Primary InterLATA Carrier (PIC) with LEAS	This feature provides carrier pre-subscription, screening, and routing capabilities for subscribers in non-conforming end offices homing onto a DMS LATA Equal Access System (LEAS) office for intraLATA calls in a manner similar to the currently supported InterLATA calls. Public utility commissions in several states now consider it appropriate to allow independent operating companies and carriers to provide intraLATA Services, and this feature provides this opportunity.
12	LEA00002	LEAS-Local	This feature allows the denial of toll access from a subscriber station and supports outpulsing of all Equal Access call types exactly as they were dialed.	5					AF2370	Increase Digit Outpulsing	This feature resides in a DMS that does not support equal access as specified in Bellcore feature specific document FSD 20-24-0000. Its purpose is to support outpulsing of all equal access call types exactly as they were dialed, so that a DMS- LEAS (LATA Equal Access System) office can provide equal access services for the DMS local office.
12	LEA00003	LEA SS7 I/W with LEAS	trunking with CCS7 trunking and improves access time and reduces post-dial delay for calls routing from an end office to a LATA Equal Access System (LEAS) tandem. These capabilities operate in compliance with GR-317	5					AN0342	CCS7 Interworking with LEAS Office	This feature provides the capability to replace MF trunking with CCS7 trunking and improves access time and reduces post-dial delay for calls routing from an end office to a LATA Equal Access System (LEAS) tandem. These capabilities operate in compliance with GR-317 CORE and GR-394-CORE.
8	LNP00100	LNP LRN	This feature provides AIN-based Local Number Portability (LNP) for implementation of Location Routing Number (LRN).	6	8						This feature allows the MDC attendant console (AC) to interact with the LNP trigger so that it an both originate and reroute calls to ported directory numbers. It also allows the AC number to be ported when it is included as part of a ported customer group.
8	LNP00100	LNP LRN	This feature provides AIN-based Local Number Portability (LNP) for implementation of Location Routing Number (LRN).	6	8				AJ4411, AJ4412	Attendant Console LNP Feature Interactions	This software supports features unique to the MDC attendant console as well as other non-attendant console DMS features that interact with the LNP trigger.
	12	12 LEA00001 12 LEA00002 12 LEA00003 8 LNP00100	12 LEA00001 LEAS-Toll 12 LEA00002 LEAS-Local	12 LEA00001 LEAS-Toll This feature enables the routing of incoming calls from an non-conforming end office to a DMS access tandem switch for completion to carriers by performing screening and translations from an non-conforming end office to a DMS access tandem switch for completion to carriers by performing screening and translations from an non-conforming end office to a DMS access tandem switch for completion to carriers by performing screening and translations functions similar to those in an Equal Access end office. 12 LEA00002 LEAS-Toll This feature enables the routing of incoming calls from an non-conforming end office to a DMS access tandem switch for completion to carriers by performing screening and translations functions similar to those in an Equal Access end office. 12 LEA00002 LEAS-Local This feature provides the denial of toll access from a subcriber station and supports outpulsing of all Equal Access call types exactly as they were dialed. 12 LEA00003 LEA SS7 I/W with LEAS This feature provides the capability to replace MF trunking with CCS7 trunking and improves access time and reduces post-fail delay for calls routing from an end office to a LATA Equal Access System (LEAS) tandem. 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		LNP00100		This feature provides AIN-based Local Number Portability (LNP) for implementation of Location Routing Number (LRN).	6	8		Code	PCID		Billing Enhancements	Feature Description This feature provides the ability to assign distinct Location Routing Numbers (LRNs) on both an office-wide and per-remote basis. For proper access billing, the LNP billing record may need to identify the host or remote switch that a call originates or terminates on.
	8	LNP00100	LNP LRN	This feature provides AIN-based Local Number Portability (LNP) for implementation of Location Routing Number (LRN).	6					AF6443, AF6444, AF6572, AN1953,	Local Number Portability Functionality	Release 1 of Nortel's Local Number Portability (LNP) service software focuses on an AIN-based, long-term solution for LNP with the implementation of Location Routing Number (LRN). Key characteristics of Nortel's LNP solution include:
	8	LNP00100	LNP LRN	This feature provides AIN-based Local Number Portability (LNP) for implementation of Location Routing Number (LRN).	6	9				AU2525,	Pre-Translation and Class of Service Screening Support	This feature enables provider-selected calls routed directly out of pre-translations or class-of-service screening to send an LNP query to the SCP. The call then routes according to the response received from the SCP.
	8	LNP00100	LNP LRN	This feature provides AIN-based Local Number Portability (LNP) for implementation of Location Routing Number (LRN).	6	8				AU2444	Query Location Routing Number (QLRN)	This feature enables a technician to initiate a query from the SSP to the SCP, based on a directory number, and view the returned Called Party ID. The query used by QLRN is the same as the query used for calls to ported numbers. In addition, messages provided by QLRN can be used to identify possible missing switch datafill.
	8	LNP00100	LNP LRN	This feature provides AIN-based Local Number Portability (LNP) for implementation of Location Routing Number (LRN).	6	9				AU2546	Virtual Facility Group Support	This feature provides the ability to override the directory number residency check performed by LNP translations. Thus, providers can use virtual facility groups (VFGs) to throttle calls into or originate calls from a customer group.
Added	8	LNP00100	LNP LRN	This feature provides AIN-based Local Number	6	10			9289	AU3086	Foreign Location Routing Number	
				Portability (LNP) for implementation of Location Routing Number (LRN).								 This feature applies to LNP-enabled networks using one Local Routing Number (LRN) per SSP per LATA. In this type of network, if the <i>destination</i> switch serves multiple rate centers, routing anomalies can occur during LNP response translations. The Foreign Location Routing Number (FLRN) feature helps ensure that LNP response translations retain the post-query call type, so that it remains the same as the pre-query call type. This helps the routing and billing for the call to remain correct. Helps to properly route and bill calls to recipient switches that serve multiple rate centers. Makes future GR-2936 requirements available to DMS-500 SSP systems now. Supports the transition to Portability Outside a Rate Center (PORC) functionality.
Added	8	LNP00100	LNP LRN	This feature provides AIN-based Local Number Portability (LNP) for implementation of Location Routing Number (LRN).	6	10			9289	AJ5070	Preset Conference Support	The Preset Conference Support feature allows service providers to offer preset conferences that involve ported directory numbers (DNs). This feature supports only the IBN (Integrated Business Network) preset conference type. It has no effect on a preset conference when portable DNs are not used. When a subscriber dials an IBN preset conference DN, the switching office automatically rings the pre-selected conference members (up a maximum of 50). With this feature, a conference member DN could be a ported number and outside the customer group of a preset DN. The Preset Conference Support feature can help enhance revenues by enabling

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8	3 L	NP00101	LNP Query on Release	This feature provides a Query on Release option for use with LNP00100 by allowing calls to non- ported numbers (numbers that have not been moved to another central office) to be routed to the terminating SSP without performing a database query.	6					AR2113, AR2114, AR2124	LNP Query on Release	Query on Release (QoR) is an optional feature associated with Nortel's LNP Release 1 (LNP00100). Whene permitted by public utilities commission/FCC regulation, this option enables calls to non-ported numbers (numbers that have not been moved to another switching office) to be routed to the terminating switch without performing a database query. Calls to ported numbers re released back from the donor switch to the originating or intermediate SSP. followed by a query to the SCP to
8	3 L	NP00200	LNP GR2936 Ph I	This feature provides software enhancements and broadens the support of Local Number Portability on the DMS switch.	9					AU2544	10-Digit Unconditional Trigger Enhancements	Builds upon the functionality provided in LNP0100 by enabling the 10-digit unconditional trigger to be assigned to an expanded list of line class codes (LCCs) and DN types. New LCCs and DN types supported in LNP00200 include CCF, CDF, CFD, UCD, T & RCF, and others
8	3 L	NP00200	LNP GR2936 Ph I	This feature provides software enhancements and broadens the support of Local Number Portability on the DMS switch.	9					AU2538	Bellcore GR-2936 Billing	Supports Bellcore GR-2936 based billing for LNP related calls. Additions include one new billing module (719) and two new Call Type Codes (CTC) 721 and 722. CTC 721 provides a vehicle for generating billing records for calls that normally do not generate automatic message accounting (AMA) records. Providers can optionally bill for all LNP calls using both ported and non-ported numbers or for LNP calls using ported numbers only.
8	3 L	NP00200	LNP GR2936 Ph I	This feature provides software enhancements and broadens the support of Local Number Portability on the DMS switch.	9					AU2539	Bellcore GR-2936 Billing	CTC 722 provides a vehicle for generating billing records when last resort routing to a recipient switch occurs at a donor switch and a billing record is not already being generated at the donor switch. This code applies to originating calls carried over a public trunk and made to numbers ported from the donor switch.
8	3 L	NP00200	LNP GR2936 Ph I	This feature provides software enhancements and broadens the support of Local Number Portability on the DMS switch.	9					AU2678	LNP Query Parameter Reduction	Query Parameter Reduction: helps reduce the real time impact of LNP on the DMS switch by reducing the number of optional parameters in an LNP query message. All LNP queries contain mandatory parameters. Optional parameters can be sent according to datafill set by the service provider by using the table datafill interface
8	3 L	NP00200	LNP GR2936 Ph I	This feature provides software enhancements and broadens the support of Local Number Portability on the DMS switch.	9					AU2548	Ported-Out Directory Number Marking	Ported Directory Number Marking: marks native, ported-out directory numbers (DN in switch datafill, to help avoid accidental re-use of ported-out DNs in a donor switch. This feature provides a new tool, Query Ported DN (QPDN), that lists both ported-ou and ported-in DNs on an NPA-NXX basis. The software also enhances existing SERVORD commands QDN and QLEN to indicate ported-out and ported-in DNs.

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Added	8	LNP00200	LNP GR2936 Ph I	This feature provides software enhancements and broadens the support of Local Number Portability on the DMS switch.	9	10			12179	AU2779	Query Enhancements	 Query Enhancements are based on both Bellcore GR-2936 and additional customer requirements. They include a new optional AIN Trigger Criteria Type (TCT) for LNP queries, analysis of 10-digit Automatic Call Gapping (ACG) controls, and controlling the volume of queries from calls originating from another provider's network. The Query Enhancements feature includes the following functions: AIN TCT: This function enables the DMS-500 SSP to identify LNP triggers as separate TCTs. The TCT is implemented as an option to avoid forcing markets outside the U.S. to adapt to it. Network providers who want this TCT to be active in their markets can simply set the option in the appropriate table. Ten-Digit ACG: When the SSP detects an LNP trigger, it checks for active ACG controls. If an active ten-digit ACG control is encountered, the SSP provides final treatment to the call. For all other ACG control, the SSP attempts to use default routing to the dialed number. Network Management: This function routes all "undipped" calls (that is, they have not yet been queried) to a donor network. It is provisionable as an option on a trunk-gr
Added	42	LNP0300	LNP Canadian Requirements	This feature provides LNP capabilities in the Canadian market.	10				12295	AJ5071	LNP SSP:LNP/800-Plus Interworking	The initial functionality of this new feature includes support of 800-Plus Toll-Free Service ability to interact with LNP when an AIN LNP trigger is encountered. This feature applies to the Canadian market only. LNP00300 enables LNP capabilities widely deployed in the U.S. to be used in Canadian offices, providing enhanced revenues and subscriber satisfaction and maximum return on AIN infrastructure investment to providers.
	20	LOC00001	LOC Services	This feature provides multi-party service for subscribers who are served by individual lines. The bridged multi-party group can include up to four subscriber lines connected to any peripheral, including those served by digitally integrated remotes and subscriber loop carrier systems. The multi-party service provided by this feature offers two enhancements to mechanical bridging including : only the called party in the multi-party group is rung and no special treatments or caller process is required for revertive calls.	5						Local Services	This feature provides multi-party service for subscribers who are served by individual lines. The bridged multi-party group can include up to four subscriber lines connected to any peripheral, including those served by digitally integrated remotes and subscriber loop carrier systems. The multi-party service provided by this feature offers two enhancements to mechanical bridging including : only the called party in the multi-party group is rung and no special treatments or caller process is required for revertive calls.
	20	LOC00002	LOC Carrier Identification Parameter	This feature enables interexchange carriers (IECs) to consolidate trunk groups to provide Equal Access connections for the carrier and its reseller carriers over one trunk group. The Carrier Identification Code Parameter (CIP) feature delivers the Carrier Identification Code (CIC) in the initial address message (IAM) from an originating local exchange network to the IEC on Feature Group D , CCS7 -supported calls.	5					AN0717	Carrier Identification Code Parameter	This feature enables interexchange carriers (IECs) to consolidate trunk groups to provide Equal Access connections for the carrier and its reseller carriers over one trunk group. The Carrier Identification Code Parameter (CIP) feature delivers the Carrier Identification Code (CIC) in the initial address message (IAM) from an originating local exchange network to the IEC on Feature Group D, CCS7 -supported calls. These calls include CIP for FGD, 700, 900+NXX & 800 Database type calls. Presubscribed carrier information in CIP will be used for normal 1+ presubscribed calls. This enables the information to be sent in the forward direction to the transit network indicating the transit network selected by the originating subscriber. The Local Exchange Carrier (LEC) can optionally offer the feature to IECs on a percarrier, per-trunk group basis, per CIP value.
	20	LOC00004	LOC International 15 Digit Int'l Dialing	This feature provides support for subscriber international dialing services that require an expanded number of dialed digits as per CCITT Recommendation E.164 which provides for an increase from 12 to 15 in the maximum number of digits for international numbers. The new 15- digit format consists of a one-to three-digit Country Code and a National Significant Number of up to 14 digits. The combined total may not	5					AN0777	International 15-Digit Dialing	This feature provides support for subscriber international dialing services that require an expanded number of dialed digits as per CCITT Recommendation E.164 which provides for an increase from 12 to 15 in the maximum number of digits for international numbers. The new 15-digit format consists of a one-to three-digit Country Code and a National Significant Number of up to 14 digits. The combined total may not exceed 15 digits. This feature makes essential changes to billing data collection as well as to call processing, subscriber services, and the operations, administration, and maintenance (OAM) functions that support international dialing.

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20	LOC00005	LOC Dialing Plan Translation Enhancements	This feature simplifies general translations procedures in the local office.	6					AF6498, AF6616, AF6617	Expand LINEATTR Table to 4096	As introduced in the feature above, the upper limit to the LINEATTR table continues to expand. In NA007, this table is scheduled to accommodate 4096 entries.
20	LOC00005	LOC Dialing Plan Translation Enhancements	This feature simplifies general translations procedures in the local office.	6					AF6299	Expand LINEATTR Table and Line Treatment Groups	A proliferation of calling plans and blocking scenarios at central offices with multiple rate centers is straining the capacity of table LINEATTR—the table that defines blocking and calling arrangements for each rate zone. To give one hypothetical example, 400 table entries for flat rate service and 400 for messaging service would be required on a switch with 10 rate centers, 10 calling plans, and 4 blocking scenarios (for vendor codes such as 900, 976, or 700). The addition of miscellaneous line codes could push the number of entries up to or beyond the maximum of 1024 for table LINEATTR. This feature raises the maximum number of entries in the LINEATTR table to 2048. In connection with this change, the maximum number of Line Treatment Groups also
20	LOC00005	LOC Dialing Plan Translation Enhancements	This feature simplifies general translations procedures in the local office.	6	8				AF6755	Expand LINEATTR Table to 32K	In response to network provider requests, the LINEATTR table continues to expand to meet the perceived demand to support customized routing arrangements for competitive local exchange carriers (CLECs) as required by the Telecommunications Reform Act of 1996. In NCS08, the upper limit to this table is scheduled to grow from 4096 (the NCS07 limit) to a maximum of 32,000 (32K). Additional line attribute entries may be required to provide selective routing of traffic to a CLEC's operator and directory assistance platform for resold or unbundled lines.
20	LOC00005	LOC Dialing Plan Translation Enhancements	This feature simplifies general translations procedures in the local office.	6	8				AF6919	Expand the Line Treatment Group Table to 9999	This feature increases the maximum number of Line Treatment Groups from 512 to 9999.
	LOC00005		This feature simplifies general translations procedures in the local office.	6					AN1809, AN1797, AN1810	Generic Recursive Pretranslator	When the points of presence (POPs) for several interexchange carriers are on the same access tandem, this feature significantly reduces the number of equal access pretranslation tables required in the end offices to route calls to these carriers. With this feature, a single generic recursive pretranslator can replace carrier-specific recursive pretranslators for a particular class of service. This feature applies when recursive pretranslation routing instructions are identical except for carrier name. This feature reduces the number of craftsperson hours required to set up and maintain pretranslation tables. By cutting the time required to datafil a central office, the patwork provider can reduce operating expenses. The reduction in the number of
20	LOC00006	LOC Interswitch Call Trace	This feature extends Directory Number identification of calls originating from other central offices, including non-DMS switches, if the entire network uses CCS7.	6					AF6106, AF6113, AN1658	Interswitch Call Trace	the network provider can reduce operation expenses. The reduction in the number of Currently, the DMS system identifies a caller's directory number (DN) for an intraswitch call trace. For a call placed from another central office, the trace yields a log message identifying the caller's trunk group and trunk member. This feature extends DN identification of calls originating from other central offices—including non-DMS system offices—if the entire network uses CCS7. The DN is extracted from the CCS7 message and printed as part of a log message. By greatly expanding the DMS system's call tracing capability, this feature enables the

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ADDED		LOC00006	LOC Interswitch Call Trace	This feature extends Directory Number identification of calls originating from other central offices, including non-DMS switches, if the entire network uses CCS7.	6	10			2709	AF7560	Interswitch Call Trace/Call Forwarding	This feature enables trace capabilities for a call that originated in another switch and was interconnected by SS7 facilities. This Interswitch Call Trace (ICT) software checks each call marked for Calling Line Identification (CLID) to determine if the call arrived over the SS7 network. If so, ICT generates a message that contains the calling party's number from the Initial Address Message (IAM), along with other call information needed to help trace harassing calls. In NCS10, LOC00006 also indicates if Call Forwarding was involved — and identifies all three parties. If the call was forwarded, this software populates two new fields (Called Number and Other Party) in the ICT log (LINE 605) with the following information. This enhancement helps reduce the time and effort needed to identify harassing callers when a call forwarding feature is active at the intended victim's directory number (DN). Previously, call trace logs (involving more than one switch) sho
	20	LOC00010	Table POSNAME Expansion	This feature expands selective routing 0- calls to Operator Assistance (OA) platforms of other service platforms to accommodate the selective routing of 0- traffic to multiple competitive local exchange carrier (CLEC) operator services and expands the size of table POSNAME from 16 to 128 position names.	8					BY58148	Expand POSNAME/POSITION Table	To accommodate the selective routing of 0- traffic to multiple competitive local exchange carrier (CLEC) operator services, the network provider may require an increase in the number of positions that can be defined. This optional feature expands the size of table POSNAME from 16 to 1024 position names and table POSITION from 64 to 1024. The U.S. Telecommunications Reform Act of 1996 and subsequent ruling by the
	20	LOC00011	END OFFICE OA AMA	This feature enables network providers to collect charges from competitive local exchange carriers (CLECs) that use their equipment to provide access to other operator service locations and offers a convenient way to track customer use of alternative operator services.	8					AF7086	End Office Operator-Assisted AMA	As part of deregulation, end users are gaining the ability to choose which local operator services they use. This feature enables local service providers to create AMA billing records for any operator-assisted (0+ or 0-) call, regardless of the particular operator center accessed. This feature offers the following advantages to service providers: • Enables network providers to collect charges from competitive local exchange carriers (CLECs) that use their equipment to provide access to other operator
	20	LOC00012	LOC Resale/Unbundling	This feature offers switch owners in the U.S. a cost-effective and reliable switch-based solution for administration and accounting of CLEC traffic at the end office.	9					AF7115	Class of Service Screening Table Expansion	This feature enables the ILEC to more easily accommodate CLEC call routing requirements and expands table CLSVSCRC to 8191 screening class names.
	20	LOC00012	LOC Resale/Unbundling	This feature offers switch owners in the U.S. a cost-effective and reliable switch-based solution for administration and accounting of CLEC traffic at the end office.	9					AF7251, AF7311, AF7247	Local Service Provider Identification - AMA	This feature appends the service provider designation to provide "full" Local Service Provider Identification (LSPI) automatic message accounting (AMA) capability for lines. It provides LSPI information within existing originating and terminating AMA billing records. As a subscriber changes his local service provider, this change is immediately reflected in the next active billing record.
	20	LOC00012	LOC Resale/Unbundling	This feature offers switch owners in the U.S. a cost-effective and reliable switch-based solution for administration and accounting of CLEC traffic at the end office.	9					AF7113, AF7114	Local Service Provider Identification - Base	This feature enables the ILEC to associate a resold or unbundled line with a designated CLEC. This capability is based upon industry requirements as defined by Bellcore GR-2970 for the association of a Local Service Provider Identifier - Account Owner (LSPI-AO).

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I	App	Order Code	Order Code Name		Ris	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
Added			LOC Resale/Unbundling	This feature offers switch owners in the U.S. a cost-effective and reliable switch-based solution for administration and accounting of CLEC traffic at the end office.	9	10			12133	AF7532,	Local Service Provider Identification-Base Enhancements	The Local Service Provider Identification-Base feature identified the appropriate local service provider directly responsible for subscribers within the end office. In NCS10, this software expands the LSPI capabilities and adheres to industry standard Bellcore GR-2970 to: • Provide a Local Service Provider-Switch Owner (LSPI-SO) to identify the owner of the switching facility. • Identify the connecting switching-systems owner, by provisioning the Local Service Provider-Far End (LSPI-FE) switch owner on Intertoll (IT), Directory Assistance (DA), and Operator (OP) internetworking trunk types. • Support interconnection to MF signaling or non-LSPI compatible offices. Local service provider traffic can be identified by provisioning the LSPI-Account Owner (LSPI-AO) to a dedicated internetwork Intertoll (IT) trunk. • Specify a switch-wide default for LSPI-Switch Owner (LSPI-SO). • Enable the network provider, in situations where a DMS system spans more than one jurisdictional area, to override the switch-wide LSPI-SO default at the line level (as a line option). • Provide Command Interpreter query commands to determine the local service provider This feature expands the cost-effective, switch-based solution provided in NCS09 by a • By including the LSPI-Switch Owner (LSPI-SO) within the AMA record, this enhancer • By including the LSPI-Far End switch owner (LSPI-FE) within the AMA record, the IL • By including the LSPI-Far End switch owner (LSPI-FE) within the AMA record, the IL • By including the LSPI-Far End switch owner (LSPI-FE) within the AMA record, the IL • By including the LSPI-Far End switch owner (LSPI-FE) within the AMA record, the IL • By including the LSPI-Far End switch owner (LSPI-FE) within the AMA record, the IL • By including the LSPI-Far End switch owner (LSPI-FE) within the AMA record, the IL • By including the LSPI-Far End switch owner (LSPI-FE) within the AMA record, the IL • By including the LSPI-Far End switch owner (LSPI-FE) within the AMA record, the IL • By includi
Added	20	LOC00012	J. J	This feature offers switch owners in the U.S. a cost-effective and reliable switch-based solution for administration and accounting of CLEC traffic at the end office.	9	10			13413		Identification-AMA Enhancements	This enhancement expands Local Service Provider Identification automatic message accounting capabilities to: • Add LSPI-Switch Owner (LSPI-SO) identification for both lines and supported trunks. • Include LSPI-Account Owner (LSPI-AO) for trunks as well as lines. This software also generates new access tandem records to account for calls placed on al LEC network from other local service providers (CLECs) over supported internetwork trunk types.
Added	20		Enhancements	This feature offers new screening capabilities to reduce cost of ownership and provides custom local calling areas as a new service offering to wholesale customers.	10				14257	AF7475	6-Digit Local Call Area Screening	situations where the CLEC interconnects to the ILEC's network at the access tandem. This new ordering code: • Provides a single Numbering Plan Area (NPA)/Office Code (NXX) lookup for local call determination. • Enables the ILEC to define customized local-calling areas on a per-CLEC basis. This gives the incumbent an opportunity to provide a new service to CLECs.
												Resolves ambiguous situations when the office code of a 7-digit dialed toll call is the same as the NPA of a ten-digit dialed local call. Prior to the release of this feature, this situation resulted in the 7-digit toll call being treated as a 7-digit local call. Allows a smooth transition from existing local call area screening tables to new 6- digit call area screening capability. Permits the network provider to tailor treatment on a local call area, dial plan, and call type basis. Previously default call treatments had fixed assignments.
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5					AD2488		This feature provides a recall timer for the hold feature on an attendant console to remind the attendant that a call has waited on hold for a period of time that is datafillable on a customer basis. The attendant is alerted by a buzz or warning tone. This hold timer applies only to calls that have a source and no destination or that have a destination and no source.

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			MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5	6				Automatic Intercept System Enhancement	This feature enables MDC intercept calls which have fewer than seven dialed digits to be properly handled by a centralized Automatic Intercept System (AIS). The software expands the dialed digits to the required seven digits, where necessary, before outpulsing the called number to the AIS. Some of the common MDC dialing features, such as extension dialing, Electronic Switched Network dialing, local network access, and virtual group access can result in calls with fewer than seven dialed digits. As well, this feature expands support of multiple area codes per office to cover UNDN (unassigned directory number), OPRT (operator), and TRBL (trouble) intercept treatments used to route calls to the AIS. This feature extends centralized AIS operations to MDC intercept calls with fewer than seven dialed digits. MDC calls that currently reach an AIS but fail (because of incomplete dialed digits, will now be properly handled. This increases AIS coverage and provides uniform treatment of intercept calls from both MDC and non-MDC lines.
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5				AG1541	Call Forward Don't Answer Interaction with 3WC	This feature ensures that the Three-Way Calling feature interworks properly with the Call Forward-Don't Answer (CFD) feature. When a caller attempts to set up the second leg of a three-way call to a set with CFD assigned, the call is redirected to the forwarded-to directory number after the CFD timer has expired. Any features in effect on the forwarded-to directory number continue to be applied correctly. For example, if the DN has been assigned Call Waiting (CWT) and is busy with another call, call-waiting tones are applied to the line to signal the incoming conference call.
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5				AG1565	Call Pickup with Multiple Incoming Calls	Currently, when more than one station within a call pickup group is ringing and a user activates Call Pickup, the priority in which the calls are answered is determined by their Line Equipment Numbers (LENs). With Call Pickup Transparency, the priority in which calls are answered is determined by the length of time they have been ringing. The call that has been ringing the longest is answered first.
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5				AF2303	Distinctive Ringing Enhancements	This feature enhances the existing Distinctive Ringing (DR) feature by allowing DR to be assigned optionally on a per line basis; currently, DR is provisionable only on a customer group basis. Ringing patterns have also been added for compliance with LSSGR section 6.2.6.9—Business Group Ringing requirements.
	4	MDC00001	MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5				AF2012	IBNRTE Table Capacity Increase	This feature quadruples the IBN routes that are available to the telephone operating company in a single switching system. Currently, 1024 routes are available in the IBNRTE table; with the new capability, 4092 routes are available.
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5				AF1936	MDC LCC Compatibility with FRO, RMR, RMT	This feature provides Meridian Digital Centrex line class code (LCC) compatibility with several POTS line options, thus allowing these options to be assigned to MDC stations served by 500 or 2500 sets. The options included are: Fire Reporting System, Originating (FRO), Remote Message Register for Local Calls (RMR), and Remote Message Register for Toll Calls (RMT).
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5	6			AF6110	MDC Meet-Me Conferencing Enhancement	To expand flexibility, this feature removes two current Meet-Me Conference restrictions: • Previously, the customer group had to have an attendant console assigned. • Previously, the customer group had to be 64 or lower if no attendant console was assigned. This feature eliminates customer group number considerations when assigning conferencing to a customer group. Removal of these restrictions permits the assignment of a Meet-Me Conference to any of the 4.096 possible customer groups.

Change In Issue 2	App	Order Code	Order Code Name	Order Code Description	1st NCS RIs	Enh Ris	Repl Ord MD RIs Code	PCID	ACTID	Feature Name	Feature Description
	4	MDC00001	MDC MDC minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5					Semi-Restricted Incoming Lines Call Intercept	This feature enhances the existing Denied Incoming (DIN) line option by enabling a subscriber to choose a treatment or route for incoming direct dialed calls. Incoming calls receive an intercept tone, a recorded announcement, or are forwarded to the Centrex attendant. The feature is assigned on a customer group basis and provides the option to restrict a single line or a group of lines.
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5				NC0001	Speed Call Pause Insertion	With this feature, Speed Call users can insert pauses into the 24-digit (maximum) string associated with their Speed Call cells, thus allowing series of numbers to be programmed consecutively. Controlled pauses are used between access codes, passwords, and directory numbers to ensure efficient call processing. The pause is inserted using the asterisk (*) key. The length of the pause is datafillable on a per customer group basis; longer pauses can be generated by programming several asterisks in succession.
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5				AF2100	Three-Way Calling/Call Pickup Interaction	This feature enhances the existing Call Pickup (CPU) feature by allowing a user active in a two-party call to pick up and add a third party to the call. To invoke the feature, the user depresses the three-way call (3WC) or call transfer (CXR) key (which places the party to whom he is already talking on hold), receives a dial tone, and dials the CPU activation code (or depresses the CPU key) to pick up the ringing member. Previously, Call Pickup could not be invoked from the second leg of a three- way call; a CPU member could only invoke a call pickup after placing the active call on hold using the Call Hold (CHD) option or the physical HOLD key on a Meridian Business Set (MBS). If the CPU user was assigned call forwarding, the call on hold might be "timed out" and forwarded before the CPU user completed the Call Pickup activation.
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5				AF1935	Transfer Calls to Restricted Station	This feature allows specified unrestricted stations to transfer calls from both inside and outside the customer group to restricted stations within the customer group. Through a datafilled option—Denied Incoming Exempt (DINE)—a station user is allowed to transfer a call to another internal station marked with the Denied Incoming (DIN) option. This application was previously implemented through Terminating Restriction Codes.
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5	6			AN1632	UCD Query Enhancements	The Uniform Call Distribution (UCD) feature permits calls to be evenly distributed to a number of pre-designated 500/2500 stations. If all these stations are busy, new calls are queued and a ringing tone is returned to the caller. The stations are accessed through one primary and up to four supplementary directory numbers (DNs) assigned to a UCD group of stations. This feature will provide query commands to enable network administrators to view the primary and supplementary DNs for a given UCD group. Service providers now have access (by way of a MAP command) to the directory
	4	MDC00001	MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5					UCD Queue Closure Enhancement	UCD Call Closure Enhancement helps ensure the completion of queued calls to UCD members after initiating steps to send the UCD group into night service. Call Closure Enhancement enhances the existing method of implementing Night Service for a UCD group by blowing a member of the group to close the incoming queue previous to all agents logging out. It allows for the distribution of calls in queue to the available agents while sending new calls to the Night Service treatment. Night Service is enhanced by allowing dialed activation of Night Service in addition to the current method of activation through agent log out. Application. This new capability ensures all customer calls in queue are properly presented to an agent at or near the end of the business day when the UCD group has been closed out into Night Service.

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ssue 2	4.00	Order Cede	Order Code Name	Order Code Description	NCS Ris	Enh Ris	MD RIs	Repl Ord	PCID		Feature Name	Feature Description
ADDED			MDC MDC Minimum	This feature provides basic MDC features which include station features, system-level features, and attendant features.	5	10	MD RIS	Coue	13204		CODEBLK Ambiguous Codes	Currently, the CODEBLK table enables the DMS code restriction functionality to block/allow one or more 3 to 18 digit numbers dialed from selected stations within the customer group. With the advent of ambiguous area codes/office codes, blocking these codes by specifying a 3 to 18 digit string in table CODEBLK also causes calls to office codes/area codes of the same value to also be blocked. This feature provides Numbering Plan Area (NPA), Office Code (OFC), and Country Code (CC) enhancements for table CODEBLK. This enables the DMS system to block or allow calls based on an area code, office code, and country code. This feature also: • Provides additional custom announcements capabilities for blocked calls. • Allows datafill of custom announcements/treatments in table CODEBLK for blocked calls.
	4	MDC00002	MDC MSAC	This feature provides additional Attendant Console features to complement those found in MDC00001 which include support of additional languages, immediate notification to the attendant when an emergency call is queued, alarm triggering when a predetermined number of calls fills a queue for longer than a predetermined period and "do not disturb" capabilities with	5					AD0351	Alarm Call Status on Attendant Console	This feature automatically triggers two external Signal Distributor (SD) points when certain criteria are met within the Attendant Call Queue. The first of these SD points indicates when a predetermined number of enqueued calls for a subgroup has been reached or exceeded. The second SD point denotes when the oldest call in a subgroup has been enqueued beyond a predetermined period. The two SD points can be connected to lamps or audible warning devices to alert the supervisor or attendant about the situation. The capability to assign the queue size and time thresholds is provided through datafill by assigning the QSTATUS option in Data
	4	MDC00002	MDC MSAC	This feature provides additional Attendant Console features to complement those found in MDC00001 which include support of additional languages, immediate notification to the attendant when an emergency call is queued, alarm triggering when a predetermined number of calls fills a queue for longer than a predetermined period and "do not disturb" capabilities with several options to specify where calls will divert.	5	9				AF7263	MDC MSAC Enhancements	This feature provides more options for call disposition by enabling the MDC attendant to join a Meet-Me Conference and to transfer calls to a Meet-Me Conference,
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					AG1371	Call Forward Busy/Don't Answer—Int/Ext Split	This feature enhances and simplifies Loudspeaker Paging by allowing the paging party to confer with the paged party before connecting him/her to the calling party, and allowing the paged party to answer a call by entering only an answerback access code and one-digit index. Currently, because incoming calls are parked against a directory number, the paged party has to enter an access code and the directory number against which the call is parked. In addition, the paging party cannot confer with the paged party. This feature is available to users of Attendant Consoles, Meridian Business Sets, and 2500 sets.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					NC0084	Call Forward Busy—Inhibit Make Busy/Line Busy	This feature associates a new Make Busy feature key with a line that has Call Forward Busy (CFB) or Call Forward Busy Line (CFBL) service. When the key is activated, all incoming calls to the base station are always call forwarded, regardless of the busy/idle status of the base station. The feature is implemented by service order and introduces the following two new line options—Inhibit Make Busy (IMB) and Inhibit Line Busy (ILB).
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					NC0055	Call Forward Do Not Answer and Call Waiting Interaction	This feature enhances the existing Call Forward Don't Answer (CFD) station feature by providing new call treatment options when the forward-to destination is busy. The available options are: Waiting or Series Complete (the existing feature operates this way); • Do not forward the call, but continue to ring the base station until the incoming call is answered or abandoned; or • Do not forward the call, but provide an intercept announcement treatment. Feature operation is selected on a customer group basis for both Meridian Digital Centrex and Residential Enhanced Services, and on a per line basis for POTS lines.

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	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				NC0025	Call Forwarding of Call Waiting Calls	This feature gives Meridian Digital Centrex and RES users with Call Waiting and Call Forward Don't Answer (CFD) assigned to their lines the added benefit of having calls that are enqueued against their busy station for a period ranging from 12 to 60 seconds (as determined by the operating company) to overflow automatically to a predetermined destination. Currently, a call that has been put on Call Waiting activates several warning tones to alert the busy station, but then remains connected until the call is answered, abandoned by the originator, or the busy station user hangs up (whereupon the waiting call then rings as an incoming call). Incoming waited calls can be identified on the Business Set's display with Auto Inspect. The subscriber can then choose to answer the call or let it forward to voice mail.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				AF1117	Call Forwarding Reactivation	This feature allows a telephone subscriber to activate "Call Forwarding" to his or her last "Forwarded To" directory number. The subscriber activates the feature by dialing an access code (e.g., 79). Upon feature activation, the subscriber receives confirmation tone denoting that call forwarding has been properly activated.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				AG1565	Call Pickup with Multiple Incoming Calls	Currently, when more than one station within a call pickup group is ringing and a user activates Call Pickup, the priority in which the calls are answered is determined by their Line Equipment Numbers (LENs). With Call Pickup Transparency, the priority in which calls are answered is determined by the length of time they have been ringing. The call that has been ringing the longest is answered first.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				AG1997	Call Request Retrieve/Key Short Hunt Interaction Control	This feature provides a customer group option to control the interaction of the Message Waiting Call Request Retrieve feature with the Key Short Hunt feature. The retrieval feature can be set to hunt or not to hunt, as designated by the customer group.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				AF1663	Change Business Set Features During Talking State	This feature allows telephone operating company personnel to add, change, and delete the features assigned to Meridian Business Sets while users are active on those sets. Currently, these procedures can only be performed while the sets are idle, which requires the telephone operating companies to provide personnel during off-hours and increases the amount of time required to process work orders.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				AF1565	Change Speed Call Controller	This feature allows a group speed call controller to be changed without removing and then reentering all the speed call members. When the Service Order clerk issues the following command to specify the old and new controller line equipment number (LEN), all members of the Speed Calling–Long List (SCL) group are updated: CHG CNTLR SCL (LEN) TO (LEN) This command is compatible with Meridian Digital Centrex (500/2500), Meridian Business Set, and Data Unit lines.

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1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				AD2964	DISA: Invalid Authcode Treatment Option	This feature improves the flexibility of Direct Inward System Access (DISA) by providing telephone operating companies the capability to custom-datafill the treatment to which the call is to be routed when an invalid DISA authorization code is dialed. Currently, when an invalid DISA authorization code is detected, the call is routed to reorder treatment, and the DISA caller receives no indication as to why this has happened (i.e., the network is busy or an invalid authorization code was dialed).
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				AG1252	Extended Area Service (EAS)—MDC Shared Trunking	This feature allows Extended Area Service (EAS) and Meridian Digital Centrex (MDC) types of traffic, each including multiple customer groups, to be served by one trunk group. The result is increased trunking efficiency and simplified provisioning and administration. CCS shared trunking allows a trunk group to maintain the private or public network identity of each call while carrying multiple traffic types and multiple customer groups.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				AJ0432	Feature Key Access to Message Waiting	This feature allows the Message Waiting/Call Request feature to be assigned to a feature key on an ISDN functional terminal or other Meridian Business Set. Previously, the feature was activated by dialing an access code.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5	9			AF7298	Hunt Group OM Simplification	This feature adds two new usage registers to the existing HUNT OM group including HUNTTRF which records call processing traffic on the hunt groups in the office and HUNTMNT which records maintenance traffic on the hunt groups in the office.

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	Ann	Order Code	Order Code Name	Order Code Description	Ris		MD RIs		PCID	ACTID	Feature Name	Feature Description
			MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5	RIS	MD KIS	Code	POID	NC0200	It J Make Busy Enhancements for Hunt Groups	This feature provides the functionality of Call Forward Busy service to hunt groups and ensures that the group's hunting algorithm executes completely before an incoming call is "forwarded." With this feature, the capabilities of the Make Busy Key (MBK), Inhibit Line Busy (ILB), and Inhibit Make Busy (IMB) options can be assigned to lines that are members of hunt groups. The MBK, ILB, and IMB options modify the operation of Call Forward Busy (CFB) and Call Forward Busy Line (CFBL). The MBK option (when activated) causes an incoming call to a line with the CFB or CFBL option to be forwarded whether the line is busy or idle. The IMB option is used in conjunction with the MBK option. When MBK is activated on a line to which the IMB option is also assigned, an incoming call is not forwarded but instead given "busy tone" (or some other customer-defined) treatment. The ILB option prevents an incoming call to a line with CFB or CFBL from being forwarded whenever the line is actually busy.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					AF1275	Loudspeaker Paging Answer	This feature enhances and simplifies Loudspeaker Paging by • allowing the paging party to confer with the paged party before connecting him/her to the calling party, and • allowing the paged party to answer a call by entering only an answerback access code and one-digit index. Currently, because incoming calls are parked against a directory number, the paged party has to enter an access code and the directory number against which the call is parked. In addition, the paging party cannot confer with the paged party. This feature is available to users of Attendant Consoles, Meridian Business Sets, and 2500 sets.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					AG0671	MDC Trunks with ISUP Signaling	This feature permits the use of CCS7 trunk signaling for Meridian Digital Centrex trunk groups (i.e., IBNT0, IBNT1, IBNT2) and includes the ability to send and receive Traveling Class Marks (TCM) for CCS7 Meridian Digital Centrex trunks. This feature also provides the option of writing the calling station's directory number in place of a billing DN in the Station Message Detail Recording record.

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	Ann	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5			Unde			Multiple DISA Calls with "#" Access	This feature enables subscribers who have Direct Inward System Access (DISA) calling privileges to complete multiple calls without first having to redial both their DISA directory number and authorization code at the beginning of every call. On the completion of their first DISA call (and when the called party has disconnected), a subscriber now initiates the next call simply by pressing the octothorpe (#) key.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					AL0612		This feature distributes calls evenly to a customer who employs multiple non-data link attendant consoles. Calls are presented to attendant positions in the same sequence in which they arrive at the switch. Calls that are not completed immediately upon arrival at the switch are queued by the DMS up to a customer-specified maximum.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					AL0537	Extension	This feature allows 50B attendant consoles (non-data link) served by the DMS switching system to extend incoming calls whether or not a private announcement of the call is required. If no private announcement is required, the attendant leaves the call in a "ring" state. However, to ensure that the call is handled properly, the attendant is provided with a timed reminder if the call remains unanswered. If answered, the call is automatically released from the console loop.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					AL0604		This feature enhances the functioning of Speed Call programming and Call Forwarding deactivation by automatically returning dial tone to the user once the appropriate feature completion code is dialed. Currently, when a DMS subscriber dials the Call Forwarding deactivation code or finishes a Speed Call programming sequence, a confirmation tone is received, but the subscriber must then go on-hook before initiating another call.

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	App	Order Code	Order Code Name	Order Code Description	RIs	Ris	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				NC0053	Ring Reminder Off/On—Per Line Option	The existing Call Forward—Ring Reminder option on Meridian Digital Centrex lines causes a brief ring to occur on a user's set to signify that an incoming call has been forwarded. The feature can only be added or deleted as a customer group option. The Ring Reminder Off/On option enables the warning ring to be turned off on a per line basis. This new capability requires that the Call Forward-Ring Reminder option be applied across a customer group and that the Inhibit Ring Reminder (IRR) option be added to an individual line (through service order) to delete the ring.
	4	MDC00003	MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				NC0083	Call Intercept	This feature enhances the existing Denied Incoming (DIN) line option by enabling a subscriber to chose a treatment or route for incoming direct dialed calls. Incoming calls receive an intercept tone, a recorded announcement, or are forwarded to the Centrex attendant. The feature is applied on a customer group basis and a subscriber has the choice of restricting a single line or a group of lines.
			MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					Hunt Groups	This feature simplifies service order procedures for hunt groups by allowing: • the changing of the Line Class Code (LCC) of a hunt group member. • the mixing of the following LCCs within a hunt group: Meridian Digital Centrex (IBN), PSET, M5009, M5112, M5209, M5312, and ISDNKSET. • the changing of a hunt group member Line Treatment Group (LTG) on a single member of a hunt group. (for either a pilot or non-pilot line) without affecting the other members of the hunt group. This feature also allows the automatic assignment of hunt group numbers to directory number hunt groups. The hunt group numbers are assigned from a range designated and reserved for this feature by the telephone operating company, even though the group numbering feature control is activated on a switch-wide basis. The Query Group Member (QGRP) command is also modified to accept either group number, directory number (DN), or line equipment number (LEN). In addition, the Change (CHG) command is enhanced to allow the LCC of members of a hunt group
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5				AF1564	Forward Lines	This feature expands the use of the Suspend and Restore commands in Service Order to include Remote Call Forward (RCF) lines. Previous to this feature, RCF lines were deleted completely and then put back into service as required. This feature reduces both the input time required for Service Order personnel and the possibility of error when the line is reentered. With this feature RCF lines are suspended and restored using the same Service Order commands as non-RCF lines. The changes to Service Order commands are as follows: SUS (Suspend)—The system does not prompt for the Line Equipment Number (LEN), because Remote Call Forward lines are not associated with a LEN, RES (Restore)—This command does not change, QDN (Query Directory Number)—The display indicates whether or not the RCF directory number is suspended. This feature applies to both basic remote call forwarding and remote call forwarding for equal access.

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			Order Code Name MDC MDC Standard	Order Code Description This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	<u>Ris</u> 5	RIS	MD RIS	Code	PCID	ACTID AF2523	Paging Answerback	Feature Description This feature allows the existing loudspeaker paging answerback feature to work with paging equipment that terminates by trunk to the DMS. Currently, the feature only works with line terminating paging equipment. This feature is only applicable for Meridian Digital Centrex (MDC) customers who have subscribed to Loudspeaker Paging.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					AN0303		Some electronic phone directories and other automated dialers are not programmed to dial through the continual stutter cadence of the DMS message waiting indication (MWI) used on 2500 sets. This software allows service providers to offer an optional MWI stutter dial tone that drops back to solid dial tone after a predefined timeout. This capability will be provided on a switch-wide basis and invoked through the new office parameter VARIABLE_STUTTER_DIALTONE_TIMEOUT in the table OFCVAR. The parameter permits continuous stutter dial tone—as in existing DMS operation—and now offers a way for the service provider to return to solid dial tone after one to seven seconds of stutter dial tone.
	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability, Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5					AF1269		To save Meridian Digital Centrex users from unnecessary dialing, this feature enables the DMS Family switching system to check and see if a VFG member is available when the user dials the VFG access code. If a member is available, that member is reserved, and only then is a second dial tone returned to the user (if so datafilled). The user is thus assured of VFG access and dials the VFG access code. If a member is available, that member is reserved, and only then is a second dial tone returned to the user (if so datafilled). The user is thus assured of VFG access.
Added	4	MDC00003	MDC MDC Standard	This feature provides advanced station features including new Call Forwarding options, personal call screening capability. Meridian Business Set support, Station Message Detail Recording (SMDR), and supports Direct Inward System Access (DISA) to optimize access and use of network resources.	5	10			13278	AF7484	Star in Account Code First Feature	Account codes enable service providers to restrict unauthorized toll access to subscriber lines. Presently with account codes, an asterisk is used to activate reset dialing. This new NCS10 feature allows the use of an asterisk as a valid digit for the Account Code First feature (voluntary, non-prompted entry of a code). This feature also provides an option to the network provider to choose either an asterisk digit as a valid digit in voluntary account code or have it be dedicated for reset dialing/call reorigination. For all other dialing sequences, such as Account Code Last, Authorization Code Last, and Authorization Code First, the use of an asterisk still signifies reset dialing. Enabling subscribers to use an asterisk with Account Code First increases the number of possible digit combinations for account codes. Because the asterisk can be used as part of an account code or to signify reset dialing, this feature also provides more flexibility for the network provider.

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1	Ann	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			MDC CLASS on MDC	This feature provides Custom Local Area Signaling Service (CLASS) features including Automatic Callback, Automatic Recall, Customer Originated Trace (COT), Calling Name and Number Delivery, Calling Name and Number Delivery Blocking, Visual Message Waiting Indication, distinctive ringing patterns, and distinctive call waiting tones in the MDC business environment.	5					AG1881	CLASS Base Preparation	This feature enables Phase 1 CLASS features—Automatic Recall, Automatic Call Back, and Customer Originated Trace—to work on the Meridian Business Set and to be delivered to Multiple Appearance Directory Number (MADN) Single Call Arrangement (SCA) groups. In addition, the feature provides CLASS display features (i.e., Calling Number Delivery and Dialable Calling Number Delivery) for MADN SCA group members who have 500/2500 sets with display capabilities. The Meridian Business Set already supports all Meridian Digital Centrex display features.
	4	MDC00004	MDC CLASS on MDC	This feature provides Custom Local Area Signaling Service (CLASS) features including Automatic Callback, Automatic Recall, Customer Originated Trace (COT), Calling Name and Number Delivery, Calling Name and Number Delivery Blocking, Visual Message Waiting Indication, distinctive ringing patterns, and distinctive call waiting tones in the MDC business environment.	5					AF2858	CLASS Calling Name Delivery on MADN (SCA)	This feature allows for the delivery of the calling party's name and the current time and date to the customer premises equipment (CPE) of members of a Multiple Appearance Directory Number (MADN) Single Call Arrangement (SCA) group using 500/2500 telephone sets. This capability gives the operating company a new market for Calling Name Delivery, and benefits MADN SCA 500/2500 set subscribers by giving them access to a desirable CLASS feature. As is the case with Calling Name Delivery for residential users, the information is delivered between the first and second rings. This feature, like other CLASS display features, must be assigned to members of MADN groups on an individual basis. Although up to 16 MADN members can reside on a particular XPM, assignment of the feature is limited to eight CLASS- based MADN members per XPM. This feature assumes that name information is available, and that the appropriate CLASS and Name Display software is present in the office.
	4	MDC00004	MDC CLASS On MDC	This feature provides Custom Local Area Signaling Service (CLASS) features including Automatic Callback, Automatic Recall, Customer Originated Trace (COT), Calling Name and Number Delivery, Calling Name and Number Delivery Blocking, Visual Message Waiting Indication, distinctive ringing patterns, and distinctive call waiting tones in the MDC business environment.	5					AG1546	CLASS on Multiline Variety Package	The CLASS on MVP capability broadens the telephone operating company's revenue base by allowing the CLASS features to be assigned not only to residential subscribers, but also to users who are part of an MVP group. An MVP group is a set of business lines having a POTS public network dial plan (7- or 10-digit dialing) and a subset of Meridian Digital Centrex features.
	4	MDC00004	MDC CLASS On MDC	This feature provides Custom Local Area Signaling Service (CLASS) features including Automatic Callback, Automatic Recall, Customer Originated Trace (COT), Calling Name and Number Delivery, Calling Name and Number Delivery Blocking, Visual Message Waiting Indication, distinctive ringing patterns, and distinctive call waiting tones in the MDC business environment.	5					AG2160	CLASS Phase 1 MBS—Single Key Feature Activation	This feature allows the single-key activation of the CLASS Phase 1 features Customer Originated Trace (COT), Automatic Callback (ACB), Automatic Recall (AR), and Calling Number Delivery Blocking (CNDB) from a Meridian Business Set. With this feature, the telephone operating company can program an Automatic Dial key when it is assigned with the feature activation codes for COT, ACB, AR, and CNDB by using a new table, AUDPRGM.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name MDC CLASS On MDC	Order Code Description This feature provides Custom Local Area Signaling Service (CLASS) features including Automatic Callback, Automatic Recall, Customer Originated Trace (COT), Calling Name and Number Delivery, Calling Name and Number Delivery Blocking, Visual Message Waiting Indication, distinctive ringing patterns, and distinctive call waiting tones in the MDC business environment.	RIs 5	RIS	MD RIS	Code	PCID	AG1735	Enhancements for Centrex Dialplan	Feature Description This feature enhances both the incoming and outgoing call memory to allow the correct call information to be captured for proper operation of the CLASS features in the Meridian Digital Centrex environment. Call memory is used to retain data about the last incoming and last outgoing call from a particular subscriber's line. Previously, call memory was only designed to capture call information with the fixed public daling plan used in the residential (POTS) environment. However, this call-memory enhancement permits capture of calling and called numbers from private dialing plans used for Centrex calling. This feature also writes additional indicators into the call memory to record the private characteristics of Centrex calls. For example, when a call arrives via a private network, the DMS includes in the called party's incoming
	4	MDC00004	MDC CLASS On MDC	This feature provides Custom Local Area Signaling Service (CLASS) features including Automatic Callback, Automatic Recall, Customer Originated Trace (COT), Calling Name and Number Delivery, Calling Name and Number Delivery Blocking, Visual Message Waiting Indication, distinctive ringing patterns, and distinctive call waiting tones in the MDC business	5					AG1736	CLASS—Phase I Service Enhancements for Centrex Operation	This feature enables telephone operating companies to offer the following CLASS Phase 1 services to the Meridian Digital Centrex (MDC) users with 2500 sets: Automatic Call Back (ACB) (see AG0728), Automatic Recall (AR) (see AG0728), Calling Number Delivery (CND) (see AG0781), Calling Number Delivery Blocking (CNDB) (see AG0778), Customer Originated Trace (COT) (see AG0762), and Dialable Directory Number (DDN) (see AG1515). End users can use these CLASS services while preserving their private Centrex characteristics, such as a private dialing plan (n digits), private trunking between two locations, and customer group
	4	MDC00004	MDC Class on MDC	This feature provides Custom Local Area Signaling Service (CLASS) features including Automatic Callback, Automatic Recall, Customer Originated Trace (COT), Calling Name and Number Delivery, Calling Name and Number Delivery Bocking, Visual Message Waiting Indication, distinctive ringing patterns, and distinctive call waiting tones in the MDC business environment.	5					AG2160	CLASS—Screening List Editing on MBS / MADN	This feature allows for the assignment of CLASS Phase 2 features to users of MBSs and to members of MADN SCA groups using either 500/2500 sets or MBSs. The following CLASS features are assignable: Selective Call Forwarding, Selective Call Rejection, Distinctive Ringing / Call Waiting, and Selective Call Acceptance.
	4	MDC00005	MDC MBG Minimum	This feature provides basic Multilocation Business Group (MBG) software that supports customer groups extended across two or more switches over public CCS7 trunks allowing MDC customer groups to be served by more than one switch, and internal calls can be placed on public CCS7 trunks while retaining their customer-group	5					AR0309	Number Billing	This feature allows a customer to specify any special number in the terminating number field of the Automatic Message Accounting (AMA) record. This software is required when a call is placed to or from a non-DID number behind a PBX or through an attendant console. When the placed call is an MBG call with the Generic Address Parameter (GAP), the routing number is placed in the terminating number field of the AMA record. This software allows the use of a second number datafilled as the basis for the number in the terminating number field of the AMA record and thus affects only and the terminating number field of the AMA record and thus affects only and the terminating number field of the AMA record and thus affects only and the terminating number field of the AMA record and thus affects only and the terminating number field of the AMA record and thus affects only and the terminating number field of the AMA record and thus affects only the terminating the terminating number field of the AMA record and thus affects only the terminating t
	4	MDC00005	MDC MBG Minimum	This feature provides basic Multilocation Business Group (MBC) software that supports customer groups extended across two or more switches over public CCS7 trunks allowing MDC customer groups to be served by more than one switch, and internal calls can be placed on public CCS7 trunks while retaining their customer-group identification.	5					AR0361		This feature enables the network provider to deliver Network Number/Reason Display and Network Name Display on NBG calls to subscribers using public MBG trunks. It also allows network providers to restrict access to the two features. The feature does not, however, control access to the features over private trunks.
	4	MDC00005	MDC MBG Minimum	This feature provides basic Multilocation Business Group (MBG) software that supports customer groups extended across two or more switches over public CCS7 trunks allowing MDC customer groups to be served by more than one switch, and internal calls can be placed on public CCS7 trunks while retaining their customer-group	5					AR0256	MBG Feature Networking Control	This feature which enables the network provider to restrict access to both Network Number/Reason Display and Network Name Display but not to each feature individually. This software—which applies only to MBG calls made over public trunks—enables the network provider to allow one of the display features while denying the other.
	4	MDC00005	MDC MBG Minimum	This feature provides basic Multilocation Business Group (MBC) software that supports customer groups extended across two or more switches over public CCS7 trunks allowing MDC customer groups to be served by more than one switch, and internal calls can be placed on public CCS7 trunks while retaining their customer-group identification.	5					AG2556	MBG Support of Display and Executive Message Waiting	This feature allows MBG calls which require the use of a Generic Address Parameter (GAP) to access the following network features: • Executive Message Waiting (EMW) • Network Message Service (NMS)

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
	4	MDC00005	MDC MBG Minimum	This feature provides basic Multilocation Business Group (MBG) software that supports customer groups extended across two or more switches over public CCS7 trunks allowing MDC customer groups to be served by more than one	5				AG2555	MBG-III—Support of Private Numbering Plan	This feature allows an MBG to include stations that are not allowed to receive Direct Inward Dial (DID) calls. The primary application will be connection to PBXs with tie trunks. The terminating switch can also be a central office with private tie trunk connection to an MBG-equipped DMS. The primary application will be to provide connectivity to PBX extensions that are not
	4	MDC00005	MDC MBG Minimum	This feature provides basic Multilocation Business Group (MBG) software that supports customer groups extended across two or more switches over public CCS7 trunks allowing MDC customer groups to be served by more than one switch, and internal calls can be placed on public	5				AG2554	MBG-II—Support of IBN7 Trunk Features	This feature allows existing MDC trunk features, such as Line Screening Code Restrictions, to be extended across an MBG and operate transparently. This feature also enables the following Attendant Console features to operate in an MBG: • Attendant Console Call Park • Attendant Console Conference • Busy Vertification Line (BVL)
	4	MDC00005	MDC MBG Minimum	Sourch and memory area can be parallel to public. This feature provides basic Multilocation Business Group (MBG) software that supports customer groups extended across two or more switches over public CCS7 trunks allowing MDC customer groups to be served by more than one switch, and internal calls can be placed on public CCS7 trunks while retaining their customer-group identification.	5				AG1252	MDC-Public Shared Trunking	This package greatly increases the capabilities of the public network to accommodate privately networked business traffic. Since most of the customer groups are typically interconnected by leased facilities, MBG offers significant cost reduction for the user and simpler administration for the service provider. The customer group identifier is carried in the ISUP message, thus providing the equivalency of private trunks without the OAM costs usually associated with private trunks. In addition, the same public trunking facilities can carry both MBG and regular POTS traffic. This feature supports the use of MBG among sites whose terminals are accessible through DID public
	4	MDC00005	MDC MBG Minimum	This feature provides basic Multilocation Business Group (MBG) software that supports customer groups extended across two or more switches over public CCS7 trunks allowing MDC customer groups to be served by more than one switch, and internal calls can be placed on public	5				AG1984	Networking for Centrex Group with Public Numbering Plan	Offering business customers with multiple locations a cost-effective CCS7 communications network can lead to increased market share and profitability. This package greatly increases the capabilities of the public network to accommodate privately networked business traffic. Northern Telecom's Multi Location Business Group (MBG) offering is based on Bellcore TA-NWT-000868, entitled, "Multiswitch Business Group Structure for Conventional and ISDN Access."
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					Feature Group D on Meridian Digital Centrex	This package allows a DMS Meridian Digital Centrex node to accept Feature Group D (FGD) access to carrier signaling. Because it uses standard FGD signaling, VAPN can link business locations served by any conforming Equal Access end office or access tandem. The DMS screens the Automatic Number Identification (ANI) delivered by the FGD to identify the customer group and class of service of the calling station. The call is then treated as any other private network call, with the same access to the full range of network services as any call placed from a network station directly served by the DMS MDC node.
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to intermodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any	5				AG1638	Message Service—Enhanced Network Message Waiting Indicator	This feature delivers message waiting indication (MWI) to nodes besides the one on which the message service resides. The switches serving the outlying nodes now can be from vendors other than Northern Telecom, provided they are compliant with Bellcore TR-866 CCS7 messaging standards. This allows the operating company to offer MWI to more business and residential subscribers over a wide area. Calling party information from the CCS7 Integrated Services User Part (ISUP) and from PRI
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5	6			AF6497, AF6612, AF6613, AF6615	Name Enhancements for MBG and IBN Networking	In an MBG or IBN network, prior to this feature, the public name and number of the redirecting station would be displayed along with the calling station's public name and number. This differs from the single node application, where the public and private names are available for more sophisticated display options. This feature provides greater consistency between nodal and inter-nodal (Multilocation Business Group) name display capabilities by providing the private name—rather than the public name—of the redirecting station under certain call forwarding situations. The private name is provided only when the following conditions are met: • The redirected call is associated with an MBG or IBN trunk. • The redirected party is associated with a private network in Table CUSTNTWK. • The rediration stantion has name display capabilities. Note that the calling party's name and number remain unchanged, with privacy

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			Order Code Name MDC MBG Standard	Order Code Description This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	<u>RIs</u> 5	RIS	MD Ris	Code	PCID		Feature Name NCOS and CLID Display on AC–II	Feature Description This feature, Network Class of Service (NCOS) and Calling Line Identification Display (CLID) on the Attendant Console (AC), enables the attendant console position to display the directory number and network class of service of an incoming call from any node within the attendant's network. Each node must be provisioned with appropriate CCS7 hardware and software and connected to the CCS7 network. This feature significantly enhances attendant efficiency by displaying information about an incoming call for use by the attendant. For example, if an internal employee dials "0" to receive assistance from the attendant, the attendant knows immediately that the call is internal (from the DN) and what service priority should be given (from the NCOS), thus enabling more effective call handling.
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AD0388	Network Attendant Busy Verification Stations	This feature enhances the attendant console position by extending the attendant's ability to verify busy lines on any node within the attendant's network. The busy verification feature performs a barge-in function to allow the attendant to confirm that conversation is taking place. For the feature to operate properly, each node in the network must be provisioned with the appropriate CCS7 hardware and software and be connected to the CCS7 network.
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AD1521	Network Attendant Control	The Attendant Control feature increases office efficiency by enabling a called or calling party to go on hook—without disconnecting the call—while an attendant completes a connection. The calling or called party can then be signaled when the connection is completed. The Network Attendant Control feature extends this control to situations where the attendant and other callers are connected to different switches but are in the same customer group.
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to intermodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AD1523	Network Attendant Recall	This feature provides two new functions to Attendant Recall. First, it enables the attendant to extend the recall capabilities network-wide by means of a CCS7 trunk in the following situations: When a console extends a call to an idle line in the same customer group, and that line does not answer (No Answer Recall). When a console extends a call to a busy line in the same customer group, and either call waiting or attendant camp-on is applicable. If the busy line does not answer the attendant extended call, attendant camp-on or call wait recall is initiated. When a console extended call to a line that does not answer and the source wants to recall the console (Source Flash Recall). Second, this feature allows the No Answer Recall timer to be activated when the attendant extends a call to a three-way call.
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AD1571	Network Attendant Service Features Optionality	This feature allows telephone operating companies to control any of the following Network Attendant Services (NAS) features that are operative for individual customer groups within a DMS CCS7 network: Network Busy Verification Lines (BVL), Camp- On (including Network Camp-On Recall), Network Calling Line Identification (CLID) and Network Class of Service (NCOS) Display, and Network CLID and NCOS display interaction with Three-Way Calling.

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			Order Code Name	Order Code Description	RIs	Rls	MD RIs Coo	le F	PCID		Feature Name	Feature Description
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AD1153	Network Camp-On-1	This feature enables an attendant to camp-on a subscriber on any node within the attendant's network. Each node within the attendant's network must be provisioned with appropriate CCS7 hardware and software and connected to the CCS7 network.
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AD1525	Network CLID and NCOS Display Interaction with 3WC	This feature extends across multiple network nodes the attendant console's ability to display calling line and NCOS information for three-way calling/call transfer. The display functions in the same way as it does for intra-nodal calls, except that the three- way call message is only displayed to the attendant when the third party is actively conferenced in.
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AG0981	Network Dial Plan Display	This feature enhances the existing display capabilities of Meridian Business Sets with Display by providing the capability to format a calling party's number to be consistent with the customer's Meridian Switched Network dial plan. By reformating the calling party's number, the called party can identify calls originating on other nodes. This feature is provided using two new translation tables. One table identifies the groups of directory numbers that belong to each of the regions. The second table provides reverse-translation algorithms based on the various regions defined in the first table. Together, these two tables specify how the calling party's number is to be displayed.
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of	5					AG1255	Network Display Enhancement	Network Reason Display extends the single node Meridian Business Set Reason
			MDC MBG Standard	MDC:0000E have supporting features from This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any	5						Network Name Display	Display focture to provide information or adjusted calls made between and the linked Network Name Display is an enhanced service that displays on a Meridian Business. Set with display the calling and called names sent between multiple nodes. For the end user, this feature operates in the same manner as does the single node feature, Calling Name Display . This feature requires that the originating and terminating parties be connected through CCS7 trunk circuits .
	4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any	5					AG1104	Network Name Display For Attendant Console	This feature enables the attendant console to display the name of a calling party served by any node within the attendant's network that is: equipped with the Network Attendant Services software package, provisioned with the appropriate CCS7 hardware and software, and connected to the CCS7 network.

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	Order Code	Order Code Name	Order Code Description	Ris		MD RIs		PCID	ACTID	Feature Name	Feature Description
4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC0005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AC0263	Network Number Display	Network Number Display enables a Meridian Business Set with Display to show the directory number of calling and called parties. If a call has been redirected by a feature such as Call Forward, this feature also displays the directory number of the party from which or to which the call is redirected. Previously this capability was available only for a single node. With this feature the capability is extended to users of multiple nodes linked by Common Channel Signaling No. 7 (CCS7). In addition to displaying the directory numbers for normal network calls, numbers are displayed for the following Meridian Digital Centrex features: Call Forwarding, Call Pickup, Call Waiting and Three-Way Conference/Transfer. This feature displays directory numbers in a format that is identical to the format used by the nodal version. On the top line of the display, the directory number of the calling or called party is displayed, followed by the directory number of the redirected party. On the bottom line, dialed digits are displayed. If necessary, information from the top line can overflow to the _bottom line. If no information is available, the set displays the default message
	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AC0262	Network-Wide Ring Again	This feature allows the existing Meridian Digital Centrex Ring Again feature , which operates on a single DMS, to function across a multi-DMS Meridian Digital Centrex network. The switches serving the originating and terminating parties using this feature must be interconnected through Common Channel Signaling No. 7 (CCS7) trunk circuits.
4	MDC00006	MDC MBG Standard	This feature builds on the capabilities of MDC00005 by expanding features from intranodal to internodal operation such as expanding the capabilities of the Meridian Business Set with display to show the directory number of calling and called parties from any network node, supporting Network Ring Again to allow a MDC customer who encounters a busy station anywhere in his customer group, on any network node, to automatically call that station again, and enabling an MDC console attendant to extend call control over the network.	5					AR0323	Per-Line Feature Control	This feature is an enhancement to the existing method of assigning networked MDC features to a group of lines through the Access Feature Group (AFG) mechanism. It allows the service provider to deploy individual network services in the MBG environment. The features that are provided with this functionality are Name Display, Reason Display, and Calling Number Display. A mechanism is implemented to limit the number of lines that are associated with a particular feature group. Through this feature, the service provider can allow a subscriber to buy network services selectively—providing the services only to those members of a customer group who need them.
4	MDC00007	MDC MBS Minimum	This feature provides expanded display capabilities to end users that have the Meridian Business Set (MBS) equipped with the optional 32-character liquid crystal display including providing the user with visual feedback during origination, termination, programming, and feature activation operations.	5					AG2302	DMS-100 Support for M5212	This feature supports the 11th feature/line button on the new M5212 Meridian Business Set designed for use in Automatic Call Distribution (ACD) applications. The M5212 can be used before this feature is delivered by datafilling it as an M5312. The new M5212 Meridian Business Set designed for use in ACD applications has 11 buttons which can be programmed to add features or lines to the set thus increasing efficiency and ease-of-use. Previous ACD sets have no more than 10 programmable buttons. This feature provides the software necessary to provide functionality to all eleven buttons. Before this feature is delivered, the M5212 can be used by datafilling it as an M5312.

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1	Ann	Order Code	Order Code Name	Order Code Description	RIs		MD RIs		PCID	ACTID	Feature Name	Feature Description
			MDC MBS Minimum	This feature provides expanded display capabilities to end users that have the Meridian Business Set (MBS) equipped with the optional 32-character liquid crystal display including providing the user with visual feedback during origination, termination, programming, and feature activation operations.	5						EBS as a Message Center—Enhancements	This feature enhances the existing feature, Electronic Business Set as a Message Center, by allowing interworking between the message center and other Meridian Digital Centrex features such as three-way calling, uniform call distribution (UCD), and automatic call distribution (ACD). Also included is an enhanced method of activating the message waiting query feature.
	4	MDC00007	MDC MBS Minimum	This feature provides expanded display capabilities to end users that have the Meridian Business Set (MBS) equipped with the optional 32-character liquid crystal display including providing the user with visual feedback during origination, termination, programming, and feature activation operations.	5					AG1626	Executive Message Waiting	This feature allows end users both to leave and to retrieve messages at Meridian Business Sets with displays. The content of the message can include either the number only or both the name and number, with an associated time stamp, of the person who called. In the case of repeated messages, the number of times a caller has telephoned is shown, together with the time of the last call. Message integrity is maintained during upgrades. This feature also allows the setting up of designated closed user groups, whose members can exchange messages within the group. This feature works in conjunction with features AG1624 and AG1625 to provide these capabilities.
	4	MDC00007	MDC MBS Minimum	This feature provides expanded display capabilities to end users that have the Meridian Business Set (MBS) equipped with the optional 32-character liquid crystal display including providing the user with visual feedback during origination, termination, programming, and feature activation operations.	5					AD1933	Key Short Circular Hunt	This feature provides circular hunting across directory number appearances on Meridian Business Sets (MBSs) and Electronic Business Sets (EBSs), ensuring that incoming calls to a short hunt group canvass the entire group before receiving an overflow treatment if an idle appearance is not found. This feature enhances the existing Short Hunt feature.
	4	MDC00007	MDC MBS Minimum	This feature provides expanded display capabilities to end users that have the Meridian Business Set (MBS) equipped with the optional 32-character liquid crystal display including providing the user with visual feedback during origination, termination, programming, and feature activation operations.	5					AN1278	MDC MBSII Template	This enhancement extends the number of functional keys that can be supported by a Meridian Business Set. With hardware add-on units, a maximum of 69 keys can now be assigned by the subscriber to various features. This is planned to be a standard capability in MDC00007. Service providers can offer business subscribers a broad telephony feature portfolio that end users can customize. The high number of functional keys supported on a set permits one or a few stations to serve as a cost-effective call coverage/message contex for a small company or department.
	4	MDC00007	MDC MBS Minimum	This feature provides expanded display capabilities to end users that have the Meridian Business Set (MBS) equipped with the optional 32-character liquid crystal display including providing the user with visual feedback during origination, termination, programming, and feature activation operations.	5					AF2005	Meet-Me Conference Security/Control	This feature controls access to Meet-Me Conference directory numbers to ensure that only authorized parties can gain access to the conference. Access is controlled through authorization codes and time-of-day screening.

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	App	Order Code	Order Code Name	Order Code Description	RIs		MD RIs		PCID	ACTID	Feature Name	Feature Description
	4	MDC00007	MDC MBS Minimum	This feature provides expanded display capabilities to end users that have the Meridian Business Set (MBS) equipped with the optional 32-character liquid crystal display including providing the user with visual feedback during origination, termination, programming, and feature activation operations.	5					AG1627	Multiple Executive Message Waiting Keys Per DN	This feature enhances the basic Executive Message Waiting (EMW) feature to allow the assignment of more than one EMW key on a Meridian Business Set. One application of this enhancement is to designate voice mail to one key and a Centrex message desk to another key on a business set, allowing the set user to distinguish messages from one or the other easily.
	4	MDC00008	MDC MBS Standard	This feature provides enhanced display functionalities and offers enhances call handling, improves call coverage, and offers new productivity features for MADN secondary members.	5					AD2126	Group Intercom All Call	This feature allows an MDC user to page up to 30 members in his/her designated Group Intercom (GIC) group. This functionality is extremely useful in situations where common announcements need to be broadcast to several individuals (who are equipped with Meridian Business Sets) within the same GIC group.
	4	MDC00008	MDC MBS Standard	This feature provides enhanced display functionalities and offers enhances call handling, improves call coverage, and offers new productivity features for MADN secondary members.	5					AG1566	MADN Bridging—Three-Way Call	This feature enables a Multiple Appearance Directory Number (MADN) Single Call Arrangement (SCA) with bridging options to establish a three-way call during a bridged state. Currently, a MADN SCA with bridging options cannot activate three-way calling during a bridged state.
	4	MDC00008	MDC MBS Standard	This feature provides enhanced display functionalities and offers enhances call handling, improves call coverage, and offers new productivity features for MADN secondary members.	5					AG1568	MADN Cut-Off on Disconnect (COD)	The optionally available Multiple Appearance Directory Number (MADN) Cut-Off on Disconnect (COD) feature disallows the placing of a DN appearance on hold unless other formerly bridged members have either pressed their release keys or gone on- hook. The new feature closely simulates a true key system operation. The standard current MADN arrangement with bridging options permits a member to place his or her DN appearance on hold while additional MADN members are still actively bridged into the call.
	4	MDC00008	MDC MBS Standard	This feature provides enhanced display functionalities and offers enhances call handling, improves call coverage, and offers new productivity features for MADN secondary members.	5					AL0211	Meridian Business Set Call Forwarding on a Per-Key Basis	This feature allows each directory number (DN) on a Meridian Business Set to be forwarded to a different DN. Call Forward Per Key (CFK) is a variation of Call Forwarding Universal and Intragroup.

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	Арр	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	4	MDC00008	MDC MBS Standard	This feature provides enhanced display functionalities and offers enhances call handling, improves call coverage, and offers new productivity features for MADN secondary members.	5					NC0164	Repeated Alert for Meridian Business Set (MBS)	This feature delivers message waiting indication (MWI) to nodes besides the one on which the message service resides. The switches serving the outlying nodes now can be from vendors other than Northern Telecom, provided they are compliant with Bellcore TR-866 CCS7 messaging standards. This allows the operating company to offer MWI to more business and residential subscribers over a wide area. Calling party information from the CCS7 Integrated Services User Part (ISUP) and from PRI interworks with the Simplified Message Desk Interface (SMDI) to provide MWI across the network. This feature also works in a Multilocation Business Group shared trunking environment. This capability allows network providers to deliver a range of intelligent network services, providing new revenue opportunities for their extensive deployment of CCS7.
	4	MDC00008	MDC MBS Standard	This feature provides enhanced display functionalities and offers enhances call handling, improves call coverage, and offers new productivity features for MADN secondary members.	5					NC0204	Ring Transfer Key (MADN Ring Forward Enhancement)	This feature enhances the existing Multiple-Appearance Directory Number (MADN) Ring Forward (MRF) feature by providing the ability to use the Ring Transfer Key to turn off and on the audible ringing for numbers in the MADN group. Ring Transfer is a subset feature that controls all listed Directory Numbers and MADNs either to ring or not to ring, depending on current feature key status.
	4	MDC00009	MDC PRO	This feature provides providers, who have full Centrex services, self-maintenance capabilities to customer groups for greater control of their service including Customer Data Change to allow designated end users to make, move, add, and changes without involvement of the network provider, allows customers to directly assign one of five origination-restriction levels to phones in the associated MDC customer group, permits MDC customer access to the trunk test position, and many other customer control features.	5					AJ0902	Customer Data Change (CDC) Enhancement for ISDN	The previous Customer Data Change (CDC) feature is enhanced for use in Business Network Management (BNM) applications to allow the end user to control both packet- and circuit-switched ISDN terminals. New CDC commands have been added to provide end user control and information relevant to ISDN service, as well as new operating company SERVORD commands that can be toggled on/off on an office-by- office basis. These enhancements to CDC form the foundation for Customer Configuration Management (CCM).
	4	MDC00009	MDC PRO	This feature provides providers, who have full Centrex services, self-maintenance capabilities to customer groups for greater control of their service including Customer Data Change to allow designated end users to make, move, add, and changes without involvement of the network provider, allows customers to directly assign one of five origination-restriction levels to phones in the associated MDC customer group, permits MDC customer access to the trunk test position, and many other customer control features.	5					NC0120	Enhanced Pending Order File (POF)	This feature makes it even more convenient for users to control and configure their stations by permitting multiple users to schedule and automatically activate future service orders.
	4	MDC00009	MDC PRO	This feature provides providers, who have full Centrex services, self-maintenance capabilities to customer groups for greater control of their service including Customer Data Change to allow designated end users to make, move, add, and changes without involvement of the network provider, allows customers to directly assign one of five origination-restriction levels to phones in the associated MDC customer group, permits MDC customer access to the trunk test position, and many other customer control features.	5					AF1097	International Direct Distance Dialing Via ARS	This feature enhances the translations permitting Meridian Digital Centrex customers to access International Direct Distance Dialing (IDDD) through Automatic Route Selection (ARS), thus extending selective routing to the IDDD environment while maintaining the feature rich capability of the existing ARS design.

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		Order Code MDC00009	Order Code Name MDC PRO	Order Code Description This feature provides providers, who have full Centrex services, self-maintenance capabilities to customer groups for greater control of their service including Customer Data Change to allow designated end users to make, move, add, and changes without involvement of the network provider, allows customers to directly assign one of five origination-restriction levels to phones in the associated MDC customer group, permits MDC customer access to the trunk test position, and many other customer control features.	<u>RIs</u> 5	Ris	MD RIs	Code	PCID	ACTID AF1276	Feature Name Meridian Digital Centrex Origination Restrictions	Feature Description This feature allows the user of a designated Attendant Console, Meridian Business Set, or 2500 set to assign the following types of origination restrictions on a Meridian Digital Centrex group or station: • Deny all calls (with the exception of 911). • Allow calls only on an exception list. • Allow only intragroup calls. • Allow only intragroup calls and calls on an exception list. • No restriction (allow all calls within Network Class of Service). Previously, these restrictions could only be applied through datafill. This feature restricts only originating calls; terminating calls are unaffected. Applications for the feature include control of unauthorized calls being made from unoccupied hotel, hospital, or dormitory rooms.
	4	MDC00009	MDC PRO	This feature provides providers, who have full Centrex services, self-maintenance capabilities to customer groups for greater control of their service including Customer Data Change to allow designated end users to make, move, add, and changes without involvement of the network provider, allows customers to directly assign one of five origination-restriction levels to phones in the associated MDC customer group, permits	5					NC0056	Multi Pilot Directory Numbers (Start Hunt Numbers)	This feature enhances the existing Multiline Hunt feature and allows the assignment of Multiple Pilot Directory Numbers (DNs) to a Multiline Hunt Group. Hunting can therefore begin at different points in the group (depending on the number dialed), thus ensuring a more even distribution of calls by enhancing call-completion opportunities in the group. The feature is assignable on either a per line or per Multiline Hunt Group basis.
	4	MDC00009	MDC PRO	This feature provides providers, who have full Centrex services, self-maintenance capabilities to customer groups for greater control of their service including Customer Data Change to allow designated end users to make, move, add, and changes without involvement of the network provider, allows customers to directly assign one of five origination-restriction levels to phones in the associated MDC customer group, permits MDC customer access to the trunk test position.	5					AF2014	Preset Conference (Large)	This feature enhances the existing Preset Conference feature by increasing the maximum number of conferees in a Preset Conference (including the originator) from 25 to 50. The existing Preset Conference feature allows a Meridian Digital Centrex station, trunk, or Attendant Console to establish a preset conference by dialing a specific directory number. When the preset conference number is dialed, the predefined directory numbers within or outside of the customer group are rung simultaneously. If a dialed number is busy or unanswered, a second number can be dialed if programmed. The conference call begins immediately when the first called parties join in.
	4	MDC00009	MDC PRO	This feature provides providers, who have full Centrex services, self-maintenance capabilities to customer groups for greater control of their service including Customer Data Change to allow designated end users to make, move, add, and changes without involvement of the network provider, allows customers to directly assign one of five origination-restriction levels to phones in the associated MDC customer group, permits MDC customer access to the trunk test position, and many other customer control features.	5					AF1085	Series Completion	Series Completion (SCMP) automatically redirects a call from a busy directory number (DN) to another specified DN served by the same DMS. This datafilled line option gives greater flexibility in Hunting design by providing circular Call-Forward, Busy-type chaining and Call Forward, Busy from the originally dialed DN if all members of the Series Completion are busy. Multiple lines can perform a series completion on the same DN. SCMP is similar in function to both Call Forward Busy (CFB) and hunting options; however, a call can be redirected a maximum of 100 times (CFB permits only five call forward links). Call handling line features can be added to the last DN in the series to increase call completion probability. Series Completion redirects a call only once to any given line. The feature uses fewer switch call processing resources than CFB. Series Completion is incompatible with all other hunt group options.
	4	MDC00009	MDC PRO	This feature provides providers, who have full Centrex services, self-maintenance capabilities to customer groups for greater control of their service including Customer Data Change to allow designated end users to make, move, add, and changes without involvement of the network provider, allows customers to directly assign one of five origination-restriction levels to phones in the associated MDC customer group, permits	5					AF1922	Terminating Billing Option	The Terminating Billing Option feature (TBO) allows the operating company to make an automatic message accounting (AMA) record when a call terminates to a line or through a virtual facility group (VFG). Thus, the operating company can assess access charges per termination for these calls. With this feature, the operating company can assign to a line (through SERVORD) or to a VFG (through table control) the ability to make an AMA record on calls that terminate to it. In addition, the AMA records can be assigned unique call codes and service feature codes, allowing the operating company to write specific records that answer their particular requirements. With the introduction of open network architecture (ONA), it becomes important for

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		MDC00009		This feature provides providers, who have full Centrex services, self-maintenance capabilities to customer groups for greater control of their service including Customer Data Change to allow designated end users to make, move, add, and changes without involvement of the network provider, allows customers to directly assign one of five origination-restriction levels to phones in the associated MDC customer group, permits MDC customer access to the trunk test position, and many other customer control features.	5	6				AG5066	Uniform Call Distribution (UCD) Enhancements	This feature provides stutter dial tone on a per-line basis as an indication that the line is considered logged-on to a Uniform Call Distribution (UCD) group by the switch. This indication is for 2500 and other non-Meridian Business Set (MBS) terminals, as the MBS already provides an indication with an optional lamp. Additionally, separate routes can be defined for individual threshold overflow conditions to provide specific call treatment under different UCD group conditions. The current threshold overflow route can be augmented by any combination of the following threshold conditions: Ringing threshold (anaswered call timeout) Maximum wait time (queue wait timeout) Maximum call queue size (queue length threshold) This feature allows a UCD group owith non-MBS or mixed sets to provide log-in
	4	MDC00010	MDC CLASS On MDC/MVP II	This feature provides Custom Local Area Signaling Service II (CLASS) features to a MDC set of business lines having a POTS public - network dial plan (7- or 10- digit dialing) - known as Multiline Variety Package (MVP) including Selective Call Acceptance, Selective Call Rejection, Selective Call Forwarding, and	5					AG1880	CLASS/MDC Screening List Editing Feature Interactions	For Meridian Digital Centrex (MDC) customers using CLASS features, this feature provides for interactions between the MDC feature set and the CLASS screening List Editing features Selective Call Rejection, Selective Call Forwarding, Distinctive Ringing / Call Waiting, and Selective Call Acceptance for 500/2500 sets. It should be noted that this feature does not supply either the MDC features or these CLASS features; rather, it establishes priorities for feature activity when the CLASS features are used in conjunction with the MDC features.
	4	MDC00010	MDC CLASS On MDC/MVP II	This feature provides Custom Local Area Signaling Service II (CLASS) features to a MDC set of business lines having a POTS public - network dial plan (7 - or 10 - digit dialing) - known as Multiline Variety Package (MVP) including Selective Call Acceptance, Selective Call Rejection, Selective Call Forwarding, and Distinctive Ringing/Call Waiting	5					AG1928	CLASS/MDC Screening List Editing on Centrex Dial Plan	 This feature enhances the following CLASS Screening List Editing services to enable them to interwork with the more sophisticated Meridian Digital Centrex dial plan: The following Meridian Digital Centrex dial plan attributes are supported: Extension numbers (2 to 6 digits), Electronic Switched Network and private network directory numbers, and Public network directory numbers.
	4	MDC00010	MDC CLASS On MDC/MVP II	This feature provides Custom Local Area Signaling Service II (CLASS) features to a MDC set of business lines having a POTS public - network dial plan (7- or 10- digit dialing) - known as Multiline Variety Package (MVP) including Selective Call Acceptance, Selective Call Rejection, Selective Call Forwarding, and Distinctive Ringing/Call Waiting	5					AG1785	CLASS: CLASS Phase 2 on MVP	This feature enhances the CLASS on MVP package to allow CLASS Screening List Editing features—Selective Call Forwarding, Selective Call Rejection, Selective Call Acceptance, and Distinctive Ringing Call Waiting—to be assigned to Multiline Variety Package (MVP) lines. This feature broadens the telephone operating company's revenue base by allowing the CLASS Phase II features to be assigned not only to residential subscribers but also to users who are part of an MVP group using the public dial plan.
	4	MDC00011	MDC PVN	This feature provides private network functionality that uses any combination of public network and leased facilities and supports interworking with AIN 0.0 elements including an SCP, relaxes dialing rules so that TCAP queries	5					AG1555	Private Virtual Network Attendant Service	This feature adds several new capabilities to the Attendant Console software to provide Private Virtual Networking (PVN) services that permit the PVN caller: to obtain assistance for authorization code/personal identification number (PIN) entry, to request conferencing, and to obtain network assistance when dialing problems arise. The attendant position retains all conferencing capabilities. There are three new keys
	4	MDC00011	MDC PVN	This feature provides private network functionality that uses any combination of public network and leased facilities and supports interworking with AIN 0.0 elements including an SCP, relaxes dialing rules so that TCAP queries launched from the SSP to the SCP are consistent with the number of digits dialed by the subscriber, and extends additional capabilities to the attendant console so a PVN caller can obtain	5					AG0925	Private Virtual Network Enhancements	This feature enhances the base PVN package to provide the following additional capabilities: AIOD Interworking—The DMS Family SSP accepts Automatic Identification of Outward Dialing (AIOD) signaling from a subtending PBX and inserts the specific DN of the calling station into the PVN database query. Priority Line—Special users can have their line exempted from the Automatic Call Gapping controls that are implemented during network overload. CCS7 Trunk Interworking—Allows the DMS SSP to accept PVN calls incoming over CCS7 facilities (see the CCS7 Trunking section). Access to Meridian Network Centrex

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1	Δnn	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
	4	MDC00011	MDC PVN	This feature provides private network functionality that uses any combination of public network and leased facilities and supports interworking with AIN 0.0 elements including an SCP, relaxes dialing rules so that TCAP queries launched from the SSP to the SCP are consistent with the number of digits dialed by the subscriber, and extends additional capabilities to the attendant console so a PVN caller can obtain assistance from the attendant for an	5					F7121	SSP/Private Virtual Networking	With this base PVN package, telephone operating companies can realize increased revenues by providing business customers with a new range of value-added and cost- containment network features and services, such as: Centralized administration from a common database that allows the customer to: change routing choices by Time-of- Day [TOD] or for Inter-Exchange Carrier [IEC] selection, modify, add, or delete authorization codes to override class-of-service restrictions, and change an end- user's network class of service.
	4	MDC00011	MDC PVN	This feature provides private network functionality that uses any combination of public network and leased facilities and supports interworking with AIN 0.0 elements including an SCP, relaxes dialing rules so that TCAP queries launched from the SSP to the SCP are consistent with the number of digits dialed by the subscriber, and extends additional capabilities to the attendant console so a PVN caller can obtain assistance from the attendant for an authorization code for an on-network caller or a personal identification number for an off-network caller.	5					AR0147	Variable Dialing Plan	In the current implementation of PVN, the number of dialed digits included in the TCAP query launched from the SSP to the SCP is fixed to seven or ten digits. Therefore, for example, for a subscriber with a customized dialing plan of four digits, the SSP must extend the four digits dialed by the subscriber to seven or ten digits before sending the query to the SCP. With this new package, the number of digits in the query is flexible and consistent with the number of digits dialed by the subscriber. This added flexibility facilitates the deployment of Northern Telecom's PVN offering and its interworking with other vendors' PVN offerings
			MDC Tailored MDC 1	This feature is an "entry" level Tailored Centrex offering that improves the call handling functionality of the Meridian Business Set (MBS) and provides the simplification of the SERVORD process to ensure uniform feature assignment. Tailored Centrex refers to a packaged set of MDC features.	5					AG1866	Access Feature Group Enhancement	This feature provides the following enhancements to the access feature grouping facility: The number of line options supported by feature groups is expanded to include—Automatic Display, Call Covering, Cancel Call Waiting, Calling Name Delivery, Inspect Key, Leave Message, Power Features, Power Features Control, Power Features Display, and Query Time and Date. MBS options requiring the assignment of a dedicated feature key now have feature group support. These include—Call Waiting, Call Transfer, Message Waiting, Ring Again, and Three-Way Calling. Feature groups now provide partitioning of various applications within the Power Features option, such as Name Programming and Feature Key Definition. Customer Data Change users can access the feature group definition tables FTRGDEFS and FTRGOPTS using the Partitioned Table Editor. Several existing feature group options previously available for Residential Enhanced Service and Meridian Digital Centrex feature groups are now also available for Meridian Business Set feature groups.
	4	MDC00012	MDC Tailored MDC 1	This feature is an "entry" level Tailored Centrex offering that improves the call handling functionality of the Meridian Business Set (MBS) and provides the simplification of the SERVORD process to ensure uniform feature assignment. Tailored Centrex refers to a packaged set of MDC features.	5					AG1162	Access Feature Grouping	This feature enables a customer to package individual residential and business features into a logical group and then, with a single service order command, to assign that group of features to a line. Removing the need to assign each feature to each line not only simplifies the service order process, but also ensures uniform feature assignment over a group of lines. This feature also permits a customer to predefine feature key templates for all types of Meridian Business Sets. The template is then assigned to the line, thereby eliminating the need to assign each key individually and ensuring consistent feature key layout across the customer group. These two new functions result in a significant simplification of the service order system in feature assignment for both residential and business lines.

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	App	Order Code	Order Code Name	Order Code Description	Ris	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			MDC Tailored MDC 1	This feature is an "entry" level Tailored Centrex offering that improves the call handling functionality of the Meridian Business Set (MBS) and provides the simplification of the SERVORD process to ensure uniform feature assignment. Tailored Centrex refers to a packaged set of MDC features.	5						AFG Add Option	This software increases the flexibility of Access Feature Groupings (AFGs), which are groups of MDC features defined by the network provider that can be assigned with a single service order command to a set of lines. With AFG Add Option capability, the network provider can customize the Access Feature Groupings by adding features to or subtracting them from a specific line using simple SERVORD commands. Using AFG Add Option causes no changes to the AFG itself or to the other lines in the group.
	4	MDC00012	MDC Tailored MDC 1	This feature is an "entry" level Tailored Centrex offering that improves the call handling functionality of the Meridian Business Set (MBS) and provides the simplification of the SERVORD process to ensure uniform feature assignment. Tailored Centrex refers to a packaged set of MDC features.	5					AG1549	Automatic Inspect Mode	Currently, the Meridian Digital Centrex end user who has a display set must first depress a key (i.e., Inspect Key) in order to update the display with information concerning calls that have been call-waited, group intercom calls, and calls that are arriving to secondary directory numbers. The Automatic Inspect Mode feature changes the display status and provides pertinent call information upon call arrival at both idle and non-idle sets.
	4	MDC00012	MDC Tailored MDC 1	This feature is an "entry" level Tailored Centrex offering that improves the call handling functionality of the Meridian Business Set (MBS) and provides the simplification of the SERVORD process to ensure uniform feature assignment. Tailored Centrex refers to a packaged set of	5					AG1403	Business Set Inspect Key	This feature provides users of Meridian Business Sets with Display easy access to information about the set features and incoming calls. Specifically, the Inspect Key can be used to display the following types of information: • Users can display information about the features and directory numbers assigned to the set's buttons. For directory number buttons, the number and the name associated with the number are displayed. For feature buttons, the feature name and related information are
	4	MDC00012	MDC Tailored MDC 1	This feature is an "entry" level Tailored Centrex offering that improves the call handling functionality of the Meridian Business Set (MBS) and provides the simplification of the SERVORD process to ensure uniform feature assignment. Tailored Centrex refers to a packaged set of MDC features.	5					NC0080	Station Camp-On for Meridian Business Set	This feature improves the call handling functionality of the Meridian Business Set by enabling a user, when transferring a call, to place the calling party on hold until the called party is free. If the called party does not answer the waiting call, then the MBS that extended the call is automatically recalled by the calling party.
	4	MDC00013	MDC Tailored MDC 2	This feature is the second of four functional	5					AF5646	Assign Group Intercom	This feature adds Group Intercom to the list of ICO-accessible features. MBS
	4	MDC00013	MDC Tailored MDC 2	This feature is the second of four functional groups that make up Tailored Centrex which refers to a packaged set of MDC features and provides the Instant Change Order capability which enables a general user or a designated administrator to add, change, and delete many MDC features by using a Power Feature Key on a designated phone and the switch can provide an audit trail of the use of the Instant Change order feature in logs that can be captured, filtered, and formatted by an off-board processor.	5					AF2145	E911 Single Button Transfer Operation	This feature allows a Public Safety Answering Point (PSAP) agent to transfer a call by activating a single, predefined feature key on his or her Business Set. The E911 agent can define the Quick Conference Key (QCK) as a selective or fixed transfer. With this feature, all the actions previously necessary to transfer a call are eliminated (e.g., setting up a conference using the conference key or flash signal, using a speed calling key, etc.). This feature can be assigned to almost any Business Set, not just those used for E911 functionality.

Change In Issue 2					1st NCS	Enh	Repl Ord				
			Order Code Name MDC Tailored MDC 2	Order Code Description This feature is the second of four functional groups that make up Tailored Centrex which refers to a packaged set of MDC features and provides the Instant Change Order capability which enables a general user or a designated administrator to add, change, and delete many MDC features by using a Power Feature Key on a designated phone and the switch can provide an audit trail of the use of the Instant Change order feature in logs that can be captured, filtered, and formatted by an off-board processor.	<u>Ris</u> 5	RIS	MD RIS Code	PCID		Feature Name Fast Transfer for Meridian Business Set	Feature Description This feature reduces the number of key strokes required to transfer a call. It provides a capability for the Meridian Business Set user to transfer a call without having to first conference a called party. If Call Transfer is currently assigned to a Meridian Business Set, the simple addition of this feature does not affect Call Transfer activation or operation. However, an added optional field is datafillable with Call Transfer to allow faster transferring of calls. For example, with the "Transfer or Release" option, an active call can be transferred by simply pressing the Call Transfer key, the appropriate DSS/BLF key, and then pressing Release or hanging up. The Bind Transfer Recall feature is also compatible with Fast Transfer to ensure the appropriate call coverage.
	4	MDC00013	MDC Tailored MDC 2	This feature is the second of four functional groups that make up Tailored Centrex which refers to a packaged set of MDC features and provides the Instant Change Order capability which enables a general user or a designated administrator to add, change, and delete many MDC features by using a Power Feature Key on a designated phone and the switch can provide an audit trail of the use of the Instant Change order feature in logs that can be captured, filtered, and formatted by an off-board processor.	5				AJ0445	MBS Power Feature—Name Programming	With this feature, users of Meridian Business Sets with display can program their own sets so that their names are directly associated with their individual directory numbers. This capability was previously administrable only through the service order system. To implement Name Programming, the user enters the characters (including alpha) by means of the regular twelve-key keypad, the power feature key, and designated softkeys. To guide and simplify the procedure, the display indicates prompts and other necessary information. Access to this feature is controlled through password recognition, and switch security is assured. This feature also allows a technician to program names remotely, using any Meridian Business Set at the customer's premises.
	4	MDC00013	MDC Tailored MDC 2	This feature is the second of four functional groups that make up Tailored Centrex which refers to a packaged set of MDC features and provides the Instant Change Order capability which enables a general user or a designated administrator to add, change, and delete many MDC features by using a Power Feature Key on	5				AJ0446	Power Feature Audit Trails	This feature enables the DMS to selectively record all customer-activated changes. The Journal File and Log File records identify ICO as the change originator, as well as the DN effecting the change. This provides a record for security or billing purposes. The Log File output can be captured, filtered, and formatted by an off- board processor for upload to any OSS database. The audit can be turned on or off for each ICO-accessible feature on a Centrex Customer Group basis in Table PFCNTRL.
	4	MDC00013	MDC Tailored MDC 2	This feature is the second of four functional groups that make up Tailored Centrex which refers to a packaged set of MDC features and provides the Instant Change Order capability which enables a general user or a designated administrator to add, change, and delete many MDC features by using a Power Feature Key on a designated phone and the switch can provide an audit trail of the use of the Instant Change order feature in loos that can be captured.	5				AJ1240	Power Feature Enhancements	This feature provides a table for each customer group, allowing the operating company to permit or deny ICO access to each designated feature. Restrictions can be imposed to accommodate tariff issues, customer stated requirements, operating- company policy issues, or any other criteria. The table PFCNTRL identifies all ICO- accessible features, that customer group's access to each feature (YES or NO), and the Audit Trail status of each feature (On or Off).
	4	MDC00013	MDC Tailored MDC 2	This feature is the second of four functional groups that make up Tailored Centrex which refers to a packaged set of MDC features and provides the Instant Change Order capability which enables a general user or a designated administrator to add, change, and delete many MDC features by using a Power Feature Key on a designated phone and the switch can provide an audit trail of the use of the Instant Change order feature in logs that can be captured,	5				AF5646	Power Feature Robustness	This software adds these four Power Feature Key capabilities enabling MBS users to make changes in their service configurations: •Separate public and private name programming. •Ability to enforce passwords. •Compatibility with Call Forward separate key •Compatibility with Call Pickup separate keys.

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	Ann	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
			MDC Tailored MDC 3	This feature is the third of four functional groups that make up Tailored Centrex which refers to a packaged set of MDC features and provides new Meridian Business Set (MBS) call-handling capabilities and provides time-saving provisioning features which include Copy Feature Set and the Access Feature Grouping (AFG) Add Option.	5	<u>KIB</u>		Code		AN1321	MDC Copy Feature Set Enhancement	This enhancement to the Copy Set Feature enables the network provider to copy the attributes of a particular Line Equipment Number (LEN) to a set of lines, instead of one at a time, with one command sequence. (Of course, single-feature assignments can continue to be made to individual sets on an exception basis.) By cutting the time required to update or set up features for Meridian Business Set stations, this new capability provides major cost savings through reduced speed of service deployment and increased accuracy of service administration. By shortening the time to make changes or set up groups, this capability offers a competitive advantage the service provider can leverage to generate more revenue and retain a larger share of the market.
	4	MDC00015	MDC Tailored MDC 4	This feature is the fourth of four functional groups that make up Tailored Centrex which refers to a packaged set of MDC features and provides new Meridian Business Set (MBS) call-handling capabilities including support for M5209 or M5312 Meridian Business Sets as "low-cost" "Mini-Console" answering positions.	5	9				AF7262	Busy Lamp Field Interaction with MADN Enhancement	This feature enhances the Set-Based Busy Lamp Field (SBLF) feature to provide optional set-based monitoring of Multiple Appearance Directory Number (MADN) Single Call Appearance (SCA) group, in addition to existing group-based monitoring. With this new feature, the busy lamp will show state of the monitored MADN SCA member and not the group. The busy lamp associated with a monitored MADN SCA member set will light only if a MADN SCA shared DN answers the call or a non-MADN DN on the monitored set is ringing. If a non-monitored member of the MADN SCA group goes off-hook on a shared MADN DN, the SBLF lamp will not light up.
			MDC Tailored NARS	This feature provides an alternative to Virtual Facility Groups for provisioning Network Access Registers (NARS) which serve as a peg count used to set the maximum volume of traffic between the DMS switch and an MDC group.	5					AN0322	MDC	With this software, network providers have a streamlined alternative to Virtual Facility Groups for provisioning Network Access Registers (NARs). (The NAR is a peg count used to set the maximum volume of traffic between a DMS and an MDC group.)This method of implementing NARs provides additional data fields within the common block translations tables with additional flagging and routing capabilities based on required and provisioned overflows. A new data table, NARDATA, defines the NAR, the NAR size, and an overflow capability ranging from an announcement to treatments—to an overflow NAR. While operational in nature and mostly beneficial to the service provider, this software ultimately benefits the small and large Centrex user through more efficient and cost-effective implementation of NARs on the DMS. With this NARs development, network-provider operations can be streamlined through the reduction in translations effort required to provide NARs. This software is part of
	4	MDC00018	MDC MDR VIA AMA STREAM	This feature interworks with MDC00009 to provide call data in an Automatic Message Accounting (AMA) stream back to the customer group and provides MDC station call information to customer groups that require near real-time billing, such as hotels and motels.	5					AF1980	AUTHCODE for Message Detail Recording (MDR)	This feature changes the format of AMA by making use of module codes to attach authorization code (AUTHCODE) information, thus providing a single stream of revenue information for the operating company. With this feature, if a switch is recording in Bellcore AMA format and the customer group is datafilled with MDRRAO in Table CUSTSMDR, then the authorization code information is recorded in Module Code 102 and appended to the AMA record. Prior to this feature, authorization code information was only recorded in the SMDR stream. The authorization codes themselves are unaffected by this feature.

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	4	MDC00018	MDC MDR VIA AMA STREAM	This feature interworks with MDC00009 to provide call data in an Automatic Message Accounting (AMA) stream back to the customer group and provides MDC station call information to customer groups that require near real-time billing, such as hotels and motels.	5					AF1455	Message Detail Recording Data in the AMA Stream	Using the new "Bellcore AMA Format with Modules," this feature modifies AMA to permit the delivery of MDR data into the AMA stream, as required in Bellcore FSD 02- 02-1120 (from LSSGR TR-TSY-000523). The modules listed are supported: Module 020 Carrier Access Termination Module 021 Carrier Access Origination Module 100 Business Group Features Module 101 Tandem Digits Dialed Module 102 Authorization Codes. Using these modules, the Revenue Accounting Office (RAO) is provided with all of the information necessary to create the required reports for an end user.
	4	MDC00019	MDC MBS Installer Tools	This feature enables on-site Centrex maintenance personnel or an administrator to complete many station-based feature changes without having to consult the central office. After entering an "installer" identification and password, these personnel can perform on-site, semi-automated Meridian Business Set installation and testing, verify Line Equipment Number (LEN) information on the DMS switch, and add, delete, or modify any station feature available from the Power Features unrestricted menu.	5					AR0307	MBS-Based Installer Tools	DMS SuperNode feature extends the Query LEN software—formerly used only in the central office—to installers and users of Meridian Business Sets (MBSs). MBS- Based Installer Tools allows the verification of the Line Equipment Number (LEN) and—through Power Features—the assignment of feature keys from the MBS. On- site Centrex installers can complete many station-based feature changes without having to consult the central office staff, saving time for both the installer and the central office DMS Maintenance and Administration Position (MAP). After entering an installer identification and password for verification, installers can: Add, delete, or modify any station feature available from the Power Features unrestricted menu. Perform on-site semi-automated MBS installation and testing. Invoke the Inspect LEN function. Customers with Customer Data Change or off-board Service Management Systems can verify LEN/DN mapping for internal service support and for communications with the service provider.
	4	MDC00020	MDC PCS	This feature supports enhanced call waiting with both Uniform Call Distribution and Meridian Automatic Call Distribution and permits a forwarded call to be forwarded back to the original answering station (as can occur with a secretary or other call screening arrangements).	5					AN0340	MDC Personal Call Screening	This optional software supports enhanced call waiting with both Uniform Call Distribution and Meridian Automatic Call Distribution, and permits a forwarded call to be forwarded back to the original answering station (as can occur with secretary or other call screening arrangements). The enhancements provided by this software offer greater call coverage flexibility and can help to raise productivity in business subscriber locations. This offering can be an attractive revenue-generating solution that also increase customer satisfaction and lovalty.
	4	MDC00024	MDC TCAP Name Delivery	This feature extends to users the option of using the terminating end TCAP query method for providing Calling Name Delivery and allows carriers to use the same "Name" database and methods for Centrex customers as is used for residential customers. This allows for centralization of the Number-to-Name administrative database and complies with Bellcore specification TR-NWT-001188.	6					AQ1475, AQ1449	Calling Name Delivery MBG/MDC	This feature extends to users the option of using the terminating end TCAP query method for providing Calling Name Delivery. The 10-digit North American Numbering Plan Calling Number is launched from the terminating switch to the Service Control Point (SCP) which does a number-to-name association and returns up to 15 characters to the terminating switch for display purposes. The response may also include the permanent privacy status or Out of Area/Unavailable indication. This feature complies with Bellcore specification TR-NWT-001188. This feature allows carriers to use the same Name database and methodologies for Centrex customers as is used for residential customers. This allows for centralization of the Number-to-
	4	MDC00025	MDC NETNAME Expand	This feature allows the expansion of the NETNAME table from 512 customer groups per switch to 4096 customer groups and enables a customer group with a private dialing plan to choose two different names for Calling Name Delivery - a private and a public name.	5					AF6025	NetName Enhancement	Name administrative database. Also, since this Name delivery feature is based upon. This feature allows the expansion of the NETNAME table from 512 customer groups per switch to 4096 customer groups and enables a customer group with a private dialing plan to choose two different names for Calling Name Delivery - a private and a public name. For example, the customer group could elect to have all of its members identified by name for internal calls, but for external calls only the name of the company or group would appear on the called party's display.
	4	MDC00027	MDC Attendant Console CF Recall	This feature provides additional recall capabilities under specific call forward conditions including CFB Intergroup by which the attendant can extend the call to a station in a different customer group that is then forwarded to CF Busy and CFDA by which the attendant can extend the call to station within the same customer group or a different customer group that is then forwarded due to CF Do Not Answer.	6					AG5072	Attendant Recall Enhancements	This feature delivers additional recall capabilities under specific call forward conditions. Currently, station calls extended by the attendant only receive Do Not Answer recall if the call extends to an attendant station within the same customer group and is then forwarded due to Call Forward (CF) Busy. Now, MDC00027 introduces these additional attendant recall capabilities: • CFB Intergroup. The attendant can extend the call to a station in a different customer group that is then forwarded due to CF Busy. • CFDA. The attendant can extend the call to a station within the same customer group or a different customer group that is then forwarded due to CF Do Not Answer. This feature allows a more uniform and consistent handling of recall timer calls by an attendant under various call forward scenarios. This results in improved customer service for the provider.

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1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
			MDC Name/DN Blocking	This feature provides Calling Name/Number Blocking on a per-line or per-call basis for the Centrex group.	5					AG1550	Calling Name/Number Delivery Blocking	This feature allows end users to specify on a call-by-call basis whether or not they would like for their station number and/or name to be transmitted to the destination end user within a Centrex group. After the feature is activated, information at the terminating station is either suppressed or, if the originating party has subscribed to permanent call blocking, displayed at the discretion of the caller. The terminating party sees one of the the following displays upon receiving a call: Name Only. Number Only. Name and Number. No Display Information.
	4	MDC00034	MDC Enhanced WATS	This feature expands the capabilities of OUTWATS in the MDC environment and allows a subscriber to select an OUTWATS carrier from a predefined list of up to five companies.	5					AF1664	Enhanced Meridian Digital Centrex WATS	This feature provides expanded capabilities to outward Wide Area Telecommunications Service (WATS) in the Meridian Digital Centrex environment. The enhancements introduced by this feature are designed to allow the central office to provide better service to WATS subscribers and to the carriers that offer WATS.
	4	MDC00035	MDC Teen Service	This feature permits the provisioning of up to four different directory numbers to a single MDC line and distinctive ringing patterns identify the directory number dialed; thus, signaling the intended called party of an incoming call. Different Call Waiting tones are also available.	5					NC0019	Teen Service on Meridian Digital Centrex	This feature allows Teen Service to be assigned as a line option to a Meridian Digital Centrex line. Teen Service allows up to four directory numbers (DNs) to be assigned to each single party, flat rate line. Distinctive ringing patterns differentiate DNs addressed. Lines with Teen Service have one primary directory number and up to three secondary DNs. Each DN assigned to a line is designated with a specific ringing pattern. If Call Waiting occurs, distinctive Call Waiting tones are used to distinguish calls for the separate DNs. Subscribers are therefore afforded important advance information about incoming calls.
			MDC SMDR for PVN	This feature provides SMDR billing records to be collected for each MDC station in a PVN by having the SCP that serves the PVN database generate a new SMDR extension record using ANI for the call's origin and contains billing parameters such as, Alternate Billing Number, Business Customer ID, and Additional Digits Dialed.	5						SMDR for PVN	This feature enables Station Message Detail Recording (SMDR) billing records to be collected for each MDC station on a PVN. This allows the network provider to supply immediate and complete billing information through a download to the PVN, subscriber's office computer or by mail. When a call is placed through a PVN, the service control point (SCP) handling the PVN database generates a new SMDR extension record containing the billing information. The call's origin is tracked through Automatic Number Identification (ANI). The SMDR extension record is then sent to the service switching point (SSP) at which the PVN is based, where the billing records are compiled.
	4	MDC00038	MDC CDAR (1A TRANSPARENCY)	This feature supports variable-length account codes within a customer group and eases the transition from another vendor's switch to the DMS switch by not requiring subscribers to have to alter their account codes that are used with Station Message Detail Recording (SMDR).	6					AF6109	Customer Dialed Account Recording-DMX81	End users subscribing to Station Message Detail Recording (SMDR) have had the option of dialing an account code to identify an account to place against a call. The subscriber could establish a 2- to 14-digit code length, but once the length had been set, no variation in the number of digits was allowed. With this enhancement to the CDAR feature, subscribers can vary the length of account codes. By dialing one of nine different access codes, the user lets the switch know the length of the account code about to be entered. With this feature, subscribers served by another vendor's switch with different SMDR specifications do not have to alter their coding system when they move to the DMS system. This helps to assure a smooth transition and a more receptive subscriber base to other revenue-producing features developed by Nortel.

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	nn	Order Code	Order Code Name	Order Code Description	Ris	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			ADSI on MDC	This feature enhances disposition options for incoming calls on ADSI terminals and supports the Conference feature which allows the user to add the waiting party into existing conversation, creating a three-way conference, and Drop First which allows the user to drop from the conference the originally called party and Drop Last which allows the user to drop the call-waiting party from the conference.	8		9	RES00040			Call Waiting Deluxe	This optional software builds upon the DMS system TR-compliant Call Waiting Display and TR-compliant Analog Display Services Interface (ADSI) protocol capabilities to provide a service that is accessible from industry-standard ADSI terminals. This feature supports the following additional disposition options as defined by Bellcore TR- 416: • Conference—enables the user to add the waiting party into their existing conversation, creating a three-way conference. • Drop First—allows the user to drop from the conference the person that was involved in the original two-party call. • Drop Last—allows the user to drop from the conference the person that was originally the call-waiting party. This feature also supports the TR-416 requirement for 2500 set access to Call Waiting Deluxe. By offering this service to Centrex subscribers, the subscriber base is expanded and revenue potential for service providers is broadened.
	4 1	MDC00042	MDC CALL FWD TIMED	This feature allows the user to set the period of time a forwarded call will ring before it routes to a treatment.	6					AF6278	Call Forward Timed	This feature provides an additional call forward option to MDC lines that already have assigned Call Forward Busy or Call Forward Don't Answer, or both. Call Forward Timed (CFT) permits the user to set the period of time a forwarded call will ring before it routes to a treatment. Current call forward situations where permanent ringing can occur (unanswered call waiting, forward to number unavailable, and maximum call forwards reached) will now terminate with CFT assigned to the line. The duration for the CFT timeout threshold and timeout result can be set by the network provider on a customer group basis. The CFT timer will only apply where forwarding has not resulted in answer or queuing services such as attendant, ACD, UCD, or hunt. The call routes to treatment immediately on timeout, regardless of other line options.
	4	MDC00044	MDC PER LINE FEATURE CONTROL	This feature assigns Access Feature Group functionality on a per-line basis through the use of Service Groups, including Name, Number, and Reason Display.	6					AN1493	Per Line Feature Control	In the past, Name, Number, and Reason Display features were assignable only at a Customer Group level. Optional MDC00044 software permits the network provider to assign these display services on a per-line basis, through the use of Service Groups. A generic Service Group can be shared by different Customer Groups to simplify and speed the assignment of Access Feature Group features to individual lines. Of course, terminating sets require display capabilities to benefit from these capabilities. MDC00044 offers operating cost savings by allowing the network provider to assign Access Feature Group features to individual lines, office-wide. Since craftspersons can control the display settings on a per-line basis, network providers have broad flexibility in how they assign these revenue-generating features.
			MDC Connected Name Display Blocking	This feature provides Name Display services to customer groups and ISDN users (BRI and PRI) without invasion of privacy to called parties who happen to be outside the caller's customer group by blocking the connected party's name from appearing on a Meridian Business Set (MBS).	6							With this feature, network providers can provide Name Display services to customer groups and ISDN users (both Basic Rate Interface and Primary Rate Interface), without invasion of privacy to called parties who happen to be outside the caller's customer group. If both the calling and called parties are in the same customer group, then the connected party's name information will appear on the originating MBS terminal's display. This software, specific to MBS stations in Multilocation Business Groups, addresses regulatory requirements in those areas requiring called party privacy, such as subscribers wanting unlisted directory numbers. This also promotes goodwill and customer satisfaction, especially for privacy-sensitive parties that appreciate the security offered by this feature.
	4 N	MDC00050	MDC CI Comm-CFX Table Chg	This feature creates a CI command that can update the number that a line is forwarded to without requiring the use of SERVORD or table editor. This command works for RES, POTS, and Centrex lines.	6					AR1733	CI For Ultra CFW	This feature creates a CI command that can update the number that a line is forwarded to without requiring the use of SERVORD or table editor. This command works for RES, POTS, and Centrex lines.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
orrected eplace- ent Order ode	4	MDC00053	CSMI on MDC	This feature provides a Centrex subscriber to a network-based answering service (NBAS) the option to listen to a caller as the party leaves a recorded message, without alerting the party that the message is being monitored, and to intercept the call if desired.	8		9	RES00047	10785	BY63711	Call Screening, Monitoring, and Intercept (CSMI)	With CSMI, a Centrex subscriber to a network-based answering service (NBAS) has the option to listen to a caller as the party leaves a message, without alerting the party that the message is being monitored, and to intercept the call, if desired. This functionality is similar to the monitoring capabilities of current customer premises equipment (CPE) terminals. Enhancements to these capabilities are available to Centrex end users who subscribe to an NBAS and a call forwarding feature that directs calls to that service. Centrex lines are supported with provisioning options for billing the service on a pay-per-use, subscription, and usage-sensitive billing Offering this service to Centrex subscribers can help expand a network provider's customer base and broaden revenue potential. This feature's flexible billing capabilities provide automatic message accounting records for a range of different billing arrangements.
hanged pp from 4 42	42	MDC00055	MDC Auto Attndnt-RLT	This feature optimizes the use of network resources by releasing redundant ISDN User Part (ISUP) trunks when a call is redirected or transferred from an attendant service to another number. This feature is for the Canadian market.	6				761	AG2329	CCTO with No Third-Party Interaction	This feature optimizes the use of network resources by releasing redundant ISDN User Part (ISUP) trunks when a call is redirected or transferred from an attendant service to another number. The attendant service must be on an MDC line with a Simplified Message Desk Interface (SMDI) link to another number. The most common application of this feature is to provide trunk optimization when calls are redirected through a DMS attached voice mail system or an automatic attendant service. This feature bes not provide trunk optimization for calls transferred from an Attendant Console or Electronic Business Set (EBS). No billing records are modified as the result of the call transfer. This feature is implemented using the "DIAL" method for call transfer. When the transfer is activated, a request is sent from the transferring switch backward over the network to the preceding node, until the request reached the originating node equipped to perform call completion and trunk optimization (CCTO). The second call (i.e., the transfer) is then dialed directly from the CCTO-equipped office and trunks are dropped from the call. Because the transfering
	4	MDC00056	MDC Code Restriction Group	This feature allows a common set of code restrictions to be shared across customer groups. Each Network Class of Service (NCOS) can have an optional restriction group associated with it and an NCOS entry can have both an individual restriction being searched first, followed by the group being searched if no restriction is found.	6					AF6352	Code Restriction Sharing Across Groups	This feature allows a common set of code restrictions to be shared across customer groups. Each Network Class of Service (NCOS) can have an optional restriction group associated with it. An NCOS entry can have both an individual and a group restriction. The individual restriction is searched first. If no restriction is found, the group is searched. Restrictions are found in table CODEBLK. Restriction grouping provides simplified translations and administration by reducing the number of duplicated restriction groups needed.
	4	MDC00058	MDC Capacity Increase	This feature increases the maximum number of MDC lines to 100,000; thus, doubles the maximum number of MDC lines that can be datafilled in the DMS switch.	6					AF6500	MDC/Centrex Line Capacity Increase	Currently, many large MDC offices are approaching—or have reached—the maximum number of Centrex lines (50,000). This enhancement doubles the current Centrex (MDC) line datafiil capacity to 100,000. With current and planned processor and memory enhancements, many existing processing limitations have been removed. The actual Centrex maximum configuration may vary from switch to switch, subject to engineered capacities and feature limitations. Increased Centrex capacity allows service providers to generate additional revenue from existing DMS switches. Larger Centrex capacity enables additional, small Centrex opportunities in existing switch serving areas—providing operational and administrative economies for new line growth. MDC/Centrex revenue services include: • Customer grouping and networking options • MDC data services • Call tracking, fraud prevention, and network security • End-user management • Custom dialing plans • Nodal and multi-nodal Automatic Call Distribution
	4	MDC00059	MDC CI COM-CF RING CHNG	This feature is an enhancement to MDC00050 and it updates the CFWREP command to include a ringcount change for call forward don't answer.	6					BY47200	CI Command For Ringcount Change	This feature is an enhancement to MDC00050 and it updates the CFWREP command to include a ringcount change for call forward don't answer.

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			Order Code Name ARS Default Public Network Routing	Order Code Description This feature eliminates the need to immediately revisit Automatic Route Selection (ARS) datafill with each NPA/NXX opening by sending ARS calls what would normally receive treatment after an NPA/NXX opening to a default public network route.	<u>Ris</u> 9	RIs	MD RIS	Code	PCID	AU2666	Feature Name Automatic Route Selection Datafill Enhancement	Feature Description Automatic Route Selection (ARS) translations must be updated whenever a new NPA/NXX opens up, so calls to the new areas will complete instead of being routed to treatment. This feature helps enhance call completion by modifying translations to use a default public network route whenever a vacant result is found for an ARS call.
	4	MDC00061	MDC Call Fwd Fraud Prevention	This feature provides restrictions for the types of phone numbers that can be programmed by MDC subscribers as call forward destinations and limit the number of programming attempts on an office wide basis.	9					AF7259, AF7427	Call Forward Fraud Prevention	This feature enables service providers to restrict the types of phone number that can be programmed by MDC subscribers as call forward destinations and limit the number of programming attempts on an office wide basis. These restrictions can then be overridden on a per-line basis for subscribers wanting universal call forwarding capabilities. This feature reduces the fraudulent use of universal call forwarding, resulting in increased revenue protection and security for service providers. Businesses and families can enjoy an increased level of security by knowing that 976, 900 and similar numbers (as well as International numbers and long distance numbers) cannot be used as call forwarding destinations
Added	4	MDC00063	MDC COT on MBS Key	This feature enables the CLASS Customer Originated Trace feature to be assigned to a feature key on an MBS set.	10				13269		Customer Originated Trace on MBS Key	The CLASS (Custom Local Area Signaling Service) feature Customer-Originated Trace (COT) enables an end user to activate a trace of the last incoming call over the subscriber's line. Currently, this feature is available to a Centrex MBS/ISDN set only by dialing the feature access code after terminating the call. This feature provides two enhancements: • COT can now be assigned to a feature key. • COT can be initiated during an active call. This applies to MBS set users and ACD agents. When the called party activates a trace, the calling party is put on hold. Once the called party hears a tone or announcement (as datafilled in the switch), the connection between the calling party and the called party will be restored, if both parties are still on the call. The lamp by the COT key remains lit while a trace is active.
	44	MISC0002	MISC Non-Saleable Robust	This feature provides enforcement of messaging link guidelines for remotes that are connected to their host XPM via a messaging interface entity such as the NT6X50 card, NT6X48 card, or NTMX74 receiver circuit. It will provide a warning message if both messaging links are datafilled on a single messaging interface entity in the appropriate inventory table (e.g. RCCINV).	6					AF6438, AF6589	PSIDE_Links	This feature provides enforcement of messaging link guidelines for remotes that are connected to their host XPM via a messaging interface entity such as the NT6X50 card, NT6X48 card, or NTMX74 receiver circuit. It will provide a warning message if both messaging links are datafilled on a single messaging interface entity in the appropriate inventory table (e.g. RCCINV).
Added	44	MISC0002	MISC Non-Saleable Robust	This feature provides enforcement of messaging link guidelines for remotes that are connected to their host XPM via a messaging interface entity such as the NT6X50 card, NT6X48 card, or NTMX74 receiver circuit. It will provide a warning message if both messaging links are datafilled on a single messaging interface entity in the appropriate inventory table (e.g. RCCINV).	8				9671	AF6729	LIU7 Elimination for ISUP Looparound Trunks	This feature eliminates LIU7 traffic for ISUP loopback trunks by using an ISUP Signaling Loopback (ISL). ISUP messages associated with loopback trunks are routed internally within the DMS software instead of being routed to the SS7 network. This allows ISUP loopback trunks to be provisioned without an additional impact on SS7 network resources.
	26	MSA00001	Special Delivery Service (SDS)	This feature provides a subscription-based service that increases call completion by offering callers voice messaging services when a busy or no-answer condition is encountered. This order code is MD in NCS08 and replaced with RES00077 - Access to Messaging.	5		8	RES00077		AQ1335	MSA Access Enabler	When a caller subscribing to MSA encounters busy or no answer (within an office- defined interval), then the party has an option of being transferred to a messaging system, to leave a message for the called party for future delivery. This service is designed to be available on MSA-subscribed lines for calls that meet network provider- defined dialed digit criteria. An announcement informs the subscribing caller that transfer to a messaging system is available. The party can then enter an MSA acceptance digit to request the transfer. MSA00001 provides the end office components of this service: • Detecting Busy and No Answer conditions. • Examining dialed digits for service eligibility. This screens out calls to other services (such as operator and 911), as well as international, Feature Group A, Feature Group B, and similar calls. • Offering the service to the caller by announcement. One text pertains to a no- answer condition; a different text can be given for a busy condition.

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs Code		PCID	ACTID	Feature Name	Feature Description
			FAX-Thru Service	This feature routes outgoing faxes that reach no answer or busy to a Fax Messaging Platform for later delivery if the destination fax machine is busy or does not answer and once the destination machine is available, the fax is forwarded from storage to the destination. This order code is MD in NCS08 and replaced with RES00078 - Fax-Thru Service.	7			00078				Fax-Thru Service (FTS), a feature based on Message Service Application (MSA) service (introduced with MSA00001), routes outgoing faxes to a fax messaging platform if the destination fax machine is busy or does not answer. Once the destination machine becomes available, the Fax Messaging Platform forwards the fax from storage to the destination. FTS is offered on a per-line basis from the central office. Lines subscribed to the service are monitored for a busy signal or no answer. Upon detection of a busy signal, the fax is automatically routed to the FTS directory number. Calls to the destination fax machine are maintained for a pre-defined time out period. Upon time-out with no answer, the fax message and routing information is transferred to the messaging platform directory number for later delivery.
												The key benefits of Fax-Thru Service include: • Introduces new revenue potential with portfolio-differentiating features. • Activates features on a per-line basis.
	22		In-Switch NOO/NXX Service	This feature provides basic N00 routing services and Info Digit 24 functionality.	5						Info Digit 24 Functionality	This feature enables the service provider to recognize 10-digit received numbers as having originally been 800 numbers that have been translated to the actual destination address. Due to the introduction of 800 Number Portability in the US market, the DMS-500 system needs to be able to receive 800 number calls from the local exchanges after the 800 number has already been translated. To identify the 10 digit POTS number as having originated as an 800 number the local office passes the information digit number of "24" to the IECs. This feature allows the DMS-500 system call processing then uses the 10-digit POTS number call processing then uses the 10-digit POTS number call processing then uses the 10-digit POTS number to index into the INWTRANS table. The call may then have Incoming Exclusion screening applied. The associated STS provides the necessary routing direction for the call.
	22		In-Switch NOO/NXX Service	This feature provides basic N00 routing services and Info Digit 24 functionality.	5						N00 Routing	This feature allows service providers who opt to process N00 calls without using a service control point (SCP) to provide N00 routing services using DMS-500 system datafill. This software provides the following capabilities for in-switch routing: • Incoming Exclusion Screening—allows the service provider to allow or deny 800 INWATS calls based on the originator's NPA. • 800 Digit Translation—provides a simple conversion of 800 INWATS numbers to the associated seven- or 10-digit Directory Number, without using complicated digit manipulation. • Partitioning—allows the service provider to specify the STS (Serving Translation Scheme) to be used to route INWATS calls based on the 800 number received. Each 800 INWATS number can be assigned a unique partition (STS), or several INWATS numbers can be routed within the same partition. • 700 Dialing—The DMS-500 system load permits the establishment of a unique 700- type number that will allow subscribers to verify 1+ Equal Access pre-subscription. Th • 900 Dialing—The DMS-500 system load partiles the establishment of unique 900-type number that will allow subscribers to verify 1+ Equal Access pre-subscription. The 900 Dialing—The DMS-500 system load partiles the establishment of unique 90-type number that will allow subscribers to verify 1+ Equal Access pre-subscription. The 900 Dialing—The DMS-500 system load partiles the establishment of unique 90-type number that will allow subscribers to verify 1+ Equal Access pre-subscription. The 900 Dialing—The DMS-500 system load parties the establishment of unique 90-type number that will allow subscribers to verify 1+ Equal Access pre-subscription. The 900 Dialing—The DMS-500 system load parties the establishment of unique 90-type number that will allow subscribers to verify 1+ Equal Access pre-subscription. The 900 Dialing—The DMS-500 system load parties the establishment of unique 90-type number that will be allow the stable the establishment of unique 90-type number that will be subscribles the establishment
	22	N00R0002	TCAP NOO/NXX Service	This feature provides TCAP-based N00 Routing.	5					AD8472, AM0391	Auto code Gapping	This feature allows the DMS-500 system to throttle TCAP query messages, upon request from the SCP, based upon pre-defined priority levels. This allows the service provider to prioritize the types of queries to be handled in case of TCAP traffic congestion. The service provider benefits from additional protection during high traffic periods.
	22	N00R0002	TCAP NOO/NXX Service	This feature provides TCAP-based N00 Routing.	5					AD8178	N00 TCAP Route Advance	This feature allows the DMS-500 system switch to decide to re-route an N00 type call to predefined alternative destinations. Route advance occurs when either an expired timer or the receipt of a Release With Cause message.
	22	N00R0002	TCAP NOO/NXX Service	This feature provides TCAP-based N00 Routing.	5						TCAP Based N00 Routing	This feature provides N00 routing services for subscribers by using a centralized Service Control Point (SCP) to translate the dialed N00 number. Using the Transaction Capabilities Application Part (TCAP) protocol provided by CCS7 signaling, the DMS-500 platform routes caller and N00 number information to an SCP for lookup. Since all N00 numbers can be stored in a single database (rather than being replicated throughout the service provider's network), database management is significantly simplified. In addition, the use of an SCP increases flexibility in the services available to the caller and the owner of the N00 number.

Issue 2

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Issue 2	4.00	Order Code	Order Code Name	Order Code Description	NCS Ris	Enh Ris	MD RIs	Repl Ord	PCID	ACTID	Feature Name	Feature Description
				This feature provides TCAP-based N00 Routing.	5	KIS	MD KIS	Code		AD8178, AD8472, AM0391	TCAP Based NXX Dialing Plan	Preature Description Due to increased usage, 800 numbers are expected to exhaust. This feature enables service providers to offer additional toll-free numbers and emerging toll-free services. With NXX, N= 2-9, and X = any number. This feature extends toll-free recognition to the CCS7 network, using TCAP messaging between DMS-500 systems and SCP databases to verify NXX toll-free numbers. This feature also supports Personal Communication Services NPA with 5XX prefixes. NXX services are transparent to the end user, and are called-party billed.
	22	N00R0003	N00R V2 TCAP DNIS Svs	This optional feature allows carriers to offer their N00 customers the option of receiving the N00 number that was originally dialed by the subscriber.	6						Version 2 N00 TCAP Dialed Number Identification	This optional feature allows carriers to offer their N00 customers the option of receiving the N00 number that was originally dialed by the subscriber.
Added	22	N00R0200		This feature provides a special internationally registered toll free telephone number that will remain the same throughout the world regardless of the country and/or carrier. When a Universal International Freephone Number (UIFN) is dialed from a location in North America the call is completed toll free to the UIFN subscriber's telephone located either in North America or elsewhere in the world.	10				12908	AX0221	Universal International Freephone Number	This feature provides a special internationally registered toll free telephone number that will remain the same throughout the world regardless of the country and/or carrier. When a Universal International Freephone Number (UIFN) is dialed from a location in North America the call is completed toll free to the UIFN subscriber's telephone located either in North America or elsewhere in the world. This feature will enable IXCs not possessing CAIN functionality to generate revenue by providing the capability to perform in-switch translation and routing on their customers' UIFN calls without having to hand those calls off to another IXC for routing or pay a fee to dip another provider's database for routing data.
Added	26	NBD00003	Delivery	This feature enables United States carriers to meet the provisions of the Communications Assistance for Law Enforcement Act (CALEA)	10				10455	AU2775	CALEA Basic Surveillance	Signed in late 1994, CALEA requires that United States Telecommunications service providers assist law enforcement agencies in conducting lawfully authorized electronic surveillance. To meet the provisions of CALEA, this regulatory service in NCS10 begins the rollout of features to lawfully access and deliver call content and call-identifying information of DMS-500 switch-based subjects to legal authorities. Once this feature is activated for a particular line, this service collects and sends all audio content and data about calls to, from, and redirected by the subject to an authorized law enforcement agency monitoring center (depending on the type of court order). This surveillance, transparent to all parties in these calls, continues until the feature is deactivated. In NCS10 this ordering code supports functional basic surveillance, including subject- redirected calls, on DMS POTS, RES, MDC, and ISDN lines.
	14	NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/TU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AJ2367	56 Kbps BRI/PRI Switched Access	This feature ensures that the ISDN customer can access the frame relay network. Basic Rate Interface (BRI) and Primary Rate Interface (PRI) are supported for circuit- switched B-channels through the network. ISDN connections terminate on the Frame Relay Interface Unit (FRIU) via T1 trunk connections. The FRIU does not need to distinguish ISDN access from any other channelized access. The FRIU does not receive or interpret ISDN signals, but simply passes the data through the frame relay service (FRS) network. Frame Relay Service An FRS subscriber is connected to a frame relay switch via an access channel on which multiple logical-link connections may exist. Each logical link operates independently of other loaical links on the access channel. Each subscriber is assigne
	14	NI000002		This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/TU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AR0102	Bellcore AMA Frame Relay Billing	This feature gives an operating company the capability to record and convert billing data into Bellcore AMA format for generating usage-based billing records. The AMA format is based on Structure Code 00693.
	14	NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITI/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AJ2878	Committed Information Rate	In order to provide a consistent level of service quality to its frame relay subscribers, a network provider may use a number of fixed subrates into the access network, called Committed Information Rates (CIRs). By allocating fixed bandwidth per PVC on the access line, the provider can more easily administer and tariff frame relay service and provide guaranteed bandwidth to multiple PVCs sharing the same resources. CIRs allow the network provider to better engineer its network and maintain a consistent level of service.

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	App		Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID		Feature Name	Feature Description
	14	NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AL2182	DataSPAN Billing Data Collection	This feature provides the capability for a measurement of data usage to be captured and stored in an FRIU. Control and interaction with other billing systems is provided through the feature AJ1480. The FRIU performs the following functions: counts the number of frames and octets, segments, or cells from an incoming channel; counts the number of frames and octets, segments, or cells from an outgoing channel; and provides temporary store for a frame and octet, segment, or cell count until that billing data is retrieved by the computing module (CM) billing control. DataSPAN billing data collection capabilities can also be used by the LEC to generate customer-network usage reports, which may be a valuable service that operating companies can sell to customers—even if billing is not based on usage.
	14	NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AJ1480	DataSPAN Frame Relay Billing Requirements	This feature enables an operating company to bill customers on a usage basis by measuring the data that a customer transmits across the DataSPAN network. The base frame relay service billing controller provides: A collection function that periodically retrieves billing data from an FRIU, An internal frame relay database that stores billing data from an FRIU, An aggregation function that handles the periodic generation of billing records, and A new table to datafill the frequency that billing records are to be generated
		NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AJ1847	DataSPAN Local Management Interface	New signaling features have been added that perform the following: Support the Local Management Interface (LMI) specification Annex D, ANSI T1.617 for the exchange of status information between the user device and the network. It supports message formatting for Annex D and allows connections for a data call to be provisioned at the originating office only. Establish a non-channelized loop connection across a T1 span for testing purposes. Provide ring and loopback for testing. The combination of these features maximizes DataSPAN network communications to improve the management of frame relay data flow and network connections.
	14	NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5						DataSPAN—Base	This package comprises a set of features that together provide basic DataSPAN capabilities, allowing high-speed LAN interconnection and providing customers with a logical end-to-end link—a virtual private network—between all points connected to the service. See the introduction to this section for additional information on DataSPAN.
	14	NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AJ2946	ECN, Egress Buffering, and OMs	On a frame relay network, bursty traffic can sometimes cause temporary congestion at the egress point. This feature provides congestion-control mechanisms to enhance the quality of DataSPAN service. It also provides the tools to precisely monitor the frame relay traffic on various components of the network.
	14	NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AJ1846	Fractional T1 Support for Frame Relay	This feature provides T1 access to frame relay service in incremental fractions of up to four 384-kbps channels per FRIU.
	14	NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AJ2294	Frame Capture Tool	This feature implements a frame capture tool for monitoring frames being received by and/or transmitted from an access Frame Relay Interface Unit (FRIU). The primary purpose of the tool is to debug connections from customer premises equipment (CPE) to an access FRIU with relatively low traffic rate. The ability to troubleshoot with a software tool enables service provider maintenance personnel to solve problems more quickly, thus helping to ensure the continuing integrity of the DataSPAN network. Frame capture tool capabilities include: • Capture of all receive and transmit frames on a specified access channel, or frames for a specified Data Link Connection Identifier (DLCI) for that access channel • Capture of complete user data frames—including Link Access Protocol F (LAPF) hes

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
	14	NI000002	NIO DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with CCITT/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.	5					AJ2292	Frame Relay Provisioning Table Requirements	This feature improves the stored endpoint data of DataSPAN frame relay by removing many of the existing Private Virtual Network (PVN) structures, separating connection data from endpoint data through well-defined interfaces, and improving the performance of the data access. This simplifies DataSPAN operation and makes the database more efficient. (Endpoint data defines the permanent information associated with a customer's frame relay access into the DataSPAN network.) The long-term goal of the DataSPAN data platform is to replace the provisioned connection data tables with an internally held database of connection information generated through call processing. This information is either triggered from endpoint provisioning or via switched logical link connections.
	14	NI000002	NI0 DataSPAN	This feature offers frame relay switching services from a DMS SuperNode switch and this DataSPAN implementation is compliant with	5				_	AJ2877	ISDN Nailed-Up B Channel to DataSPAN Frame Relay	This feature provides access to the frame relay network via a "nailed-up" B channel on a BRI ISDN line. ISDN connections terminate on the FRIU via physical T1 trunk connections. The FRIU does not need to distinguish ISDN access from any other
				CCITT/ITU, ANSI, and Frame Relay Forum standards for Frame Relay User Network Interface and Network-to-Network Interface.								channelized access. The FRIU does not receive or interpret ISDN signals, but simply passes the data through the FRS network at either clear 64 kbps or 56 kbps.
	14	NI000003	NIO DPN Support	This feature is licensed only if a service provider continues to maintain a DPN Packet Handler (DPN PH) vs. a DMS Packet Handler (DMS PH) in the DMS office to support ISDN packet data services. This feature provides testing capability for DPN PH operations over DS-0 channels through a logical loopback in the D-Channel Handler (DCH) for a logical terminal (LTID) and provides MAP commands to start, stop, and query the loopback.	5					AL2040	Bd Channel Logical Loopback	User data packets over the ISDN D channel are routed to the DPN Packet Handler (PH) through umbilical DS-1 links coupling the DMS and the PH call-processing module. Each of 24 DS-0 channels of the DS-1 umbilical link can carry up to 64 D- channel packet-data calls simultaneously. Previous to this feature, a physical DS-0 channel loopback had to be performed, causing interruptions in service for all of the 64 possible calls on DS-0 channels without taking down the entire DS-0 channel. This feature provides logical loopback in the D-Channel Handler (DCH) for a logical terminal identifier (LTID) of the Bd channel. The purpose of a logical loopback is to detect faults within and outside the DCH without having to take down the entire DS-0 channel. A MAP command is provided to start, stop, and query the loopback. The PH sends a test frame to the DCH to receive the loopbacked frame for verification. Loopback is disabled by a MAP command or by a timeout occurring after the enable.
MD'd order	14	NI000004	NIO DWS	This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	5		10	NI000073	878		Dialable Wideband Service—PRI Access	This package offers user-controllable access to bandwidths ranging from 128-kbps through 1.5-Mbps—on demand in 64-kbps increments—over an ISDN PRI loop. Called parties are identified to the network by the North American Numbering Plan. Public-network Dialable Wideband Service can be used for video conferencing and other wideband data-communications applications, such as order transaction, image transfer, and private-line backup and augmentation.
MD'd order code	14	NI000004	NIO DWS	This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	5		10	NI000073	894		DWS Base Software	This package provides the basic software used by higher level ISDN PRI software and CCS7 trunking software for call processing and trunk selection.
MD'd order code	14	NI000004	NI0 DWS	This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	5		10	NI000073	878	AD4735	DWS Feature Group D-to-PRI Interworking	This feature allows direct end-office access to interexchange carrier networks through the interworking of PRI and Feature Group D trunks.

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		Order Code NI000004	Order Code Name NIO DWS	Order Code Description This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	RIs 5	RIs	MD RIs 10	Code Ni000073	PCID 877		Feature Name DWS PRI Messaging	Feature Description This software implements Dialable Wideband Service for the local exchange carrier (LEC) market according to the current standards, extending the DWS capability to provide wideband end-to-end connectivity over ISDN PRI and ISUP Intertoll (IT) trunks. Specifically, this software provides DWS functionality from the customer premises equipment (CPE) to a DMS switch by updating the implementation of the Primary Rate Interface (PRI) messaging protocol.
MD'd order code	14	NI000004	NI0 DWS	This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	5		10	NI000073	879		DWS PRI Test Tools	This test tool software creates and sends PRI messages and allows for the display of certain call-processing data areas. The software helps resolve protocol violations between the switch and customer premises equipment.
MD'd order code	14	NI000004	NI0 DWS	This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	5		10	NI000073	881		Enhanced Time Switch	This feature provides OAM&P for the Enhanced Time Switch (ETS) and will serve as the software foundation for all future ETS-dependent features. The ETS provides constant delay, thus ensuring channel order, for the peripherals involved in a wideband call.
MD'd order code	14	NI000004	NI0 DWS	This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	5		10	NI000073	894		Glare Resolution	This software provides the basic software used by higher level ISDN PRI software and CCS7 trunking software for call processing and trunk selection. This software also offers enhanced glare resolution by allowing network providers to assign priority for all trunk members to one of the switches. Preference should continue to be given to the switch that is higher in the hierarchical network, to favor terminating traffic.
MD'd order code	14	NI00004	NI0 DWS	This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	5		10	NI000073	878	AD4433	ISUP-to-PRI Interworking	These features offer user-controllable access to bandwidths ranging from 128 kbps through 1.536 Mbps—on demand in 64-kbps increments—over an ISDN PRI loop. Called parties are identified to the network by the North American Numbering Plan. Public network Dialable Wideband Service can be used for videoconferencing and other wideband data communications applications, such as order transaction, image transfer, and private-line backup and augmentation.

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	Ann	Order Code	Order Code Name	Order Code Description	Ris	RIs	MD RIs		PCID		Feature Name	Feature Description
		NI000004		This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	5	6	10	NI000073	6421		New OMs for DWS Trunks	These features provide new operational measurements (OMs) as defined by Bellcore TR-1203, Issue 2, for Dialable Wideband Service (DWS) trunks. These OMs provide equivalent DS-0 counts of attempts (Bellcore Requirement R-356), All Trunks Busy (R-358), and Incoming Calls (R-361) associated with wideband calls on a per-trunk- group basis. The DMS system currently counts narrowband and wideband call attempts in OM group TRK, field NATTMPT (R-355), without an indication of the number of equivalent DS-0s involved. With this software, wideband and narrowband OMs also include a count of the DS-0s involved with each call. New OM fields count the equivalent DS-0 attempts, All Trunks Busy, and Incoming Calls on a wideband trunk group in accordance with TR-1203, Issue 2, December 1992, Requirement R-356 (Equivalent DS-0 Attempts for Narrowband and Wideband Calls), R-358 (All Trunks Busy—Narrowband and Wideband), and R-361 (Incoming Calls, All Rates). Each of these three requirements translates into a new OM field on a new OM group.
MD'd order code	14	NI000004	NIO DWS	This feature provides standards-compliant Dialable Wideband Service (DWS) to offer circuit- switched data transport over public facilities. The DWS subscriber over an ISDN PRI loop can request bandwidths from 128 kps through 1.536 Mbps, on demand in 64 kps increments, and pay only for the bandwidth actually used.	5		10	NI000073	878	AD3936	Wideband IntraLATA Trunking	This package provides the CCS7 wideband trunking capability required for intraLATA dialable wideband service applications. With dialable wideband access from a PRI loop, this feature enables wideband calls ranging from 128 kbps through 1.5 Mbps to be transported over CCS7 wideband trunk groups to the destination office within the LATA. Requirements for this package include hardware and software for ENET.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1589	2B1Q Diagnostics and Performance Reporting	Diagnostics for the 2B1Q line card, loop, and NT1 are provided by these features. A performance log is printed if the line card or NT1 detect transmission degradation. The quality of the transmission is monitored by the line card and the NT1, which keep track of erred seconds and severely erred seconds. If the erred seconds or severely erred seconds thresholds are exceeded during the current hour, a performance log is printed. Synchronization loss reporting for 2B1Q lines is also provided. The diagnostic tests provided by this feature check the loop components to determine if a fault exists in: the line card, the NT1, the loop, or the D-Channel path.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel'S DPN Packet Handler.	5					AC0551	2B1Q LCME Base Load Development	Together, these features provide the base XPM and central controller (CC) software load and basic diagnostic functions for the Enhanced Line Concentrating Module (LCME) in support of the ANSI standard 2B1Q U interface. MAP accessible maintenance capabilities delivered with this feature include: LISTSET, TRNSL, BSY, RTS, FORCE, LOADPM, QUERYPM, NEXT OFFL. The feature also provides diagnostic control, fault event reporting, and recovery control. A new high density 2B1Q ISDN line drawer is required.
	14	NI00007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1314	2B1Q Loop and TDM Connection Provisioning	This feature delivers the following functions for the 2B1Q U-interface and the S/T- interface passive bus: Datafiling the Enhanced Line Concentrating Module (LCME), Provisioning of logical terminals on the LCME, Posting 2B1Q and S/T-interface lines at the Line Test Position (LTP) and MAP, Provisioning the Time Division Multiplexer (TDM) connection from the LCME to the D-Channel Handler (DCH) card, and Providing Query D-Channel Handler (QDCH) and CKTLOC functions.

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	Ann	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5						2B1Q Loop Maintenance Base	This feature provides the following loop maintenance commands at the MAP level for the 2B1Q line card and the Network Termination 1 (NT1): LOOPBK—set, release, and query loopback in the loop; SUSTATE—query loop status; DCHCONT—D- Channel Handler (DCH) continuity test; TEI—Terminal Endpoint Identifier (TEI) management; and LCO—operate and release relay in line card.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0537	2B1Q U-Interface ISDN Line Card Firmware	This feature provides firmware support for the control and maintenance functions in the new single slot U-interface ISDN line card that employs standardized 2B1Q line coding.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0571	2B1Q XPM TDM Connection Support	This feature provides support for the dynamically allocated D-Channel connections between the ISDN 2B1Q LCM and the ISDN LGC. Hardware is required for the operation of this feature.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0912	Basic Rate Interface Meridian Feature Transparency	Meridian Feature Transparency (MFT) makes all of our Meridian Business Set features available to ISDN sets such as the M5317T, M5209T, and compatible third- party vendor sets. A single firmware version supports both this signaling option and our standard ISDN signaling option. The desired feature option is assigned on a set- by-set basis, and sets assigned different feature options fully interwork and can be mixed in a customer group. As new Centrex features are introduced, they are immediately available to ISDN sets assigned the MFT signaling option. Customers who implement MFT now can migrate to standard ISDN features in the future with a simple DMS translations change, with no impact on the end user's M5317T and M5209T ISDN Business Sets.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AR0727	BRI Incoming Message Overload	This feature implements Incoming Message Overload (ICMO) protection for ISDN BRI lines based on the current Centrex ICMO feature. Lines generating excessive layer messages—which can be caused by customer premises equipment (CPE) faults, protocol violations, BRI line noise, or ISDN Line Concentrating Module (ISDN LCM) hardware faults—are placed in a System Busy state by the DMS switch and placed in a system test queue. ICMO lines are automatically tested and returned to service if the faults are transient, or remain out of service for repetitive overload situations. This protects other lines from service degradation due to ISDN LCM processor overload from babbling lines.

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	App	Order Code	Order Code Name	Order Code Description	Ris	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL2281	Broadcast Loader for DCH	This feature allows the LEC to broadcast load messages to multiple D-Channel Handlers (DCHs) with a single load command. The DCHs can be located in one or more ISDN extended peripheral modules (XPMs), such as the ISDN Line Trunk Controller (LTCI) or the ISDN Line Group Controller (LGCI).
	14	NI000007	NI0 ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1914	CC Layer 2 Transmission Performance Monitoring	Together, these features allow craft personnel to monitor the Layer-2 transmission performance of each BRI D channel. Personnel can also monitor the transmission- performance percentage for the DMS switch. These features allow the craftsperson to query and reset peg counts for the D channel of BRI lines. They also generate a daily report on the percentage of erred and retransmitted frames for the entire switch. The report also includes logs for lines exceeding transmission-error thresholds. These developments satisfy TR compliance for TSY-000475—Section 5.4.5.1—on transmission requirements.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0810	Channel Identification (CID) Compliance	This feature provides compliance to the TR-268 specified Channel Identification Information Element. It allows a terminal to specify a particular B channel when establishing new calls or retrieving held calls.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1668	CSM Support for Speccon Network Connection	This feature improves the reliability of nailed up connections. For calls switched through the network, two extra bits have been added: CSM and Parity. These bits are used to determine data integrity. If there is a loss of integrity, the DMS generates a log and switches network planes.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL0956	D Channel Handler (DCH) Sparing Maintenance	This feature provides a "Hot Standby" D Channel Handler (DCH) to increase the fault tolerance of ISDN services.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0529	D Channel Handler Congestion Control	This feature enables the D Channel Handler (DCH) card to recognize traffic overflow and congestion conditions and recover from those conditions. Traffic capacity is maximized and traffic congestion is minimized by means of throttling links and redistributing traffic.

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	App	Order Code	Order Code Name	Order Code Description	RIs		MD RIs		PCID	ACTID	Feature Name	Feature Description
			NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0368	D Channel Handler Q.921 Frame Routing	This feature provides frame-routing procedures and the discrimination of Service Access Point Identification (SAPI) numbers in the D Channel Handler (DCH) cards of the ISDN Line Group Controller (LGCI)/ISDN Line Trunk Controller (LTCI). SAPI 0 (call control packets), SAPI 16 (user packet data), SAPI 17 (loop-back service processing), and SAPI 63 (Terminal Endpoint Identifier [TEI] management) are supported.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0530	D Channel Link Fault Handling	This feature enhances Layer-1 and Layer-2 fault handling and recovery in the Master Processor (MP) of the ISDN Line-Group Controller (LGCI)/ISDN Line Trunk Controller (LTCI) for Bd- and D Channel traffic.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL2280	DCH Performance Operational Measurements —CC	These features collect operational measurement (OM) data on D-Channel Handler (DCH) performance. With these OMs, the network provider can measure the performance of the DCHs, so that office configuration and distribution of services across DCHs can be engineered to best meet customer needs and make the most cost-effective use of hardware. The OMs apply only to the DCH processors of the ISDN Line/Trunk Controller and ISDN Line Group Controller (ISDN LTC/LGC). The OMs are for DCHs that have an ISDN Service Group (ISG) associated with them. There are two types of measurements: CPU occupancy, Overload Control SAPI 16 Message-Shedding Counts (the number of user data-packet frames lost because of CPU overload)
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1322	D-Channel Handler (DCH) Performance Tools	This feature monitors real-time performance and activity of the D-Channel Handler (DCH), the ISDN Signaling Pre-Processor (ISP), the Master Processor (MP), and the Signaling Processing Unit) OCCUPANCY for the DCH and ISP • Originations and terminations • Universal Tone Receiver (UTR) channel usage • P-side channel usage • Basic Rate Interface Operational Measurement (OM) peg counts for the DCH
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AQ0672	D-Channel Handler Overload Controls	This feature allows the D-Channel Handler (DCH) to handle sustained packet switched call overload conditions and still provide acceptable levels of circuit-switched traffic.

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			Order Code Name	Order Code Description This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support Nr1-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	Ris 5	Ris	MD RIS	Code	PCID	ACTID AL1296	Feature Name D-Channel Handler Performance MAP Display	Feature Description Through this feature, the craftsperson can monitor from the Maintenance and Administration Position (MAP) command level the performance and activity of the LGCI/LTCI and the D-Channel Handler (DCH) card. The performance parameters monitored are: • CPU OCCUPANCY call processing, overhead, and background for the ISDN Signaling Pre-Processor (ISP) and DCH for the previous minute. • The number of Service Access Point Identifier (SAPI) frames successfully transmitted and received over the previous minute. • The number of SAPI frame errors transmitted and received by the DCH over the previous minute.
	14	NI00007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AQ0884	Dial-Up B-Channel Loopbacks	This feature allows the T-Bus/U-Loop to be tested from the customer's premises without assistance from the test center or central office personnel. This feature allows the tester to dial up a B-Channel loopback from an ISDN phone. The line card loops back the results of bit error-rate testing (BERT). The ISDN phone must be equipped with a BERT pattern generator/receiver.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AQ0875	Digital Test Access on ISLC Circuit-Switched B Channels	This feature is an enhancement of the Digital Test Access (DTA) software developed under the ISDN Digital Test Access Maintenance feature (AL1321). This feature allows the user to monitor circuit-switched B channels and D-channel packet data connections (Bd) of a BRI loop, using a specially modified external protocol analyzer (PA). Currently, only provisioned B channels (PB) and D channels can be monitored. Circuit-switched B channels, nailed-up B channels, D channels, and Bd connections can be monitored by DTA with this feature. DTA references Bellcore TA-783 section 5.1.2.1 and section 5.1.2.2.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0493	DMS ISDN OAM Packet Handler NAS Co-Existence	These features allow services to be provisioned for packet data terminals through the SERVORD system just as they are for telephones and other circuit-switched devices. The following capabilities are provided: Interworking in the OAM Processor for service provisioning in the Exchange Termination portion of the DMS ISDN node, which handles circuit-switched services, and the Packet Handler, which handles packet-switched services (AJ0302). Co-existence of Packet Handler configuration functions, performed by the Network Administration System (NAS) and X.25 service provisioning functions, performed by the OAM Processor (AJ0493). Integrated service provisioning through an Operations Support System (OSS) or Maintenance and Administration Position (MAP). Provisioning orders for packet devices are accepted from the OSS or MAP and translated into a form usable by the PH (AJ0397). Decoding, manipulation, and validation of PH master configuration files (MCFs) by the OAM Processor (AJ0398). MCFs contain all provisioning information for the Access Module component of a PH. Uploading and downloading MCFs between
	14	NI00007	NIÙ ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0451	Download Functional Signaling Terminal Profile	This feature permits two activities to be performed by a special key sequence: • configuration of Basic Rate Interface terminals, such as Northern Telecom's M5317T, at terminal installation; and • an on-site terminal test that allows the craftsperson to perform the following tests: — testing of directory number keys, — testing of feature keys and feature indications, - verification of feature keys and feature indications, - verification of feature assignment against feature keys, - display checks, and - testing of terminal endpoint identifier (TEI) assignment.

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	14	N1000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0577	DS-1 Mapping for Packet Handler	This feature allows the datafill in the DMS switch of the path of the DS-1 channels from the LGCI through the Digital Interworking Unit (DIU) and into a Peripheral Interface (PI) port in the packet handler.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0164	Dynamic TEI and Service Profile Identification	This feature, Dynamic Terminal Endpoint Identifier (TEI) and Service Profile Identification (SPID), introduces two new capabilities: • The ISDN terminal can automatically request that the DMS ISDN node assign to it a terminal endpoint identifier (TEI), thus eliminating the need to program a TEI into each terminal manually. • The ISDN terminal identified by the dynamic TEI is associated with a Service Profile Identification. The SPID, datafilled in the switch, indicates the Service Profile, or specific feature assignments and other characteristics of the terminal. Assignment of dynamic TEIs and association of that TEI with the proper SPID occurs during terminal initialization.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0942	E.164 Support for X.25 Services	From 1986 through 1990, the circuit-switched portion of ISDN used the E.163 numbering plan (i.e., the North American Numbering Plan), while the packet-switched portion used the X.121 numbering plan currently employed in Public Packet-Switched Networks (PPSNs). A special Data Network Identification Code (DNIC) ("9001") was assigned to ISDN islands, a strategy that was adequate until there was a need to interconnect these islands. Then, the use of a special DNIC was no longer feasible. This feature implements the CCITT standard E.164 numbering plan, a uniform plan for all circuit- and packet-switched ISDN terminals. The feature allows the user to specify the numbering plan lused for a particular Data Network Address (DNA), and prepends the numbering plan flag of every DNA of a Logical Terminal Identifier (LTID) before downloading the data to the PH. The flag can have one of two values: "E" (which indicates that the DNA uses the E.164 plan), and "X" (which indicates X.121).
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL2572	Enhanced DCH Integration in ISDN LGC/LTC	These features fine-tune the integration of the new Enhanced D-Channel Handler (EDCH) circuit pack residing in the ISDN Line Group Controllers and Line Trunk Controllers (LGC/LTC). The EDCH's 300% increase in memory, along with the 25% increase in real-time processing, is essential for the continued rollout of ISDN features and enhancements in support of National ISDN-2 and National ISDN-3 features on the DMS. Through firmware and software changes, this software introduces EDCH patching—to reduce time-to-repair durations.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1389	Enhanced DCH Loader	This feature reduces the time required by the craftsperson to load the D-Channel Handler from the MAP terminal.

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	Ann	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
			NIO ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5			Unite		AL2541	Enhanced ISP Integration in ISDN LGC/LTC	This feature supports National ISDN-2 and National ISDN-3 features on the DMS. It integrates the Enhanced ISDN Signaling Pre-Processor (EISP) into the ISDN Line Group Controller and Line Trunk Controller (LGC/LTC). It ensures compatibility of the EISP with both the XPM PLUS and the master processor (MP)/signaling processor (SP). The EISP provides a 300% memory increase when used with the XPM PLUS. The additional memory, along with the 25% increase in real-time the EISP provides, is essential for the continued rollout of ISDN features and enhancements.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0376		This feature provides functional terminal access to the existing base of Meridian Digital Centrex features. Over 130 of the features available to Business Sets and Integrated Services Digital Network (ISDN) stimulus signaling terminals are available to functional terminals. Additional features are planned for availability in each subsequent load, including: • Call Waiting • Class of Service Restrictions • Call Forwarding • Call Waiting Originating • Call Park • Executive Busy Override • Ring Again • Per-Call Bearer Capability • Speed Calling • Hunting
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0356	Increase Max. Number of ISDN Terminal Profiles	This feature increases the maximum number of ISDN terminal profiles from 1,022 to 32,000 by increasing the number of logical terminal groups from 1 to 32. Previously, only one logical terminal group, the ISDN terminal group, existed, and it was limited to 1,022 terminals. The ISDN terminal group still exists by default, but now an additional 31 logical terminal groups can also be defined. Each terminal group can have up to 1,022 terminals assigned.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AR0040		This feature enhances the Information Request procedures associated with TR-847, TR-205, TR-850, TR-853, and TR-858 to provide terminal portability in accordance with the following National ISDN-1 requirements: • TR-847—The use of Information Request (IRQ) as described in TR-TSY-000847, Issue 1, ISDN Features—Common Switching and Signaling Generic Requirements, Sections 3.1, 3.2, and 3.5. • TR-205—Enabling/disabling Bridged Call Exclusion as described in TR-TSY- 000205, Issue 1, ISDN Electronic Key Telephone Service, Section 3.1.2.1, using feature-key management procedures. • TR-850—Feature operations as described in TR-TSY- 000850, Issue 1, ISDN Bullectronic Key Telephone Service, Section 3.1.2.1, USDN Business Group Dial-Access Features, Section 3.1.1. • TR-853—Circuit-mode activation of an I-CF subfeature as described in TR-TSY- 000853, Issue 1, ISDN Call Forwarding, Sections 3.1.1.1 and 3.1.1.2 • TR-858—Conference invocation as described in TR-TSY-000858, Issue 1, Flexible
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ1018	Integrated Hardware Maintenance for PH (OAMP Resident)	This feature provides integrated hardware maintenance for DPN Packet Handler OAMP software to translate remote operations into NCS commands and to communicate with NCS over the X.25 link.

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			Order Code Name NIO ISDN Base	Order Code Description This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	RIs 5	RIS	MD RIS	Code	PCID	ACTID AJ1340	Feature Name Integrated OAM for a Centralized Packet Handler (PH)	Feature Description A serving DMS office with the Centralized DPN Packet Handler (CPH) can support ISDN packet data switching for up to seven outlying DMS offices. This feature provides support for the Centralized DPN Packet Handler integrated service provisioning. These outlying DMS switches can perform packet service provisioning functions on the centralized DPN PH from their MAPs. Integrated DMS/PH logs and alarms and NCS passthrough functions are also available (features AJ0607 and AJ0576, respectively). The OAM Processor is maintained from a serving DMS office.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0607	Integration of Packet Handler and DMS-100 Log Streams	This feature allows the real time collection of packet handler alarms and logs and makes them available for merging into the DMS log stream. The PH logs are controlled, distributed, and processed into reports along with DMS logs using the MAP LOGUTIL facility, and are available to operating company OSs through a common DMS switch interface.
	14	N1000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0166	Intercom and Group Intercom for ISDN EKTS	This feature extends the Intercom and Group Intercom features to ISDN functional signaling terminals. The Intercom feature allows a caller to terminate directly on a predesignated terminal by pressing the intercom key on the ISDN terminal. Group Intercom enables a customer to terminate, using abbreviated dialing, on a member of a predesignated group. Intercom and Group Intercom for Functional Terminals aligns with Bellcore's standardized Electronic Key Telephone Service, TR-TSY-000205.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0329	ISDN Basic Rate Functional Signaling—Call Processing	This feature provides call setup based on Bellcore TR-TSY-000268 and allows access to DMS Meridian Digital Centrex features for functional terminals on an ISDN Basic Rate Interface loop. This loop can support both functional and stimulus signaling and terminals. Functional terminals can interwork with stimulus terminals, 500/2500 sets, and Meridian Business Sets.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1321	ISDN Digital Test Access Maintenance	ISDN is typically deployed in networks that handle heavy data traffic and support terminal equipment and software from many vendors. This environment creates the potential for compatibility problems. Because the operating companies are providing interfaces among this equipment, tools are needed to detect protocol problems. A number of vendors manufacture protocol analyzers that can be attached to an ISDN S/T interface to capture messaging and analyze the protocols used. But the operating company needs a method of testing the ISDN line without sending personnel to the customer site to test the line physically. This package allows analysis from a centralized protocol analyzer, without the need to dispatch personnel. The protocol analyzer can be located at the central office or at a remote location over a T-1 carrier. At the MAP, the data stream from any ISDN B or D channel being tested are examined. A Digital Test Access timeout can be defined from

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			Order Code Name NIO ISDN Base	Order Code Description This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	RIs 5	RIS	MD RIS	Code	PCID	ACTID AJ0955	Feature Name ISDN LAPB & LAPD Hardware Configuration from MAP	Feature Description This feature enables SERVORD personnel to configure the LAPD/LAPB Processing Element/Peripheral Interface (PE/PI) pairs in the PH from the DMS MAP. This feature introduces a new table—PHINV (Packet Handler Inventory)—which contains an inventory of the LAPD/LAPB PE/PIs. Personnel can update the card configuration by editing this table at the MAP.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0294	ISDN LCM Central Controller Maintenance III	This feature increases the number of C-side, XPM-directed, DS-30A links from 6 to 18 per ISDN Line Concentrating Module (LCMI), thus increasing the number of ISDN lines per LCMI from 58 to 160. This feature also provides a more efficient reporting of the ISDN U-Interface synchronization states to the central controller (CC). The U-Interface synchronization states of all the ISDN line cards are polled by the LCMI, and synchronization lost is reported in the CC.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AQ1100	ISDN LCM Datafill Restrictions	Datafill on an ISDN Line Concentrating Module (ISDN LCM) is limited to the ISDN optical line card (NTBX04AA). All other card codes are blocked from datafill. In the three software releases prior to NA002, patches were written which warn the service provider of this datafil restriction every time TABAUDIT (table audit) is run. TABAUDIT is an existing tool used to validate table data. When run, TABAUDIT calls each table, calling the VPRCC (verify procedure) for each tuple in the table. TABAUDIT is always run a few weeks before the application of a new software release. The TABAUDIT warnings prior to NA002 are given for the following tables: LNINV (line inventory) stores the line card code for a particular LEN (line equipment number) on the ISDN LCM. The LEN identifies the position of the line card to de NTBX04AA), sating that the tuple must be removed before the application of NA002 or greater. LTMAP (LTID mapping) associates ISDN LCM (and not card code NTBX04AA), stating that the tuple must be removed before the application of NA002 or greater. LTMAP
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0215	ISDN LCM Line Maintenance Support	This feature enhances maintenance support for the ISDN Line Concentrating Module (LCMI) by providing the following capabilities: ability to datafill lines for the LCMI in Table LNINV, ability for the LCMI to support mixed line types (Meridian or Electronic Business Set, Data Unit, and ISDN), including the administration of single and double slot line card placement, ability to post and maintain the lines in the LCMI at the Line Test Position (LTP) level of the MAP once they are datafilled, and capability in the central controller to collect Dial Tone Speed Recorder operational measurement data from LCMIs datafilled below an ISDN Line Trunk Controller (LTCI).
	14	NI00007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL0944	ISDN Loop Maintenance Enhancements	This feature improves loop maintenance by: • Allowing Automatic Line Testing (ALT) of ISDN Alternate Mark Inversion (AMI) loops. • Extending Bit Error Rate Testing (BERT) to idle ISDN B channels. • Displaying the connected party and the Logical Terminal Identifier (LTID) when a busy B channel is posted.

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	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0366	ISDN LTC DCH Switch of Activity (SWACT) Support	This feature provides loop maintenance for the new D Channel Handler (DCH) cards in the ISDN Line Trunk Controller (LTCI). The feature allows determination of loop status for maintenance purposes, identifying such situations as P-side peripherals, DCHs, DS-30A link carrying D channel, or subscriber loop being put into or taken out of service, busied, or seized for maintenance. DCH continuity text, loop diagnostic test, and loop maintenance messaging have been enhanced, so that the MAP displays loop information such as the DCH and the channel number. In addition, operational measurement (OM) data for the D channel are collected and passed to the OM system for storage and display. Also included is the ability to view the new ISDN Signaling Processor (ISP) statistics through the MAP.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0292	ISDN LTC Peripheral Module Maintenance I	This feature provides the basic maintenance support and office data modification procedures for the ISDN Line Trunk Controller (LTCI) and the ISDN Line Group Controller (LGCI) from the central controller and the Maintenance and Administration Position (MAP). These maintenance activities result in "load," "test," "busy," "return to service," and the query commands of the LTCI/LGCI from the MAP.
	14	NI00007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0446	ISDN LTCI-ISDN SP GEFNET and PMDEBUG interface	This feature allows maintenance personnel to access the PMDEBUG function through GEFNET or the Central Controller (CC). It also allows the access to be switched from the ISDN Signaling Processor (ISP) to either the Signal Processor (SP) or the Master Processor (MP) of the LTCI. GEFNET is a local area network used to debug the XMS-based Peripheral Module system.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0487	ISDN LTC—ISDN User Part (ISUP) Audit Enhancements	This feature enhances the audit capability of the ISDN Signaling Preprocessor (ISP) card in the ISDN Line Trunk Controller/Line Group Controller (LTC/LGC) in the following ways. • Provides an audit function for the Inter-Processor Communication (IPC) buffer to collect IPC buffers that have been lost because they have not been released by the user. This feature returns those lost buffers to the free buffer pool. • Provides IPC-message tracing in the ISP, allowing the tracing of IPC messages floating between the ISP and the rest of the IPC system.

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			NIÖ ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0945	ISDN OAM LAPB/LAPD Configuration	This feature provides hardware configuration control from the DMS Maintenance and Administration Position (MAP), further reducing dependency on DPN technology. With this feature, LAPB/LAPD processing elements (PEs) can be configured in the ISDN DPN Packet Handler by datafilling the Access Module/Resource Module (AM/RM) configuration in a new DMS table called PHINV. LAPB/LAPD information datafilled in PHINV is downloaded to the DPN Packet Handler via the OAMP when the AM/RM is returned to service from the PH MAP level.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0956	ISDN OAM Processor MAP Level and OAM&P Downloading	This feature enables the DMS to recognize the OAM Processor (OAMP) as a DMS peripheral for maintenance purposes, and to download OAMP software during commissioning and rebooting of the OAMP. The MAP operator can post the OAMP and perform operations similar to those done for other peripherals. The user is given a hierarchical view of the OAMP. The operator can enter a given level through MAP commands. The MAP command interface provides, for the OAMP: Real time updates (at one minute intervals) to indicate current node status. Simultaneous support for multiple operators at the same MAP level. (However, only one operator at a time is permitted to perform critical maintenance actions.)
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0302	ISDN OAM Session Service Manager	These features allow services to be provisioned for packet data terminals through the SERVORD system just as they are for telephones and other circuit-switched devices. The following capabilities are provided: Interworking in the OAM Processor for service provisioning in the Exchange Termination portion of the DMS ISDN node, which handles circuit-switched services, and the Packet Handler, which handles packet-switched services (AJ0302). Co-existence of Packet Handler configuration functions, performed by the Network Administration System (NAS) and X.25 service provisioning functions, performed by the OAM Processor (AJ0493). Integrated service provisioning through an Operations Support System (OSS) or Maintenance and Administration Position (MAP). Provisioning orders for packet devices are accepted from the OSS or MAP and translated into a form usable by the PH (AJ0397). Decoding, manipulation, and validation of PH master configuration files (MCFs) by the OAM Processor (AJ0398). MCFs contain all provisioning information for the Access Module component of a PH. Uploading and downloading MCFs between
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, lesting capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0605	ISDN Packet Handler AM/RM Maintenance	This feature provides DMS maintenance for the DPN Packet Handler (PH) by adding a new PM MAP level for the DPN Packet Handler. Maintenance requests for the PH are sent to the OAM processor, which validates the commands and then passes them to the DPN Packet Handler, where they are executed. The results of the tests are returned to the OAM Processor and then to the DMS for display on the MAP. The NAS Coexistence feature allows service datafill from the MAP to coexist with the PH hardware configuration performed through NAS with the PHMERGE command. This feature provides a MAP equivalent to the PHMERGE command. It does not replace PHMERGE, but allows its functions to be performed from the MAP as well as from NAS. It provides on-screen feedback concerning the result of the command and the log supplied by PHMERGE to the DMS system when the command is successfully completed. Required processing is done by OAMP-resident software. The LOADPM command in the PH MAP level merges PH data datafilled from both SERVORD and N
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0957	ISDN Packet Handler NAS Activation from MAP	The NAS Coexistence feature allows service datafill from the MAP to coexist with PH hardware configuration performed through NAS with the PHMERGE command. This feature provides a MAP equivalent to the PHMERGE command. It does not replace PHMERGE, but allows its functions to be performed from the MAP as well as from NAS. It provides on-screen feedback concerning the result of the command and the log supplied by PHMERGE to the DMS system when the command is successfully completed. Required processing is done by OAMP-resident software. The LOADPM command in the PH MAP level merges PH data datafilled from both SERVORD and NAS into one Master Configuration File and activates the datafill in the PH.

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	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ1230	ISDN Upgrade to G.27 Service Data	This feature enhances ISDN OAM to include support for DPN G.27, allowing the provisioning of LAPB and LAPD lines on a PH running G.27, G.26, or G.25.
14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0634	ISP/DCH Diagnostic Enhancements	This feature increases the robustness and reliability of the ISDN Line and Trunk Controller (LTC) by addressing diagnostic and audit enhancements to the ISDN Signaling Preprocessor (ISP) and D Channel Handler (DCH) software loads.
14	NI000007	NIO ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1674	Layer 1 Performance Monitoring for 2B1Q Loops	Layer 1 performance monitoring allows service provider craft personnel to set different threshold values and assign these to ISDN 2B1Q loops for block errors, erred seconds, severely erred seconds, and erred second history. The feature also allows the setting of the Common Date and Time Reference, which controls the updating of performance-monitoring parameters.
14	NI000007	NIO ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AQ0788	Layer 2 High Protocol Abnormality Rate—CC	Together, these features allow querying of the Layer 2 error counts of either a single ISDN line on an XPM or of all the ISDN lines on the XPM. They also allow the error counts for a line or all lines to be reset. Every 24 hours, the CC requests the Layer 2 counts for all ISDN lines. When this request is made, a Layer 2 error threshold value is sent down with the request. Alarms are sent to the CC for each ISDN line for which the total Layer 2 abnormality count exceeds the threshold value. These features are part of the TR-TSY-000475 compliance program.
14	NI000007	NIO ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0601	LCME Connection and Time Division Multiplexer Control	Previously, ISDN channels were nailed up in the Bus Interface Card (BIC). With this feature, channels are dynamically assigned on a per call basis.

Change In Issue 2					1st NCS	Enh	Repl Ord				
	Ann	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
	14	NI000007	NIÖ ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AC0569	LCME Diagnostics	This feature provides the diagnostics for the Enhanced Line Concentrating Module (LCME). The diagnostics are based on the ISDN LCM diagnostics. The hardware for the 2B1Q LCM is packaged in a dual shelf arrangement supporting eight enhanced line drawers. Each shelf contains four line drawers and common equipment consisting of two power supplies, one processor, and two DCCs. A standard DMS frame can support two LCM modules, along with a cooling fan, a frame supervisory panel, and two ring generators. The line drawers of the 2B1Q LCM provide the main physical difference between it and the AMI LCM. They allow the connection of 60 tip and ring leads, as opposed to the 48 allowed with the AMI LCM. This increase is accomplished by providing space for 60 single slot line cards. The new point-of-use power supply (PUPS) also resides within the line drawer and occupies the equivalent space of four single slot line cards. The 2B1Q LCM initially supports ISDN lines only. The following line types are supported: POTS line cards. Meridian Business Set cards. ISDN 2B1Q U-Interface cards. ISDN T Interface cards. Datapath cards. The
	14	NI000007	NI0 ISDN Base	This feature provides the functionallity which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AC0567	LCME Drawer Control Task and Hardware Interface	This feature provides 2B1Q line drawer functionality for 2B1Q line cards and the 2B1Q ISDN Line Concentrating Module.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AC0604	LCME TDM Dump and Restore Procedures	This feature provides software to support the dump and restore of new 2B1Q LCME Time Division Multiplexing (TDM) data during a software upgrade. Hardware is required for the operation of this feature.
	14	NI00007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AC0520	LCMI Software Support for POTS Line Cards	This feature provides the ISDN Line-Concentrating Module (LCMI) software necessary to allow it to support POTS line cards as well as ISDN, Datapath, Meridian Business Set, and Integrated Bit Error Rate (IBERT) line cards. This feature provides the following capabilities for POTS line cards in the LCMI: Interface for diagnostics and maintenance, Ringing control, Hook-state supervision, Cadencing of tones. See XPM/CC Support for POTS Line Cards in the LCMI (F7499) for more information about the support of POTS line cards in the LCMI.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AL1629	Link Reconfiguration for XPMs with Special Connections	This feature allows the craftsperson to reconfigure special ISDN connections with a single table change. The change can be performed while the LGC/LTC is in service; the two ends of the connection can be to the same LGC/LTC or to two different LGCs/LTCs.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name NIO ISDN Base	Order Code Description This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	RIs 5	RIS	MD Ris	Code	PCID	ACTID AL0680	Feature Name Loop Maintenance for ISDN Line Card	Feature Description This feature: allows identification of the ISDN line card (NTBX25AB) in the DMS ISDN environment by providing datafilling capability, allows the ISDN line card to be identified at the Line Test Position (LTP) level of the Maintenance and Administration Position (MAP), and enables all loop maintenance features for ISDN line cards, such as DIAGNOSTICS, BUSY, RTS, BERT, etc.
	14	NI000007	NIO ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1040	Loop Maintenance for ISDN S/T Line Card	The ISDN S/T line card allows ISDN terminals to terminate directly on the line card without an intervening NT1. It is a two-slot line card that plugs into a standard LCMI drawer. This feature provides the following line-maintenance functions for the ISDN S/T line card: Loopback set, release, and query, D Channel Handler (DCH) continuity test, Central-office relay operate and release, Bit Error-Rate Testing (BERT), Test Signal (TstSgnl), a 96 KHz/second test tone, Terminal Endpoint Identifier (TEI) management, Busy and Return to Service (RTS), Diagnostic
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1667	LTC Performance Tool Enhancements for ISDN	This feature enhances the central controller performance software and adds Custom Local Area Signaling Services (CLASS) to the ISDN version of the LTC/LGC load. If the LGC/LTC contains the ISDN Signaling Preprocessor (ISP), then the PM activity performance tool measures the CPU occupancy of the ISP.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0369	LTCI Call Processing Integration	This feature provides Basic Rate Access (BRA) call processing in the ISDN Line Trunk Controller (LTCI) and coordinates the use and maintenance of the logical links provided by the D Channel Handler (DCH). Key capabilities include: providing interface to and control of the DCH, enabling communication between the DCH and the LTCI, and providing Terminal Endpoint Identifier (TEI) check and restoration as part of the link reestablishment audit.
	14	NI000007	NIO ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0475	LTCI OM Collection and Reporting	This feature permits the LTCI to accept operational measurement (OM) requests from the central controller (CC), to collect information on D channels and Bd channels, and to return the OM data to the CC for storage and processing.

Change In Issue 2			Orden Orde Name	Orden Orde Description	1st NCS RIs	Enh RIs	Repl Ord MD RIs Code	PCID	ACTID	Feature Name	Factor Description
			Order Code Name NIO ISDN Base	Order Code Description This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NL1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5	KIS	MD KIS Code		AC0528	Trunks	Feature Description This feature enables the ISDN Line Trunk Controller (LTCI) to handle DS-1 based digital trunks using A/B signaling and to perform SWACT activity successfully.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AC0371	LTCI Warm SWACT	This feature enhances the robustness of ISDN applications by providing a warm switch of activity (SWACT) capability for the ISDN Line Trunk Controller (LTCI). LTCI warm SWACT is accomplished by continuously synchronizing data between the duplicate units of the LTCI. If one unit develops problems, the other unit assumes processing tasks with only a minimal loss in service.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AC0576	LTCI—ISDN Basic Rate Interface Overload Controls	This feature integrates the handling of ISDN lines into the present overload handling scheme for POTS and business set lines in the ISDN Line Trunk Controller/Line Group Controller (LTC/LGC), helping to ensure the stability of the peripheral in overload situations.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AL1588	Metallic Testing for 2B1Q Loops	This feature provides the software necessary to perform metallic tests for 2B1Q loops and line cards. The ISDN 2B1Q line card has test access relays that allow: looking into the line card, looking out to the NT1, and bridged access from the metallic test access bus. This feature requires the use of the Multiline Test Unit (MTU), which is being introduced to the U. S. market in conjunction with this feature. The MTU consists of two circuit packs—NT2X10BA and NT2X11BA—and provides two measurement ports by means of two separate tip and ring appearances.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AC0377	Multiple Calls per DN for Functional Terminals	This feature allows a single directory number (DN) to support up to 15 simultaneous call appearances. Each call appearance can be placed on hold or retrieved individually, providing a more flexible service offering than was previously available with traditional Centrex call waiting. The telephone operating company can control at subscription time the number of calls allowed to be supported on a DN key. This feature is based on Bellcore standardized ISDN Additional Call Offering (TR-TSY- 857).

Change In Issue 2					1st NCS	Enh		Repl Ord				
	Ann	Order Code	Order Code Name	Order Code Description	Ris		MD RIs		PCID	ACTID	Feature Name	Feature Description
			Ni0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5			Code		AJ0165	Multiple Directory Numbers	This feature allows up to 64 directory numbers to be assigned to an ISDN functional signaling terminal. Multiple Directory Numbers aligns with Bellcore's standardized Electronic Key Telephone Service (EKTS), TR-TSY-000205.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0426	Funct Terminal	This feature delivers the name of the calling or called party to a functional terminal on incoming and outgoing calls, respectively. The names displayed are those datafilled through service order to correspond to particular directory numbers (DNs). Previously, only the DNs of incoming and outgoing calls could be displayed. This feature also provides information on redirected calls. For example, this feature delivers to the terminal to which a call is forwarded the name of the caller, the name and number of the party originally called, and the reason for the call forward (CF) (e.g. the line is busy).
	14	NI00007	NI0 ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0576	NCS Pass Through	This feature represents the first step in the integration of packet handler maintenance into the DMS maintenance system. It allows access to the Packet Handler's Network Control System (NCS) and all its functions from the MAP terminal, thus reducing the number of terminals required to perform ISDN maintenance. The ability to access NCS from the MAP will still be available. For NCS access, the user simply types in the "NCS" command with a destination mnemonic for the packet handler, and then enters a password and ID number.
	14	NI000007	NI0 ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1316	No Test Trunk Access for ISDN Lines	This feature enables the No Test Trunk (NTT) interface to work on ISDN 2B1Q and AMI U-interface loops. Access to these ISDN lines is supported for test equipment conforming to the NTT require-ments listed in Bellcore LSSGR TR-TSY-000536. Therefore, existing test system controllers/remote test units are allowed to access the ISDN loops and to execute metallic testing. These systems do require modification, however, to detect the appropriate conditions on an ISDN loop.
	14	NI00007	NI0 ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0304	Packet Handler Data Table and Audit	This feature helps bring X.25 provisioning into the SERVORD system by creating a data table (PHINFO) that contains the X.25 service configurations for logical packet terminals on a DMS. PHINFO can be manipulated from the MAP. In addition, the audit function ensures the integrity of the data in PHINFO by checking for corrupted or mismatched data.

Change In Issue 2					1st NCS	Enh	Repl Ord				
1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
			NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AJ0303	Packet Handler Server	This feature enables the Exchange Termination portion of the DMS ISDN node to communicate over an X.25 Network Operations Protocol (NOP) link with the OAM Processor.
			NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					POTS, MBS, EBS, and Datapath on LCME	These features allow the LEC to support line cards for POTS, Meridian and Electronic Business Sets, and Datapath Service on the Enhanced ISDN LCM. They also provide XPM software to support Layer-1 performance monitoring of the ISDN 2B1Q subsystem. The new software is based on the same functions on standard LCMs with the exclusion of ANI and Coin. It enables the Enhanced ISDN LCM to: • interface to the POTS/EBS/MBS/Datapath/IBERT line cards for maintenance and diagnostic control purposes, • interface to the ring generator for maintenance and diagnostic-control purposes, • control ringing of a POTS set, and • supervise the hook-state status of a POTS set.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AJ0812	Progress Indicator/Cause Compliance	This feature provides compliance to TR-268 specified Progress, Cause, and Signal Information Elements, which provide ISDN terminals with information about calls as they progress towards completion. This information can then be displayed to the customer by the ISDN display terminal. Progress Information—This information is useful whenever a call leaves the ISDN environment. With this information, the ISDN customer understands that ISDN information such as Bearer Capability will not be communicated to the called party; thus, the call can proceed as though it were a POTS call. Location information—Location information indicates where in the network the call left the ISDN environment (e.g., in the serving local exchange carrier [LEC] network, the InterLATA carrier's network, the serving international network, or the customer's private network). Cause Information—Cause information is provided to ISDN terminals to inform them (for example, on the display of an ISDN business set) of the reason that a requested call or service could not be provided. Following are some examples of causes for service rejection: The requested service has not be
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AJ0301	Query ISDN Terminal Command	This feature creates a new CI command—Query ISDN Terminal (QIT)—that displays all X.25 and circuit-switched service parameters associated with a particular ISDN logical terminal.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5				AF2124	RCCI XPM SPECCON II	This feature provides central controller (CC) support so that dynamic trunk and intraswitch connection resources can coexist with ISDN connections in the ISDN Remote Cluster Controller.

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			Order Code Name	Order Code Description This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	RIs 5	RIS	MD RIS	Code	PCID	ACTID AF4839	Feature Name RSC-S Digital Test Access	Feature Description This feature provides Digital Test Access (DTA) equivalency on the Remote Switching Center-SONET (RSC-S).
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AQ1195	RSC-S Layer 2 Protocol Abnormality	This feature provides ISDN host equivalent Layer 2 protocol abnormality and performance monitoring on the RSC-S, in compliance with National ISDN requirements.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL0942	S/T ISDN Line Card XPM Interface	This feature enables the ISDN Line Group Controller (LGCI) to monitor and control the S/T–ISDN Line Card (NTBX26AA) and the S/T bus.
	14	NI000007	NIÖ ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL0955	S/T Line Card Diagnostics	This feature enables the provisioning and maintenance of the S/T–ISDN Line Card (NTBX26AA). The S/T–ISDN Line Card eliminates the requirement for the ISDN U Line Card and a customer premises-located Network Termination 1 (NT1) for ISDN loops of less than 3,280 feet (one kilometer). This reduction in hardware on short loops can enable a significant reduction in costs when a DMS Remote is placed on or near customer premises and is used to deliver ISDN Basic Rate Access.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0162	Service Order Enhancements for Funct. Terminals	This feature improves service order operation for datafilling a functional terminal. The following enhancements are provided by the feature: • The command SLT ADD now prompts for the following information: - Maximum number of keys on the set - Release Key - Dynamic Terminal Endpoint Identifier (TEI) - Service Profile Identifier (SPID) - Authorized Bearer Service - LTCLASS - Electronic Key Telephone Service (EKTS)

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	Ann	Order Code	Order Code Name	Order Code Description	RIs		MD RIs		PCID	ACTID	Feature Name	Feature Description
			NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5			Unite		AJ0305	SERVORD Enhancements for ISDN	This feature, in conjunction with the feature Packet Handler Data Table and Audit (AJ0304), delivers integrated packet/circuit service provisioning from the MAP. In addition, improvements have been made to the ISDN SERVORD system that simplify the SLT ATT command and incorporate the management of special connection (SPECCONN) table entries into the SLT ATT and SLT DET commands.
	14	NI000007	NIO ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL1294	SPECCONN Network Connections	ISDN uses special connections (SPECCONN) to provide B-channel packet connectivity to the Packet Handler and to link D channels as they originate on the 2B+D loop to the D-Channel Handler (DCH) card. In general, special connections are permanent, or "nailed up," two-way connections between endpoints in DMS peripheral modules (i.e., XPMs) such as the ISDN LGC. Special connections can be used to provision a private line circuit through the DMS for end user communication applications using ISDN, Datapath, etc. This feature provides the following enhancements: Allows special connections between endpoints on different peripherals. Allows special connections that terminate not only on ISDN Line Group Controllers (LGCIs), but also on Digital Trunk Controllers (DTCs), ISDN Digital Trunk Controllers (DTCIs), Line Trunk Controllers (LTCs), and LGCs. LGCs, in this capacity, are used as host to Remote Cluster Controllers (RCCs).
	14	NI00007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0425	Status Enquiry Support	In the event of a D-Channel Handler (DCH) Switch of Activity (SWACT), this feature queries the status of a call and restores the call if required. During a link reset or failure this capability is necessary, because one or more call-control messages may have been lost, and the network's view of a call's status might not match the view of the terminals involved in the call. This feature complies with TR-268.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0380	Table Control for Functional Signaling	This feature provides the datafill and data query enhancements required to support ISDN functional-signaling terminals. These enhancements include the following: The maximum number of functional terminals supported on a single Basic Rate Access (BRA) loop is increased from one to eight. The Authorized Bearer Services parameter is introduced, which corresponds to the Call Type parameter specified in Bellcore TR-TSY-000268, December 1988, Issue 2. This parameter allows Bearer Capability to be assigned on a logical-terminal basis. The Query Logical Terminal (QLT) command now displays the Logical Terminal Class (LTCLASS) and Bearer Service Restrictions for a queried terminal.
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AF3604	TR-268 (Basic Call) Terminal Portability Compliance	This feature advances compliance with Bellcore TR-TSY-000268 Issue 3. The following ISDN terminal portability issues are addressed by this feature: • Handling out-of-sequence information elements • The use of timer T303 upon receipt of a CALL PROCeeding message • The default values of timers T303 and T310 • Handling of status-enquiry procedures • Handling of nonlocking-shift procedures • Handling of restart procedures • This feature also implements compliance with CCITT standards for the following issues: • Coding of the connected number information element identifier • Optional Protocol Version Names

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			NI0 ISDN Base	This feature provides the functionallity which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AJ0814	Low Layer Compatibility	This feature provides compliance to TR-268-specified information elements that communicate calling and called party subaddress information. Compliance is also provided to the information elements that communicate information about the type of call being made. This information is in addition to the call's Bearer Capability. Subaddress Information—The Subaddress Information Element contains additional address information beyond the directory number (DN), allowing flexibility when a called ISDN DN address has multiple Data Terminal Equipment (DTE) devices associated with it. Potential applications using subaddress information include an ISDN Local Area Network (LAN) gateway configuration with several PCs, printers, or file servers connected to it. The ISDN LAN gateway could map the subaddress information to a device address on the LAN. In another instance, an ISDN Terminal Adapter (TA) can connect to several ports on a mainframe computer, and the subaddress information are used to select a particular data port. High Layer and Lower Layer Compatibility Information—These two information elements contain inform
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AR0043	TR-847 Compliance for FA in Setup Message	This feature enhances DMS support for the feature-activation protocols specified by TR-847, ISDN Features—Common Switching and Signaling Generic Requirements, Issue 1, December 1988, for the following ISDN BRI supplementary services: • ISDN Call Pickup (in compliance with TR-854 ISDN Call Pickup, Issue 1, December 1988) • ISDN Call Forwarding (in compliance with TR-853 ISDN Call Forwarding, Issue 1, December 1988) • ISDN Electronic Key Telephone Service (in compliance with TR-205 ISDN Electronic Key Telephone Service, Issue 1, December 1988) • ISDN Flexible Calling (in compliance with TR-858 ISDN Flexible Calling for Managing Multiple Independent Calls, Issue 1, December 1988) • Automatic Dial Usage • Call Park Retrieval • Call Request Retrieval
	14	NI000007	NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AR0041	TR-847 Compliance: Terminal Initialization/SPID	This activity furthers the terminal portability program by providing compliance with National ISDN-1 terminal initialization standards (Bellcore TR-TSY-000847 Issue 1, ISDN Features—Common Switching and Signaling Generic Requirements). It includes support for the TID portion of the Service Profile Identifier (SPID), the network-initiated initialization procedures, and timer TI-T1.
		NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5						TR-850 BBG Dial Access Compliance	This feature advances ISDN terminal portability by providing DMS support for the dial access procedures specified in TR-TSV-000850. It increases the flexibility of the dial- access procedures available to a functional terminal in an ISDN business group. Specifically, it provides additional support for the keypad (KP), called-party number (CDN), transit network selection (TNS), and operator system access (OSA) information elements. Generation of the signal (SIG), information request (IRQ), and progress indicator (PI) information elements is not changed by this activity.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AL2277	User Assigned Dynamic TEI—XPM	This allows a Dynamic Terminal Endpoint Identifier (TEI) to be specified from an ISDN terminal rather than from the switch. This feature allows the assignment of Terminal Endpoint Identifiers (TEIs) by the user for SAPI 0 (Service Access Point Identifier) services, the SAPI reserved for ISDN Call Control messages. Users can assign a TEI, from their terminal equipment, for SAPI 0 services in the subrange 0 through 63 inclusively. This development meets Bellcore requirements as defined in TR-TSY- 000793. This feature represents a step toward ISDN terminal portability on the DMS.

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			NI0 ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0568	XPM 2B1Q Loop Maintenance Interface	This software supports ISDN LTC/LGC maintenance messaging for 2B1Q standardized line coding.
	14	NI000007	NIO ISDN Base	This feature provides the functionalilty which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AQ0671	XPM Layer 2 Transmission Performance Monitoring	These features allow the craftsperson to query and reset peg counts for the D channel of BRI lines. They also generate a daily report on the percentage of erred and retransmitted frames for the entire switch. The report also includes logs for lines exceeding transmission-error thresholds. These developments satisfy TR compliance for TSY-000475—Section 5.4.5.1—on transmission requirements.
	14	NI000007	NIO ISDN Base	This feature provides the functionality which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Intervorking with Nortel'S DNP Packet Handler.	5					AC0531	XPM Support for D Channel Handler Sparing	This feature allows N+1 sparing of DCH cards in the ISDN Line-Group Controller (LGCI)/ISDN Line Trunk Controller (LTCI). With N+1 sparing, traffic in DCH cards that must be taken out of service or dropped due to the detection of faults is automatically switched to a spare DCH card, and service is maintained.
	14	NI000007	NIO ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AQ0695	XPM Support for LCME POTS & 2B1Q L1 Performance Monitoring	These features allow the LEC to support line cards for POTS, Meridian and Electronic Business Sets, and Datapath Service on the Enhanced ISDN LCM. They also provide XPM software to support Layer-1 performance monitoring of the ISDN 2B1Q subsystem. The new software is based on the same functions on standard LCMs with the exclusion of ANI and Coin. It enables the Enhanced ISDN LCM to: • interface to the POTS/EBS/MBS/Datapath/IBERT line cards for maintenance and diagnostic control purposes, • interface to the ring generator for maintenance and diagnostic-control purposes, • control ringing of a POTS set, and • supervise the hook-state status of a POTS set.
	14	NI000007	NIO ISDN Base	This feature provides the functionalility which is required to support National ISDN services for both Basic and Primary Rate applications. This feature provides the software infrastructure to support NI-1 services including ISDN basic access and advanced signaling, ISDN and Packet Handler operations, administration, and maintenance, testing capabilities for Basic Rate Interface (BRI), and Basic support for interworking with Nortel's DPN Packet Handler.	5					AC0519	XPM/CC Support POTS Line Cards in the LCMI	This feature provides the XPM/CC software necessary to allow the ISDN Line- Concentrating Module (LCMI) (NTBX31AC) to support POTS line cards as well as ISDN, Datapath, Meridian Business Set, and Integrated Bit Error Rate (IBERT) line cards. The LCMI consists of two shelves, which together support eight line drawers. Each of these physical line drawers can be further divided into three maintainable entities known as 'logical' line drawers. Therefore, each dual-shelf LCMI consists of 24 logical line drawers. Each logical line drawer has 16 card slots for a total LCMI line-card capacity of 384. This feature provides the following capabilities: Up to 16 POTS line cards cards). POTS cards can be mixed in the same logical line drawer with line cards for Meridian Business Sets, Meridian Data Units, and IBERT. ISDN and non-ISDN line cards can be pixed will he POTS cards in the LCMI. Ringing generator information is displayed on the PM MAP level for the LCMI. And the ringing generator's material statement is the PM MAP level for the LCMI, and the ringing generator's material statement is the provide on the PM MAP level for the LCMI.

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			NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					3WC/Call Transfer Using ISDN Flexible Calling	This feature provides ISDN Three Way Calling and Call Transfer capabilities as specified in Bellcore document TA-TSY-000858 "ISDN Flexible Calling for Managing Multiple Independent Calls." The ISDN user accesses the Three Way Calling (3WC) capability by pressing the 3WC key and joining additional calls into the conference. In addition, the ISDN user can hold or retrieve the conference, drop the last call added to the conference, or invoke a transfer of the conference. When the conference originator transfers the conference, he or she is disconnected from the conference while the other parties remain conferenced in. Up to three parties—any mixture of ISDN and non-ISDN stations—can be conference dogether with this feature. Larger conferences of up to 30 parties are planned to be available when this feature is enhanced and the new Large Conference Flexible Calling feature is offered. The feature provides the ISDN equivalent version of the Meridian Digital Centrex Three- Way Calling/Call Transfer feature and can be deployed transparently in a multivendor, multinode environment.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5				AG1709	Basic Rate Interface to Enhanced Service Providers	Enhanced Service Providers (ESPs), who sell opinion polling services, information services, voice mail, pay-per-view cable television, and 900/976 services to subscribers, are becoming a lucrative new market for the local exchange carrier (LEC). These ESPs require Open Network Architecture (ONA) interfaces between the LEC and the ESP for calling number delivery and other information. Northern Telecom's INFO+ service enables the LEC to offer its customers LATA-wide Calling Line ID prior to the deployment of CCS7 using Basic Rate Interface (BRI).
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5				AN0189	CLASS on ISDN	Custom Local Area Signaling Services (CLASS) on ISDN can be implemented using standard ISDN features such as calling number delivery available through NI-1 for the ISDN set, coupled with ISDN CLASS features listed below: Customer-Originated Trace (COT) allows ISDN subscribers who have received a harassing or prank call to activate an immediate trace of the last incoming call, without requiring prior approval and costly manual intervention by service provider personnel. A subscriber who wishes to trace a terminated harassing or prank call goes off-hook, receives dia tone, and then dials the COT activation code. Information about a traced call is made available to the network provider-designated agency, and not to the subscriber who initiated the trace. Because COT is activated on a per-call basis, the service (SCA) uses the Screening List Editing function to store up to 31 DNs
			NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					Flex Call / 911 Interworking	This software provides an enhancement to Flex Call that allows interworking with 911 operators. It allows a Flex Call (FC) controller to bridge a Basic 911 (B911) or Enhanced 911 (E911) call to an FC conference if that call is routed over an Emergency Service (ES) line, an ES trunk, or an OP trunk assigned the TERMHOLD option. Prior to this software, these 911 calls were considered "FC Blocked" and could not be bridged to a conference. An E911 call routed through an E911 Virtual Facility Group (VFG) cannot be bridged to an FC conference; these VFG calls remain blocked. Once a 911 call is bridged to a Flex Call, the Flex Call/911 Interworking feature is activated and the conference controller is subject to any applicable B911/E911 functionality, such as ringback or the call-clearing control features ORIGHOLD and TERMHOLD. Note: ORIGHOLD and TERMHOLD are synonyms for the same feature that allows the called party to control call clearing. When either of these features is active, the call connection is maintained until the called party goes on-hook. If the calling party goes on-hook, the clearing request is ignored. ORIGHOLD
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5				AF4847	ISDN 3-Way Calling/Flexible Calling Chaining	This software provides an enhancement Flexible Calling by allowing a non-controlling party in an existing Flexible Calling conference to place the existing conference on hold, establish a second conference with a non-ISDN terminal (POTS, Meridian Digital Centrex, or CLASS), and connect both conferences together. This action can be repeated by any of the non-controlling parties in the conference, building an extensive Flexible Calling chain.

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	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AQ0779	Call—Notification Busy Limit	This feature allows customers to define how many call-waiting calls can be offered to their sets. In general, ISDN Additional Call Offering allows ISDN subscribers to have multiple appearances of the same directory number on each ISDN terminal. Even when busy on one appearance, the subscriber can receive additional calls and make outgoing calls on the other call appearances. This feature allows users to define—at subscription time—a threshold that specifies how many call-waiting calls can be simultaneously offered to the call appearances of a DN on their sets. This threshold is called the Notification Busy Limit. When the number of calls waiting against a user is equal to the Notification Busy Limit, any calls that are subsequently offered are treated as a busy call (i.e., given busy tone or forwarded if call forward, busy applies). In this scenario, the user would be able to use those idle appearances for outgoing calls.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AR0038	ISDN Call-Appearance Call Handling	This feature lays the foundation for the Call-Appearance Call Handling (CACH) option for MADN EKTS. CACH provides an optional D-channel protocol mechanism to allow calls to be directed on the basis of Call Appearance rather than DN. This will allow an ISDN terminal to support multiple call appearances of the same MADN and have more than one active call at the same time. This feature provides only the platform for this capability—the offering of the Call Appearance information element when the CACH feature is assigned for a particular terminal. Full CACH capability (having more than one call active simultaneously) is not provided by this feature. This feature is part of the compliance program for National ISDN-1 standards for terminal portability. CACH protocols are used to provide MADN SCA capabilities for standard ISDN sets.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AQ0734	ISDN EKTS—Abbreviated/Delayed Ringing	This feature enhances ISDN Electronic Key Telephone Service (EKTS) by providing more flexible ringing options for standard-feature ISDN lines with EKTS MADN Single- Call Arrangement (SCA). The types of ringing provided are: Always—The call appearance rings as soon as a call terminates on the DN, and continues until the call is answered or abandoned. Never— The call appearance never rings. Abbreviated—The call appearance rings until a MADN Ring Forward timer expires. The call then begins to ring on another group of call appearances of the same DN that have been assigned the delayed ringing option (see below). This type of ringing can also be activated manually. Delayed—Call appearances with the delayed option begin ringing when the MADN Ring Forward Timer expires. For example, in an executive/secretary configuration in which a MADN appears on both the executive's set and the secretary's set, the executive may want calls to that DN to ring only on her own set initially, so that she can have the choice of taking the call or not. The executive would have had the abbreviated option assigned to her call appearances. If
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AQ0733	ISDN EKTS—Key Short Hunt	This feature enhances call coverage by delivering key-set short hunt for standard- feature ISDN voice terminals. Key Short Hunt is normally assigned to multiple call appearances on a single ISDN set to cause calls incoming to that set—and encountering a busy DN or one with Call Forward, All Calls activated—to hunt once through the appearances in search of an idle one. For example, in the executive/secretary configuration depicted in the figure below, the executive has a private extension (1003)—with a total of three appearances—and two MADN DNs that also appear on her secretary's set (3001, 3002). The Short Hunt group comprises—in order—DNs 1003, 3001, and 3002. If a call comes in to 1003—and all the appearances of that DN are busy—the call will attempt to terminate on DN 3001, and then 3002. Since these are MADNs, these DNs will also ring on the secretary's set. The hunt will not start again at DN 1003.
	14	NI00008	NIÙ NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AQ0735	ISDN EKTS—Secondary MADN Member CF Programming	This feature allows secondary MADN members to forward the MADN DN without having to use the primary MADN member's set,—an arrangement particularly important for executive/secretary configurations. With this feature, the MADN DNs that reside on the executive's (i.e., the primary MADN member's) set can be forwarded from the secretary's (i.e., the secondary MADN member's) set. Thus, when the executive is busy or out of town, the secretary can forward that number from any set without having to use the executive's telephone.

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			NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5						ISDN Flexible Calling—6/30 Port Conferencing	Prior to this feature, the ISDN subscriber could initiate only a conference with a maximum of three parties. This feature now allows ISDN subscribers using the standard ISDN feature set to initiate conference voice calls with a maximum of 30 conferees. The LEC can specify at subscription time whether the user will be able to initiate conferences with the maximum of 3 through 30 conferees. This feature also increases the level of compliance to Bellcore TR-858, "Flexible Calling for Managing Multiple Independent Calls." In compliance with that TR, a drop request on a two-party conference will now idle both parties. Previously, a drop request on a two-party conference simply released the conference bridge and maintained the two-party connection.
	14	NI00008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AF3244	ISDN Flexible Calling—Three-Way Call Chaining	This feature enhances Three-Way Calling through ISDN Flexible Calling. It allows a non-controlling party in a three-way voice call (a party other than the one that initiated the conference call) to place the conference call on hold and dial another party. When the new party answers, the non-controlling party can either place the new call on hold and toggle back and forth between the two calls, or take the conference call off hold and thus add the new party to the conference call. In effect, multiple three- port conferences are chained together to form a large conference call.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5						ISDN Supplementary Services Compliance	This package provides terminal portability for Bellcore TR Supplementary Services.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AG1342	MADN Single Call Arrangement	This feature, part of Northern Telecom's implementation of Bellcore's standardized services, allows ISDN functional signaling terminals: • to share directory numbers with ISDN and non-ISDN sets (MADN SCA capability), and • to bridge another MADN member into an established call or invoke the privacy option to deny a bridging attempt.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BR)) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AF3554	Miscellaneous Terminal Portability	This feature causes the terminal picking up a call to get the number of the person that the call was originally destined for (Called Number) as well as the called sub-address. It advances National ISDN-1 terminal portability standards as described in TR-TSY- 000854 Issue 1, ISDN Call Pickup.

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1	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
	14	NI000008	NIÖ NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AQ0947	Multipoint EOC 1—CC	These features permit digital loopback testing on intermediate elements of ISDN 2B1Q loops and provide modified line diagnostic tests for the central office-located element. This software is part of a phased rollout of support for the multipoint embedded operations channel (mp-eoc) on the DMS Enhanced LCM (Line Concentrating Module). This software provides a messaging interface to determine the mp-eoc configuration on the U-interface 2B1Q loop—and provides a messaging transceiver to exchange mp-eoc maintenance information between an XPM and the mp-eoc repeaters. This permits loopback on the intermediate repeaters and supports bit error rate testing (BERT) on the individual mp-eoc repeater.
	14	NI000008	NIÓ NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AR0179	Name and Reason Display	This enhances the existing Name and Reason feature for standard ISDN by using standard protocol as defined by ANSI and Bellcore, making the feature accessible from any terminal that conforms to the National ISDN-1 standard. Name and Reason Display are available on both intra- and inter-switch calls This basic feature lays the protocol groundwork for sophisticated soft-key display features planned for the near future. The names displayed are those datafilled through service order to correspond to particular directory numbers (DNs). The feature also provides information on redirected calls. Display of this information alerts both originating and terminating parties as to the ongoing status of redirected calls. Depending on the type of redirection (for example, conferencing/transfer, call forwarding, call pickup), an appropriate message is displayed, thereby allowing both parties to respond properly to the call.
		NI00008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5						TR-205 (EKTS) Compliance	This feature implements changes in the ISDN signaling protocol to facilitate terminal portability in compliance with National ISDN-1 standards. It provides compliance with the use of the SIGNAL and CAUSE information elements and the NOTIFICATION indicator as described in Bellcore TR-TSY-000205, Issue 1, ISDN Electronic Key Telephone Service.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AJ0814	TR-268 Subaddress High-Layer & Low-Layer Compatibility	This feature provides compliance to the TR-268-specified Information Elements that communicate calling- and called-party subaddress information. Compliance is also provided to the information elements that communicate information about the type of call being made. This information is in addition to the call's Bearer Capability. Sub- Address Information—The Subaddress Information Element contains additional address information beyond the Directory Number (DN), allowing flexibility when a called ISDN DN address has multiple Data Terminal Equipment (DTE) devices associated with it. Potential applications using subaddress information include an ISDN LAN gateway configuration with several PCs, printers, or file servers connected to it. The ISDN LAN gateway could map the sub-address information to a device address on the LAN. Another example is an ISDN terminal adapter (TA) that connects to several ports on a mainframe computer. Subaddress information can select a particular data port. High Layer and Lower Layer Compatibility Information—These two Information Elements contain information about a call in additi

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	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AG2001		This feature provides compliance to Bellcore TR-444, which allows for the extension of ISDN beyond a single node for network-wide service by mapping ISDN Q.931 loop signaling onto Integrated Services User Part (ISUP) signaling. One of the inherent advantages of ISDN over POTS is ISDN's ability to transport call-related information between ISDN terminals out-of-band over the D channel. TR-444 provides for the end-to-end communication of this information—such as Bearer Capability, High Layer Capability, Low Layer Capability, Call Progress Information, Cause and Signal Information, and Calling Number—over the CCS7 network between compliant central offices as if they were served by the same central office.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AG2211	TR-444 ISUP-BRI Interworking Enhancements	This feature enhances feature AG2001 (above) by providing additional TR-444 compliance. This feature allows this information to be transferred between nodes IntraLATA or InterLATA using the Access Transport Parameter (ATP). For InterLATA calls, parameters set by the operating company indicate whether a particular interexchange carrier (IEC) is allowed to receive this information. In addition, the operating company can decide which incoming information from a particular IEC should be received or discarded.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AR0168	Transfer, and Call Forwarding	This feature enhances Bearer Capability (BC) routing to ensure the BC from the original leg of a call will be used to route any additional legs that are added as a result of a Call Forwarding or Conferencing feature invocation. Before now, when Bearer Capability (BC) routing was used by calls that involved more than one leg, the default bearer capability was always used to route the additional legs rather than the BC of the originating leg.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AJ0811		Translating and routing of a POTS call only requires analysis of the called digits or called address information. ISDN requires routing based not only on the called address information, but also on the Bearer Capability of the call. In addition, ISDN defines two methods for equipment to send called address information to the switch. A calling terminal can send each address digit one after the other (known as overlap sending) or can send the called address information all at the same time (known as enbloc sending). This feature provides: Routing based on Bearer Capability and overlap called address information. Routing based on Bearer Capability and enbloc sending). Discorry Number/Bearer Capability and Environ called address information. Specification of a separate Preferred InterLATA Carrier (PIC) for each calling Directory Number/Bearer Capability pair. Specification of Bearer Capability on a per call basis using dialed access codes.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AG2210	TR-448 ISDN Translation and Routing Enhancements	This feature provides additional TR-448 compliance by extending the TR-448 ISDN routing and digit analysis capabilities to existing DMS INWATS and Virtual Facility Group (VFG) translations. Also, this feature completes TR-448 compliance by allowing a Bearer Capability to be datafilled against an incoming trunk group. For example, incoming "switched 56" trunks could be designated as "data" trunks, allowing the interworking of "switched 56" service with ISDN.
	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5					AF3555	TR-855 Terminal Portability Compliance	This feature advances ISDN terminal portability by enhancing compliance with ISDN Automatic Callback standards in TR-855. Automatic Callback (ACB) is similar to the MDC Ring Again feature, automatically alerting a caller that a previously busy line is idle. ACB causes a NOTIFY message—along with the called DN, the calling DN, and associated subaddress information—to be sent to the originating terminal when the called line is idle. The Bearer Capability (BC) and the calling DN are checked against the BC and calling DN in the NOTIFY message before the recall is allowed.

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			NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5	KIS	MD RIS	Coue		AF3603	TR-860 Terminal Portability	This feature addresses the requirements for ISDN terminal portability as outlined by Bellcore TR-TSY-000860 ISDN Calling Number Identification Services, delivering support for all the Type of Number (TN), Numbering Plan Indicator (NPI), Screening Indicator (SI), and Privacy Indicator (PI) values in Calling-Party Number (CGN) information elements at call origination.
Added	14	NI000008	NIO NI-1 BRI	This feature provides Nortel's National ISDN-1 offering for Basic Rate Interface (NI-1 BRI) and offers simultaneous voice and data applications over existing twisted pair facilities. It provides ISDN Supplementary Services such as Flexible Calling and Additional Call Offering, ISDN Electronic Key Telephone System (EKTS), and CLASS on ISDN.	5	10			12175	AF7200, AF7201, AF7202, AF7202, AF7203, AF7490	ISDN Capacity Enhancement (ICE)	 With the introduction of a new time-switch circuit pack (NTAX78BA), the traffic/line capacity of existing ISDN Line Trunk Controller/ISDN Line Group Controller (LTCI/LGCI) peripherals is almost doubled. NTAX78BA software functionality increases the number of peripheral-side (P-side) ports to 40. The pack also supports direct P-side to P-side connections, eliminating the need to use valuable Core-side (C-side) channels for the time-division multiplexing of connections between the D-Channel Handler (DCH) and Enhanced DCH (EDCH) and Enhanced Line Concentrating Module (LCME). With the number of P-side ports doubled, one LTCI/LGCI can now support two LCMEs (previously, these components had a one-to-one relationship). Efficient resource expansion. By enabling network providers to serve more subscribers with less hardware, the NTAX78BA circuit pack facilitates cost-efficient growth of revenue bases. The improved efficiency reduces floor space needs, power requirements, and overall cost of DMS system ownership. Increased capacity for ISDN services. Expanded ISDN capacity enables network providers to serve more subscribers.
	14	NI000009	NI0 NI-1 BRI Enhanced Mtc	This feature provides the machine-to-machine (TL-1) interface, the human-to-machine interface, and test hardware control required to test and maintain National ISDN lines. It offers ISDN loop qualification and functional test features through the MAP, and introduces Multipoint Embedded Operations Channel (mp- eoc) line maintenance.	5					AL2366	Change Line Maintenance Utilities 2	This feature gives the DMS switch the cost-effective testing infrastructure to support testing of current and future subscriber services. It enables the administration and control of the base DMS switch test environment by allowing line maintenance utilities to be called from Transaction Processing System (TPS) processes.
	14	NI000009	NIO NI-1 BRI Enhanced Mtc	This feature provides the machine-to-machine (TL-1) interface, the human-to-machine interface, and test hardware control required to test and maintain National ISDN lines. It offers ISDN loop qualification and functional test features through the MAP, and introduces Multipoint Embedded Operations Channel (mp- eoc) line maintenance.	5					AL2363	Enhanced ISDN Testing from MAP	This feature allows local ISDN line card and loop testing. From a Maintenance and Administration Position (MAP), the craftsperson can perform presubscription testing, service verification, and trouble segregation on ISDN lines. The feature provides a link to the Integrated Test System Controller (TSC) and Enhanced Services Test Unit (ESTU) from the MAP, enabling access to multimeter measurements, NT1 signature detection, sealing current measurement, cold start test results, 2B1Q loop level measurement, load coil detection, and wideband and impulse noise measurements.

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100UC Z			Order Code Name	Order Code Description This feature provides the machine-to-machine	NCS Ris	Enh Ris	MD RIs	Repl Ord Code	PCID	ACTID AR0596	Feature Name High Speed Testing Interface	Feature Description These features help reduce maintenance costs by providing the capability to
	14	NILLUUUUU	Mitc	This relative provides the man-to-machine interface, and test hardware control required to test and maintain National ISDN lines. It offers ISDN loop qualification and functional test features through the MAP, and introduces Multipoint Embedded Operations Channel (mp- eoc) line maintenance.	5					AK0390		An experience of the STU Master and the ESTU ISDN Test Module from the DMS by a download the ESTU Master and the ESTU ISDN Test Module from the DMS by a MAP CI command (or autonomously if remote attempts fail). The DMS supports the ESTU Master Module and supports the ISDN Test Module in NA002. ESTU delivers the National ISDN-1 test functionality required to properly qualify an ISDN BRI loop for service and/or segregate BRI loop troubles. This software also implements the ESTU ISDN Test Module (ITM) into the DMS in support of ISDN BRI loop testing. The ESTU ITM provides ISDN-specific test functions such as NT1 emulation to verify trouble-detection circuitry in the ISDN line card. Also, this software adds the necessary utilities and target procedures to access the ESTU ISDN Test Module NT0J43AA and the Enhanced Services Test Unit (ESTU) Master Module NT0J42BA.
	14	NI000009	NI0 NI-1 BRI Enhanced Mtc	This feature provides the machine-to-machine (TL-1) interface, the human-to-machine interface, and test hardware control required to test and maintain National ISDN lines. It offers ISDN loop qualification and functional test features through the MAP, and introduces Multipoint Embedded Operations Channel (mp- eoc) line maintenance.	5					AL2358	ISDN TL-1 Line Testing 1	These features enable the network provider's testing operations system (OS) to administer and control ISDN BRI testing through standard Transaction Language 1 (TL-1) commands. The DMS can execute maintenance procedures as directed by TL-1 commands from the OS. They also compile TL-1 commands generated as a result of the maintenance procedures.
		NI000009	NI0 NI-1 BRI Enhanced Mtc	This feature provides the machine-to-machine (TL-1) interface, the human-to-machine interface, and test hardware control required to test and maintain National ISDN lines. It offers ISDN loop qualification and functional test features through the MAP, and introduces Multipoint Embedded Operations Channel (mp- eoc) line maintenance.	5					AL2356	MPC Control Process for X.25 Link	These features provide an interface to ensure that the DMS switch operates smoothly in the network provider's testing operations environment. By making full use of a Bellcore TR-compliant, open interface, this software permits cost effective administration from the testing operations system (OS). The software's DMS Family Transaction Language 1 (TL-1) interface exchanges TL- 1 testing messages, commands, and test results with the network provider's testing operations system. This high degree of intelligent integration provides: • A control process for Switched Virtual Circuits (SVCs) in an X.25 link terminating on the Multi-Protocol Controller (MPC) in NA002 (the Enhanced Multi-Protocol Controller [EMPC] will be required) and • A TL-1 parser to decode/encode routines for the specific TL-1 commands and
	14	NI000009	NIO NI-1 BRI Enhanced Mtc	This feature provides the machine-to-machine (TL-1) interface, the human-to-machine interface, and test hardware control required to test and maintain National ISDN lines. It offers ISDN loop qualification and functional test features through the MAP, and introduces Multipoint Embedded Operations Channel (mp- eoc) line maintenance.	5					AL2367	Standalone ESTU Definition	This software enables integration of the Enhanced Services Test Unit (ESTU) into the DMS test system, improving the test capabilities for current and future services offered on the switch. The ESTU connects to the line to be tested through the Metallic Test Access (MTA) and is controlled by a digital modern in the Maintenance Trunk Module (MTM). These features provide table control to define the location of the ESTU, the MAP level to control the ESTU, and the process for connecting the modern to the ESTU. This software also activates the utilities and gated targets required by the ESTU.
		NI000009	NI0 NI-1 BRI Enhanced Mtc	This feature provides the machine-to-machine (TL-1) interface, the human-to-machine interface, and test hardware control required to test and maintain National ISDN lines. It offers ISDN loop qualification and functional test features through the MAP, and introduces Multipoint Embedded Operations Channel (mp- eoc) line maintenance.	5					AL2361	Test NT1	These features offer new testing capabilities to service provider personnel, including enhanced ISDN testing from a Maintenance and Administration Position (MAP) terminal. Maintenance personnel can complete presubscription testing, service verification, and trouble segregation on ISDN lines. This software provides a link to the integrated test system controller and Enhanced Services Test Unit (ESTU) from the MAP, enabling access to multimeter measurements, NT1 signature detection, sealing current measurement, cold start test results, 2B1Q loop level measurement, Ioad coil detection, and widehand and impulse noise measurements. This software also adds a standalone NT1 test capability and
	14	NI000009	NI0 NI-1 BRI Enhanced Mtc	This feature provides the machine-to-machine (TL-1) interface, the human-to-machine interface, and test hardware control required to test and maintain National ISDN lines. It offers ISDN loop qualification and functional test features through the MAP, and introduces Multipoint Embedded Operations Channel (mp- eoc) line maintenance.	5					AL1999	TL-1 Interface Parser	This feature decodes and encodes Transaction Language 1 (TL-1) commands and responses through an interface between the network provider's operations system (OS) and the DMS.

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	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2128	Channel and Link Allocation	This feature provides a set of utilities to allocate DMS Packet Handler channels and links. Channel types include Bd channels, packet B channels, and X.75 trunk channels. Link types include X.25 B, X.25 D, and X.75 B. Channels represent the physical connections between a terminal and the DMS Packet Handler. Channels are implemented with hardware within the HDLC Frame Processor (HFP) in an XLIU. Links represent the data link connections between a terminal and the Packet Handler Function (PHF). Links are implemented with software within the HFP in an XLIU. This feature provides a set of software routines to manipulate channel and link objects. In more technical terms, this feature provides the targets for the allocation aspect and association aspect for channels and links. It also provides internal support to maintenance and call processing systems similar to the DMS operating system.
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5						DMS Packet Handler Base	This package provides the base software required for the DMS Packet Handler, the fully integrated ISDN packet-switching application on the Link Peripheral Processor (LPP). The base package facilitates operations between the Packet Handler Interface Units (PHUs), Network Interface Units (NIUs), and the LPP Local Message Switch (LMS). This package directs X.25 and X.75/X.75' call processing into the appropriate PHIUs. This package requires hardware for operation.
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AG2343	DMS Packet Handler Call Processing Billing Interface	This feature integrates packet billing into the existing DMS AMA billing subsystem, providing the necessary capabilities to meet the packet AMA requirements outlined in National ISDN-1 standards. Billing data are extracted or derived from a number of data structures at different stages of the call. The billing data are filled into the Recording Unit at different stages of the call and then dispatched to the formatter under the following criteria: 1. An exit message received from either the originating or the terminating agent. 2. A midnight message for calls that have been up for more than 24 hours. 3. An intermediate update message to report billing information. 4. CM maintenance call takedown. Type 1 detailed recording uses Bellcore format.
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2025	DMS Packet Handler Call- Processing Base	This feature provides the packet-call processing base for the DMS Packet Handler. This base provides the basic call-processing components to set up and clear packet calls. It also provides the framework required for the future implementation of X.25/X.75 translation and routing, switched B service, billing, as well as access to call features. The new packet-call processing base is an OAM&P background capability and as such is fully transparent, not visible to the ISDN user.
	14	NI000010	NIO NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR-	5					AG2327	DMS Packet Handler E.164 Translations and Routing	This feature provides the E.164 translation capability for packet-mode calls within the ISDN and Basic Business Group (BBG) customer-dialing environments. It also identifies the datafill requirements for both X.25 packet-line processing and X.75/X.75' trunk-call processing. An interim mechanism is provided to handle X.121-format addresses through the use of TR-defined escape codes, as well as a translation and routing strategy for existing DPN Packet Handler-resident terminals for the transition period when DPN Packet Handler and DMS Packet Handler lines may coexist in the
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AQ0894	DMS Packet Handler Hunt	This feature provides the Hunting and Uniform Hunting features on the DMS Packet Handler. These services conform to Bellcore TR-859 for "Linear Hunting—Packet- Mode, Multiple DN Hunt Group" and "Uniformly Distributed Hunting—Packet Mode." All hunt-group members must reside on the same switch.

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	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2200	DMS Packet Handler Line Maintenance Interactions	The DMS Packet Handler introduces new components to the DMS to provide ISDN packet service. The DMS Packet Handler service is provided by XLIUs in a Link Peripheral Processor (LPP). The XLIUs are connected to the network using the NIU (Network Interface Unit). This feature integrates these new components, NIU and XLIU, to the existing ISDN line maintenance provided at the LTP (line test position) map level. To integrate the DMS Packet Handler into ISDN line maintenance, this feature provides the following enhancements: • State of Call Processing Busy (CPB) displayed when packet calls are present • New Fail Flag when packet service is unavailable • Add Return To Service (RTS) of Bb channels to ISDN Line Card RTS • Testing Bb channels • Posting a D channel
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR-	5					AL2753	DMS Packet Handler on Single Shelf LPP	This feature allows the DMS Packet Handler to be supported on the single-shelf LPP.
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2195	DMS Packet Handler X.25 Bd Channel Maintenance	This feature outlines changes to the DMS Packet Handler maintenance system to support X.25 services on ISDN D channels. It shows how Packet Handler service subscribers are provided with packet connectivity and the X.25/X.75 Service Group (XSG) and MAP displays will interact with the existing ISDN packet D-channel services. It involves interactions between the DMS Packet Handler and the D- Channel Handler (DCH) and the communication channel between the two. This feature addresses the logical connectivity maintenance required between the DMS Packet Handler and the DCH. The logical connectivity is concerned with both ends of the connection but not with the physical path between the DCH and DMS Packet Handler.
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2198	DMS Packet Handler X.75 Trunk Maintenance I	This feature provides initial X.75 trunk maintenance for the DMS Packet Handler. The maintenance is performed through the existing TTP (Trunk Testing Position) MAP level and also using the new X75TTP map level. DMS Packet Handler X.75 trunks are supported on DS-0 channels with a transmission speed of X56 kbps or 64 kbps. To perform testing of X.75 trunks, two TTP tests are provided by this feature: • The X75I test to perform an internal continuity test • The X75E test to perform an external continuity test
			NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.							Enhanced DMS Packet Handler OMs	This feature enhances DMS Packet Handler (PH) operational capabilities through new operational measurements (OMs), to allow both Northern Telecom and network providers to engineer packet call processing resources and X.25/X.75/X.75' Link Interface Unit (XLIU) components, using performance history to monitor computing capacity, plan future upgrades, and prevent service disruption. This software provides additional DMS Packet Handler OMs for the High-speed Data Link Controller (HDLC) Frame Processor (HFP, NTFX10AA) in two new OM groups—HFPOM and XLIUL3. These measurements consist of the Layer 2 (frame) and Layer 3 (packet) counts collected in the XLIU, which resides in the Link Peripheral Processor (LPP). The counts include: Number of frames/packets received. Number of frames/packets transmitted. Number of virtual call attempts (originating, terminating, unsuccessful). This software also enhances the QCOUNTS (queried counts) feature by adding a date/time stamp to the Layer 1, Layer 2, Layer 3, and HFP board peg counts—indicating when these counts were last cleared by the QCOUNTS Command Interface (CI) and the time span for the count collection. The C
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2059	HFP LAPB Protocol	This feature implements the Link Access Protocol Balanced (LAPB) on the HDLC Frame Processor (HFP) of the DMS Packet Handler to support LAPB services. LAPD is the layer-2 protocol for X.25 or X.75/X.75' on ISDN B channels, as specified in Bellcore TR-301.

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			Order Code Name NIO NI-1 Packet	Order Code Description This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	<u>Ris</u> 5	Ris	MD RIS	Code	PCID		Feature Name High-Level Design for Call Processing	Feature Description This feature introduces the packet-call processing functionality and high-level design for the National ISDN.1-compliant release of the DMS Packet Handler. This includes numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet- Switched Network (PPSN) interworking, and packet-call screening.
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call	5					AL2291	ISDN X.25 Basic Service Provisioning	This feature provides the provisioning of TR-TSY-000301 ISDN X.25 basic service parameters for the DMS Packet Handler. ISDN X.25 Basic Service Features are provided through the provisioning of ISDN X.25 basic service parameters. These parameters reside in the CM and are delivered to the X.25 peripheral (XLIU) of the DMS Packet Handler where they are processed. This feature adds the basic service parameters to two existing tables, DNCTINFO and DNCHNL, which currently contain
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2127	ISDN X.75/X.75' Protocol	This package enables Network Interface Units (NIUs) to make X.75 and X.75' connections to DMS and non-DMS Packet Handlers and PPSNs. The services provided in this package comply with TR-301 for X.75 and X.75', which allows X.75', 75' networking with a large number of DMS Packet Handlers, DPN Packet Handlers, and other packet switches. The X.75'/X.75' connections are viewed by the DMS as trunk groups; the DMS supports up to 1024 different trunk groups. This package requires hardware for operation.
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2125	Packet-Terminal Provisioning	This feature provides the capability to datafill packet-data terminals. It removes the restrictions in the DMS KSETINV and KSETLINE tables to allow directory numbers to be assigned to ISDN packet terminals served by the DMS Packet Handler. ISDN packet terminals are currently identified through datafilling a Logical Terminal Identifier (LTID) with access privileges of either Pb (Provisioned B channel access to the Packet Handler) and D (D channel access to the Packet Handler). This feature also provides the ability to assign the Packet Service Profile (PSP), which contains the directory number and X.25 service data for the ISDN packet terminal, to an ISDN Basic Rate Interface (BR) line through datafill of the LTMAP table. Initially, LTIDs with an access privilege of BD (integrated voice and data access) are not supported by DMS Packet Handler call processing. Future enhancements will remove this restriction.
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AQ1010	PVC Type II Billing	This feature provides a reverse charge billing capability for DMS Packet Handler interLATA Permanent Virtual Circuits (PVCs). In general, all interLATA calls for both Switched Virtual Circuits (SVCs) and PVCs require two AMA records to be generated: one by the originating switch or network, and the other by the terminating switch. The interLATA call records from both ends of the data circuit must match for each call. For SVCs, the calling and called DNs are in the call request packet originated by the calling party. A PVC packet call, however, is similar to an automatic voice call in the voice world, established between two terminals as soon as the originating terminal goes off-hook (no call request packets, containing the calling and the called party DNs, are sent). When the PVC is an interLATA call, the DMS Packet Handler supports third-party or reverse-charge billing for all incoming PVC calls.

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			Order Code Name NIO NI-1 Packet	Order Code Description This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	<u>Ris</u>	RIs	MD RIS	Code	PCID	ACTID AL2289	Feature Name SERVORD for DMS Packet Handler	Feature Description This package provides SERVORD commands for the DMS Packet Handler to provision services for ISDN packet terminals. ISDN Packet Terminals are currently identified through datafill of a Logical Terminal Identifier (LTID) with access privileges of either PB (Provisioned B-channel access to the packet handler) or D (D-channel access). LTIDs with an access privilege of BD (Integrated Voice and Data access) are not supported by DMS PH call processing. The following is a sequence of SERVORD commands for provisioning Packet Terminals for the DMS PH: 1. Issue the SLT ADD command 2. Issue the SLT ADD command 3. Issue the SLT ATC command 3. Issue the SLT ATC command 3. Issue the SLT ATC command be SLT ADD command datafills table KSETINV for the Packet Terminal. The NEW command datafills table KSETLINE, DNCTINFO, and DNCHNL. Tables DNCTINFO and DNCHNL are datafilled with default values. The user can change the values after issuing the NEW command busing the standard Packet Handler commands (i.e., SETPH, ADDPH, CHAPH, and DELPH).
	14	NI00010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2326	Special Connections for the DMS Packet Handler	Two additional enhancements to the DMS PH SERVORD commands have been made This feature implements special connections for the DMS Packet Handler to support nailed-up connections of B- and D-channel access lines to the X.25/X.75 subscriber's Service Group (XSG). A new SPECCONN endpoint type for the XSG channel is introduced. Table XSGDEF is modified to support XSG channel allocation. The following types of connections are supported: • X.25 B-channel access: Line Card channel to XSG channel • X.25 D-channel access: DCH channel to XSG channel • X.75 trunks: DS-1 channel to XSG channel • X.75 trunks: DS-1 channel to XSG channel
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AQ1008	Telco-Settable Parameter Defaults	This feature has been requested by U.S. network providers for additional flexibility within National ISDN packet services. This feature simplifies and significantly shortens the service provisioning activity for service providers who plan to continue to provide presently tariffed packet capabilities or customized service packages in addition to the standard National ISDN offering. The X.25 service parameters are datafilled in the DMS using SERVORD (Service Order System), the DMS service provisioning utility. The nature of the X.25 packet services allows for choosing parameter defaults for a large percentage of defaultable parameter values. Because each packet terminal may require as many as 150 parameters to be datafilled, selecting the most suitable parameter defaults is very important in simplifying the service provisioning. This feature allows service providers to define parameter defaults for the DMS switch. This capability uses the DMS Table Editor facility to BMS Packet Handler-engineered set of parameter defaults which comply with National ISD
	14	NI000010	NIÖ NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AQ0956	X.121 Translations Support on DMS-100	This feature provides full X.121 translations support on the DMS Packet Handler. In the packet-data environment, two numbering plans exist—the public E.164 default numbering plan for ISDN, and the X.121 plan for packet networks. This feature allows the DMS Packet Handler to route a packet call based on the translation of the X.121 address DNIC, DNIC + DNPA, or DNIC + DNPA + DCO. In some cases, the full address is not required for the translation. There is no LATA-status checking for X.121 translation.

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App	Order Code	Order Code Name	Order Code Description	Ris	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
		NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2066	X.25/X.75 Services Interface	This feature implements X.25 and X.75/X.75' services on the DMS Packet Handler. To provide simplified and consistent call services, the DMS Packet Handler relies on the call processor in the DMS-Core to provide functions such as digit translation and hunt-group processing.
14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2127	X.75 Basic and Supplementary Service Data	This feature provides the provisioning of the ISDN X.75 Basic and Supplementary Service Data for the DMS Packet Handler. ISDN X.75 Service Data defines the characteristics of an X.75 Interface. The X.75 Service Data resides in the Computing Module and is delivered to the X.75 peripheral (X.75 XLIU/XSG) of the Packet Handler for processing of X.75 calls. The provisioning of X.75 Service Data is accomplished in the Computing Module. A description of generic requirements for the ISDN X.75 Service Data is contained in Bellcore Technical Reference (TR)-TSY-000301.
14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AJ1833	X.75 Service Assignment	This feature permits the mapping of an X.75 service interface to a physical path identified by a DS-0 channel within the DS-1 trunk, which has been linked to an X.25/X.75 Service Group (XSG) channel in table SPECCONN. Table SPECCONN contains information on all DS-0 "special connection" channels provisioned within the DMS switch. XSG is a collection of X.25/X.75 service subscribers served by the DMS Packet Handler. The mapping is done by datafilling the X.75 trunk in table TRKMEM.
14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2126	X.75 Trunk Data	This feature provides the capability to datafill DMS Packet Handler-based X.75 trunks. It modifies tables TRKGRP and TRKSGRP. A new trunk group type, identified as "X.75," is introduced. The Table Control required to datafill X.75 trunks is in existing trunk tables. This comprises the definition of X.75 trunk data and the mapping of trunk members to hardware.
14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					BJ39379	XLIU Cold Sparing (Manual)	This feature significantly enhances the maintainability of the DMS Packet Handler by allowing the craftsperson to transfer service from an active X.25/X.75 Link Interface Unit (XLIU) to a spare XLIU without reprovisioning the service. In the unlikely event of an XLIU failure, this feature also dramatically improves service recovery time by eliminating the need to pull and replace a failed unit—and by allowing service reactivation through a single MAP-level command. The new sparing capability allows X.25 or X.75 service information for a packet processor (XLIU) to be moved to a spare processor on the same Link Peripheral Processor (LPP) sheft. Movement of the service is accomplished through the MAP-level command SWTCH, that is similar in name and function to that currently used by the D- Channel Handler (DCH).

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
			NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2069	XLIU DMS Packet Handler Billing Support	This feature provides all the necessary billing information in the X.25/X.75 Process System (XPS) on the XLIU required by feature AG2343—DMS PH Call Processing Billing Interface—to provide Automatic Message Accounting (AMA) detailed records for the DMS Packet Handler. This feature implements XLIU support for DMS Packet Handler billing of X.25 and X.75 calls. The main functions of this feature include: 1. Tracking the elapsed time of a packet call (Switched Virtual Call) 2. Counting the transmitted and received chargeable segments against different rate periods 3. Capturing information pertinent to billing from call control packets (i.e., call request, call accept, etc.) 4. Reporting billing information to call process
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL1906	XLIU Loads and Maintenance	These features introduce a new Peripheral Module—the X.25 and X.75 Link Interface Unit (XLIU)—to Link Peripheral Processor (LPP), and provide base software to support provisioning and maintenance of the XLIU. XLIU, as an application-specific unit of the LPP, is used for terminating both Link Access Protocol for D channel (LAPD) and Link Access Protocol Balanced (LAPB) X.25 protocols, or X.75 protocol between the ISDN node and the PPSN or other ISDN nodes. XLIU Maintenance 1 (AL1615) implements CC software in the following areas: • UINV Table Control • XLIU MaP level • XLIU base maintenance HFP Base Load and Maintenance Subsystem (AL2057) covers logs and operational measurement (OM) collection and maintenance, provisioning, and testing issues related to the High-Speed Data Link Control Frame Processor (HFP) card. XLIU Loads and Maintenance (AL1906) provides the loading mechanism for the Integrated Processor and F-Bus Interface (IPF), defines the HDLC Frame Processor
	14	NI000010	NI0 NI-1 Packet	This feature supports the packet-call processing architecture for the National ISDN-1 compliant release of the DMS Packet Handler, including numbering plans, digit analysis, packet translations and routing, ISDN/Public Packet Switched Network interworking, and packet-call screening. This feature provides full-featured, TR- compliant X.25 LAPB and LAPD processing and X.75/X.75' networking.	5					AL2067	XLIU X.25, X.75, and X.75' Protocols	This feature provides X.25, X.75, and X.75' functionality as specified in Bellcore TR- 301. The functions implemented for National ISDN-1 are summarized below: • CC5 Closed User Group (CUG) Support • CC1TT X.25 Facility Support • Basic Business Group (BBG) • User-to-User Signaling (Fast Select and Acceptance) • CC1TT X.75 Utility Support • X.75' Utility Support • X.7N Calling-Number Identification
MD'd the order code	14	NI000011	NIO NI-1 PRI	This feature provides additional NI-1 Primary Rate Interface (PRI) capabilities including Call-by- Call, CCS7 interworking, D-channel backup, and Digital Test Access. Call-by-Call permits different call types over a single trunk, PRI, interworking with CCS7, extends the network across multiple switches and LATAs, and D-channel backup provides increased robustness and survivability.	5		10	NI000033	868	AM0071	Backup D Channel for Primary Rate Links	The D channel of a Primary Rate link carries call control signaling for multiple Primary Rate B channels and T-1 spans. If the primary D channel should fail, calls over the controlled B channels are taken down. These features enhance the survivability of Primary Rate links by providing a backup D channel that automatically takes over for a failed primary D channel (see figure). The primary and backup D channels should be located on different trunk facilities.
MD'd the order code	14	NI000011	NIO NI-1 PRI	This feature provides additional NI-1 Primary Rate Interface (PRI) capabilities including Call-by- Call, CCS7 interworking, D-channel backup, and Digital Test Access. Call-by-Call permits different call types over a single trunk, PRI, interworking with CCS7, extends the network across multiple switches and LATAs, and D-channel backup provides increased robustness and survivability.	5		10	NI000033	3543	AQ1018	DTA for PRI D-Channel	This feature allows the craftsperson to monitor PRI primary or backup D channels using Digital Test Access (DTA). Monitoring is accomplished with an external protocol analyzer that is accessed either through the B1 or B2 channels of an ISDN line, or two DS-0 channels of a digital truth facility. DTA is now intrusive because the monitored line data is broadcast to both its normal destination and the test access point. NOTE: The same protocol analyzer used for BRI DTA protocol monitoring (NTXJ51AA) can be used for PRI D channel DTA monitoring.
MD'd the order code	14	NI000011	NIO NI-1 PRI	This feature provides additional NI-1 Primary Rate Interface (PRI) capabilities including Call-by- Call, CCS7 interworking, D-channel backup, and Digital Test Access. Call-by-Call permits different call types over a single trunk, PRI, interworking with CCS7, extends the network across multiple switches and LATAs, and D-channel backup provides increased robustness and survivability.	5		10	NI000033	905	AG1547	Feature Group D and PRI Trunk Interworking	This feature provides call connectivity between a Primary Rate Interface in a tandem switch and intertoll trunks (using Feature Group D [FGD] Multifrequency signaling) and Traffic Operator Position System (TOPS) trunks (using Centralized Automatic Message Accounting [CAMA] or FGD signaling).

Issue 2	

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MD'd the		NI000011	Order Code Name	Order Code Description This feature provides additional NI-1 Primary	RIs 5	RIs	MD RIs	NI000033	PCID 905			Feature Description Enhanced Service Providers (ESPs), who sell opinion polling services, information
order code	14	NUCCUTT		Rate Interface (PR) capabilities including Call-by- Call, CCS7 interworking, D-channel backup, and Digital Test Access. Call-by-Call permits different call types over a single trunk, PRI, interworking with CCS7, extends the network across multiple switches and LATAs, and D-channel backup provides increased robustness and survivability.	5		10	1000055	903	AG1708	Service for PRI	Enhanced Services (2007), which services (2007), and 900/976 services to subscribers, are becoming a lucrative new market for the local exchange carrier (LEC). These ESPs require Open Network Architecture (ONA) interfaces between the LEC and the ESP for calling number delivery and other information. Northem Telecom's INFO-s service enables the LEC to offer its customers LATA-wide Calling Line ID prior to the deployment of CCS7. Calling Line Identification is delivered by converting a calling number in a multifrequency Automatic Number Identification (ANI) format into the standard calling number delivery field using the ISDN 0.931 format, making the calling number available to customers over the Primary Rate Interface (see figure below). This service can deliver the information, for example, to an Automatic Call Distribution (ACD) station on a PBX.
MD'd the order code	14	NI000011	NIO NI-1 PRI	This feature provides additional NI-1 Primary Rate Interface (PRI) capabilities including Call-by- Call, CCS7 interworking, D-channel backup, and Digital Test Access. Call-by-Call permits different call types over a single trunk, PRI, interworking with CCS7, extends the network across multiple switches and LATAs, and D-channel backup provides increased robustness and survivability.	5		10	NI000033	908	AC0273		Integrated Services Access (ISA) activates the network specific facilities (NSF) information element as defined in CCITT Q.931, allowing call-by-call service selection for Direct Inward/Outward Dialing (DID and DOD), Tie Trunks, Foreign Exchange Lines, and WATS Lines. ISA dynamically reconfigures Primary Rate channels to accommodate changes in traffic from a PBX customer. In the figure below, Primary Rate channels can be adjusted at night to increase tie lines for the high speed transfer of batch files to a host computer. Other trunk types—such as DID, DOD, INWATS, and OUTWATS, are decreased, because there are very few incoming and outgoing calls at night.
MD'd the order code	14	NI000011	NIO NI-1 PRI	This feature provides additional NI-1 Primary Rate Interface (PRI) capabilities including Call-by- Call, CCS7 interworking, D-channel backup, and Digital Test Access. Call-by-Call permits different call types over a single trunk, PRI, interworking with CCS7, extends the network across multiple switches and LATAs, and D-channel backup provides increased robustness and survivability.	5		10	NI000033	868	AM0055	PRI D-Channel Backup—XPM	The D channel of a Primary Rate link carries call control signaling for multiple Primary Rate B channels and T-1 spans. If the primary D channel should fail, calls over the controlled B channels are taken down. These features enhance the survivability of Primary Rate links by providing a backup D channel that automatically takes over for a failed primary D channel (see figure). The primary and backup D channels should be located on different trunk facilities.
MD'd the order code	14	NI000011	NIO NI-1 PRI	This feature provides additional NI-1 Primary Rate Interface (PRI) capabilities including Call-by- Call, CCS7 interworking, D-channel backup, and Digital Test Access. Call-by-Call permits different call types over a single trunk, PRI, interworking with CCS7, extends the network across multiple switches and LATAs, and D-channel backup provides increased robustness and survivability.	5		10	NI000033	905	AC0339	Interworking	This feature allows DMS Primary Rate Interfaces to interwork with the Common Channel Signaling No. 7 (CCS7) network to provide: call completion between Primary Rate and CCS7, calling number delivery between Primary Rate and CCS7 (see figure below), and transport of the Traveling Class Mark, which contains the caller's network class of service information.
MD'd the order code	14	NI000011	NIO NI-1 PRI	This feature provides additional NI-1 Primary Rate Interface (PRI) capabilities including Call-by- Call, CCS7 interworking, D-channel backup, and Digital Test Access. Call-by-Call permits different call types over a single trunk, PRI, interworking with CCS7, extends the network across multiple switches and LATAs, and D-channel backup provides increased robustness and survivability.	5		10	NI000033	905	AD0859	Access Routing	This feature provides the table control necessary to allow Primary Rate Interface Integrated Service Access (ISA). Prior to the implementation of ISA, calls of different types (e.g., Tie Lines, Foreign Exchange, Wide Area Telephone Service [WATS], etc.) between two switches required separate trunk groups. ISA allows these different call types to coexist on the same trunk group.
MD'd the order code	14	NI000012	NI0 NI-1 PRI Interworking w/ 4E/5ESS	This feature provides Nortel's NI-1 PRI interfaces to Lucent's 4ESS and 5ESS switches and supports Calling Line ID/Automatic Number Identification and Integrated Services Access/Call-by-Call Service Selection with 4ESS.	5		10	NI000033	867	AM0162		This feature enhances the feature content of 5ESS connectivity by including operator services and adding additional Call-by-Call NSF values for INWATS and OUTWATS services.

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Issue 2	App	Order Code	Order Code Name	Order Code Description	NCS Ris	Enh RIs	MD RIs	Repl Ord Code	PCID	ACTID	Feature Name	Feature Description
MD'd the order code	14		NI0 NI-1 PRI Networking	This feature provides Network Ring Again, Calling Name Display, and Network Message Waiting Indicator across a network populated with Nortel's DMS Family switches and Meridian 1, SL-1, and SL-100 PBXs.	5		10	NI000033	909		DMS PRI Message Waiting Indicator / Interwork with SL-1	This software allows signals activating and canceling MWI to be passed over PRI links between a DMS switch and a Meridian 1 (formerly SL-1) or a Meridian SL-100 switch. MWI messages may be passed in either direction. The software allows a hybrid network of MDC and Meridian 1 business locations over an entire city or LATA to be served by a central office message service from a central DMS, or by a central Meridian 1 Mail message service. (The associated Meridian 1 PBX requires Meridian 1 Release 19 or higher.) When serving customers with hybrid MDC and Meridian 1 networks from a central message service, some network configuration restrictions may apply.
MD'd the order code		NI000013	NI0 NI-1 PRI Networking	This feature provides Network Ring Again, Calling Name Display, and Network Message Waiting Indicator across a network populated with Nortel's DMS Family switches and Meridian 1, SL-1, and SL-100 PBXs.	5		10	NI000033	911	AD1674	Facility Reject Message on Primary Rate Interface	This feature provides the DMS with the Primary Rate Interface Facility Reject Message capability as defined by CCITT recommendation Q.932. The Facility Message transports feature activation across the network. If the originating switch is not allowed to apply a feature to a called party or to the terminating switch, the Facility Reject Message notifies the originating switch and reports the reason for the failure.
MD'd the order code		NI000013	Ŭ	This feature provides Network Ring Again, Calling Name Display, and Network Message Waiting Indicator across a network populated with Nortel's DMS Family switches and Meridian 1, SL-1, and SL-100 PBXs.	5		10	NI000033	909	AJ1538	Activation/Deactivation	This feature allows signals activating and canceling MWI to be passed over PRI links between DMS switches. Using CCS7 and PRI signaling, this feature allows a message service to serve multiple MDC business locations over an entire city or LATA from a central location.
MD'd the order code		NI000013		This feature provides Network Ring Again, Calling Name Display, and Network Message Waiting Indicator across a network populated with Nortel's DMS Family switches and Meridian 1, SL-1, and SL-100 PBXs.	5		10	NI000033	910	AD2245	Rate Interface	This feature extends the Name Display feature across PRI links, delivering the name of the calling or called party to a functional terminal on incoming and outgoing calls. The names displayed are those datafilled through service order to correspond to particular directory numbers (DNs). Previously, only the DNs of incoming and outgoing calls could be displayed. This feature also provides information on redirected calls. For example, this feature delivers to the terminal to which a call is forwarded the name of the caller, the name and number of the party originally called, and the reason the call is being forward (e.g., the line is busy). Currently, this feature is supported between DMS switches and SL-100 PBXs.
MD'd the order code		NI000013	Ŭ	This feature provides Network Ring Again, Calling Name Display, and Network Message Waiting Indicator across a network populated with Norte's DMS Family switches and Meridian 1, SL-1, and SL-100 PBXs.	5		10	NI000033	911	AD1317	Network Ring Again—Central Controller Support	This feature extends the Ring Again feature from a single-node service to a two-node service. With this feature, telephone operating companies can offer Network Ring Again (NRAG) from a DMS switch to customers served by an SL-100 or SL-1 private branch exchange. Subscribers served off either of the two nodes can initiate the NRAG feature. NRAG is extended across CCS7 links with AD1673, and beyond the two node configuration with AD1315.
MD'd the order code		NI000013	Ŭ	This feature provides Network Ring Again, Calling Name Display, and Network Message Waiting Indicator across a network populated with Nortel's DMS Family switches and Meridian 1, SL-1, and SL-100 PBXs.	5		10	NI000033	911	AD1673		This feature enables digital private branch exchanges (PBXs) such as Northern Telecom's SL-1 and SL-100 that are connected to a DMS office by Primary Rate Interface trunks to communicate the Network Ring Again (NRAG) feature over the CCS7 network. Thus, a subscriber located in any of the nodes in the combined CCS7/Primary Rate network can apply NRAG against a busy station located in any of the nodes in the same an entwork. From an end user's perspective, the operation of NRAG is the same as nodal RAG. By extending this feature across the network, NRAG, like all Meridian Network Centrex features, increases revenues by allowing the operating company to provide productivity enhancing services to businesses with multiple sites served by different central office switches. Each node in the network that wishes to offer this feature must contain the proper Primary Rate Interface and CCS7 networking software packages.
MD'd the order code		NI000013		This feature provides Network Ring Again, Calling Name Display, and Network Message Waiting Indicator across a network populated with Nortel's DMS Family switches and Meridian 1, SL-1, and SL-100 PBXs.	5		10	NI000033	911	AD1315	Tandem Network Ring Again on Primary Rate Interface	This feature allows the Network Ring Again (NRAG) feature to be passed through Northern Telecom nodes that are connected by a Primary Rate Interface. A calling party in an originating node may apply NRAG through any number of Primary Rate connected nodes to the called party in the terminating node. These nodes may be any combination of DMS switch, SL-100, or SL-1 switches.

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	Ann	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
			NIO NI-1 Tandem	This feature provides NI-1 BRI/CCS7 interworking such as Routing and Digit Analysis and ISUP and BRI interworking capabilities on the DMS tandem office.	5					AJ0811	ISDN Routing and Digit Analysis	Translating and routing of a POTS call only requires analysis of the called digits or called address information. ISDN requires routing based not only on the called address information, but also on the Bearer Capability of the call. In addition, ISDN defines two methods for equipment to send called address information to the switch. A calling terminal can send each address information all at the same time (known as enbloc sending). This feature provides: Routing based on Bearer Capability and overlap called address information. Routing based on Bearer Capability and enbloc called address information. Specification of a separate Preferred InterLATA Carrier (PIC) for each calling Directory Number/Bearer Capability pair. Specification of Bearer Capability on a per call basis using dialed access codes.
	14	NI000014	NIO NI-1 Tandem	This feature provides NI-1 BRI/CCS7 interworking such as Routing and Digit Analysis and ISUP and BRI interworking capabilities on the DMS tandem office.	5					AG2001	TR-444 ISDN to CCS7 ISUP Interworking	This feature provides compliance to Bellcore TR-444, which allows for the extension of ISDN beyond a single node for network-wide service by mapping ISDN Q.931 loop signaling onto Integrated Services User Part (ISUP) signaling. One of the inherent advantages of ISDN over POTS is ISDN's ability to transport call related information between ISDN terminals out-of-band over the D channel. TR-444 provides for the end-to-end communication of this information—such as Bearer Capability, High Layer Capability, Low Layer Capability, Call Progress Information, Cause and Signal Information, and Calling Number—over the CCS7 network between compliant central offices as if they were served by the same central office.
	14	NI000014	NI0 NI-1 Tandem	This feature provides NI-1 BRI/CCS7 interworking such as Routing and Digit Analysis and ISUP and BRI interworking capabilities on the DMS tandem office.	5					AG2211	TR-444 ISUP-BRI Interworking Enhancements	This software—TR-444 Compliance—Tandem Office—is for DMS tandems. When an ISDN call encounters a network problem and must be cleared, this software equips tandem offices to return ISDN 'cause values' to the originating office. (Cause values are messages that indicate the reason for a network action, such as not being able to complete a call.) This feature is applicable only to CCS7 tandems handling ISDN calls and is required for full compliance with National ISDN-1 standards for Bellcore TR- 444. The primary function of TR-444 is to describe how ISDN line signaling messages (in the Q.931 format) are to be translated into Integrated Services User Part (ISUP) messages for transport over CCS7 trunking. Since lines do not terminate on DMS tandem offices, there is no need to process Q.931 signaling in those offices; however, other aspects of TR-444 are relevant to routing in a tandem office. This feature allows the tandem to return the appropriate cause value to the originating switch if an ISDN call is cleared when it encounters some problem in the network (for example, if there is no circuit available). If this feature is not loaded into a tandem. the
	14	NI000014	NI0 NI-1 Tandem	This feature provides NI-1 BRI/CCS7 interworking such as Routing and Digit Analysis and ISUP and BRI interworking capabilities on the DMS tandem office.	5					AG2210	TR-448 ISDN Translation and Routing Compliance Phase 2	This feature completes TR-448 compliance by allowing a Bearer Capability to be datafilled against an incoming trunk group. For example, incoming "switched 56" trunks could be designated as "data" trunks, allowing the interworking of "switched 56" service with ISDN
MD'd the order code	14	NI000015	NI0 NI-2 PRI Base Vrt	This feature provides Nortel's National ISDN-2 (NI-2) Primary Rate Interface (PRI) for TR-1268- compliant PRI trunking on the DMS switch and provides the Basic Call, Facility information Elements to the Basic Call for 'Send to Outside Resource," and interworking to CCS7. Other capabilities offered by this feature are PRI switching and signaling, Calling line identification services, Multiple DS-1 facilities, B-channel availability procedures, and Call-associated facility messages.	8		10	NI000043	9189		National ISDN-2 PRI Base	Nortel completes the National ISDN-2 PRI program with additional capabilities that include Operator Services Information Element, Type of Number, Transit Network Selector, and Numbering Plan interactions. NI000015 also provides two Redirecting Numbers (RNs): the Original Called Number (RN1) and the Last Forwarding Number (RN2). • Type of Number/Numbering Plan/Transit Network Selector and Operator Services Information Element interactions identify what kind of number is being called and supply any specific routing instructions. • Redirecting Numbers indicate whether or not a call has been forwarded, what number last forwarded the call, and who was originally called. Two Redirecting Number elements provide this information. If a call is only forwarded one time, the first Redirecting Number (RN1) on the NI-2 protocol indicates both the Original Called Number and the Last Forwarding Number. If a call is forwarded more than once, the

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID		Feature Name	Feature Description
MD'd the order code		NI000015	NI0 NI-2 PRI Base Vrt	This feature provides Nortel's National ISDN-2 (NI-2) Primary Rate Interface (PRI) for TR-1268- compliant PRI trunking on the DMS switch and provides the Basic Call, Facility information Elements to the Basic Call for "Send to Outside Resource," and interworking to CCS7. Other capabilities offered by this feature are PRI switching and signaling, Calling line identification services, Multiple DS-1 facilities, B-channel availability procedures, and Call-associated facility messages.	8		10	NI000043	9603	AF6867	NI-2 PRI User Provided Billing	In certain configurations, such as Intelligent Peripheral (IP) applications, calls should be billed to a number other than the number that represents the IP. This National ISDN enhancement is enabled on Nortel's NI-2 interface so that the number in the calling number field will be entered as the billing number in the Automatic Message Accounting (AMA) records. This capability is only available to interfaces that do not use PRI screening capabilities. It is designed in response to National ISDN Enhancements, SR-3681, Issue 2, June 1996. This feature allows an IP to indicate which number is to be billed at the time an IP service is provided, rather than forcing billing reconciliation at a later time through a cumbersome, mainframe-intensive downstream process.
MD'd the order code		NI000016	NI0 D ch Backup NI-2	This feature provides a spare signaling channel on a second DS-1 for survivability purposes. If the primary D-channel fails, the signaling automatically transfers to a back-up D-channel. The new data channel assumes responsibility for both existing and new calls arriving over the PRI links.	8		10	NI000043	9467		D-Channel Backup	This feature supports a spare signaling channel on a second DS-1 for survivability purposes. If the primary D-channel fails, the signaling automatically transfers to a backup D-channel. The new data channel assumes responsibility for both existing and new calls arriving over the PRI links. This capability helps prevent a single fault from causing a breakdown in the central office-to-PBX communications system. The most common circumstance causing the loss of a primary D-channel is a cable cut. In a multiple DS-1 situation, the other DS- 1s would lose the ability to process calls unless this feature has been assigned. NI000016 allows the failure of the DS-1 (and primary D-channel) to be managed by the central office and the PBX to enhance survivability.
MD'd the order code		NI000017	NI0 Call by Call NI-2	This feature on NI-2 PRI trunks allows a PBX to use channels more effectively by expanding or contracting the number of channels available to each of different call types such as INWATS, OUTWATS, Foreign Exchange (FX), and Tie Lines.	8		10	NI000043	9469	AF6864, AF6871	Call-by-Call National ISDN-2	When a PBX uses dedicated trunks to service different call types (INWATS, OUTWATS, Foreign Exchange [FX], and Tie Lines) inefficiencies can result from different busy-hour requirements for the different call types. Call-by-call service on NI- 2 PRI allows the PBX to use channels more effectively by expanding or contracting the number of channels available to each of the different call types listed. Thus, different busy hours result in more channels being available for each call type during its particular busy hour. Call-by-Call Service uses trunks more effectively for different call types. This feature can enhance efficiency by as much as 30 percent, depending on the traffic patterns involved.

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			Order Code Name	Order Code Description	Ris	RIs	MD RIs Code	PCID		Feature Name	Feature Description
	14	NI000018	NIÓ 2B Ch Trsfr NI-PRI	This feature enables PBXs to release NI-2 PRI trunks after a call has been transferred. When a forwarded or transferred call is set-up using two channels in a PRI trunk to the DMS switch, the PRI trunk channels that were used to make the connection can be dropped and made available for future calls. Without Two B-Channel Transfer, these channels would be unavailable for the duration of the call.	8	9			AF7309, AF7322, AF7323, AF7324, AU2636, AU2638,A U2640, AU2637	Completion of Two B-Channel Transfer PRI	This feature increases PRI trunk efficiency by enabling Intelligent Peripherals (IPs) to release PRI trunks after transferring AIN calls that use IP-based services.
	14	NI000018	NI0 2B Ch Trsfr NI-PRI	This feature enables PBXs to release NI-2 PRI trunks after a call has been transferred. When a forwarded or transferred call is set-up using two channels in a PRI trunk to the DMS switch, the PRI trunk channels that were used to make the connection can be dropped and made available for future calls. Without Two B-Channel Transfer, these channels would be unavailable for the duration of the call.	8				AR2400, AR2401, AR2402, AR2407, AR2406, AR2406	Two B-Channel Transfer PRI	Two B-Channel Transfer on NI-2 PRI trunks allows customer premises equipment (CPE) to more efficiently use PRI trunk connections for ISDN calling traffic. In a PBX or a network of PBXs, multiple call forward and transfer situations are typical. When a forwarded or transferred call is set-up using two channels in a PRI trunk to the DMS system, the PRI trunk channels that were used to make the connection can be dropped and made available for future calls. Without Two B-Channel Transfer, these channels would be unavailable for the duration of the call, wasting precious telecommunications resources. Typical applications for Two B-Channel Transfer on NI-2 PRI include the traffic routing and call set-up scenarios of business services such as PBX, Centralized Attendant, Automatic Call Distribution (ACD), Intelligent Peripherals (IP), and Integrated Voice Response (IVR) systems. After a call is connected and PRI trunk channels are released, AMA billing proceeds as if Two B-Channel Transfer had not occurred.
Correction- This Order Code is not MD.	14	NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5	6			AF6487, AF6442	AMA Module 070/071	This feature enables Automatic Message Accounting (AMA) Module 070 (ISDN Module) or Module 071 (ISDN Abbreviated Module) to be added to existing AMA billing records for ISDN Primary Rate Interface calls. Both modules provide a bearer capability that indicates whether a call was a voice call or a data call. AMA Module 070/071 allows service providers to accurately record and bill ISDN calls. When the type of call on a PRI line is listed as voice or data, appropriate and accurate charges can be applied to each call by the Revenue Accounting Office (RAO).
Correction- This Order Code is not MD.	14	NI000022	NIO ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and	5				AD2228	Basic ISDN Primary Rate Interface Maintenance	AMA Module 070/071 also offere sensing providers an additional reviewe source This feature provides testing and monitoring capabilities for the B and D channels of Primary Rate Interface trunks. The feature builds on existing trunk maintenance capabilities, introducing a new level (PRADCH) to handle D-channel maintenance functions.

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			Order Code Name	Order Code Description	RIs	Rls	MD RIs	Code	PCID		Feature Name	Feature Description
Correction- This Order Code is not MD.		NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AC0278	Bearer Capability Enhancements—ISDN PRA	This feature allows PRA trunk groups to perform Bearer Capability (BC) checking and to route calls onto a particular trunk group based on these BC checks. This capability allows the telephone operating company to consolidate all calls of a specific type onto a specified trunk group in order to make better use of trunk group facilities. For instance, the operating company may wish to reserve a particular trunk group to handle the data calls for one or more of its customers. PRA trunks can route calls according to standard BC categories based on whether the call is carrying speech traffic or is being transmitted at a rate of 3.1 KHz, 56 kbps, 64 kbps Restricted, or 64 kbps Clear. The feature also permits the telephone operating company to define other BC types as needed.
Correction- This Order Code is not MD.	14	NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AC0277	Calling Number Delivery Enhancement for ISDN PRI	This feature enhances Primary Rate Interface calling number delivery by providing the redirected number (i.e., the directory number to which the call was last presented) as well as the called number in cases of call forwarding (see figure). This feature coincides with SL-1 redirection features in X.11 Release 16. When a call is established over the Primary Rate Interface, the called party number is delivered to the calling party. If, during the call establishment phase, the call is redirected to another directory number by call forwarding, both the called party number and the redirected number are delivered to the calling party.
Correction- This Order Code is not MD.		NI000022	NIO ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and	5					AJ1138	CCITT Blue Book Compliance	This feature further advances Northern Telecom's compliance with CCITT Blue Book standards. For details, consult the Northern Telecom publication Primary Rate Interface User-Network Interface Specification (NIS A-211-1 Version 3).
Correction- This Order Code is not MD.		NI000022	NIO ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and	5					AJ1539	DMS-100 PRI Enhancements	This feature increases the attractiveness of DMS PRI to PBX owners. It provides two major improvements, which are explained in detail below. Allows INWATS calls incoming to a PBX to be tagged with a Service Identification (SID). Allows calls outgoing from a PBX to the DMS to be tagged with a Transit Network Selector (TNS) that provides additional routing information for public network IEC access. Service
Correction- This Order Code is not MD.		NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AJ0464	DTCI Call Processing Integration	This feature enhances the DTCI diagnostic system to support existing ISDN Signaling Pre-Processor (ISP) diagnostics. In particular, the feature provides specific Primary Rate Interface internal and external continuity tests with the ability to set up and clear loopback points. Also provided with this feature are cold SWACT and warm SWACT capabilities and DTCI support for A/B trunking.
Correction- This Order Code is not MD.	14	NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AJ0465	DTCI Primary Rate Interface Layer III Signaling	This feature provides the Layer III signaling integration required in the ISDN Digital Trunk Controller (DTCI) to support Primary Rate Interface.
Correction- This Order Code is not MD.		NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					NC0032	ESB Interworking with CLID Blocking Enhancements	This feature delivers two distinct capabilities, described below. ESB Interworking—In an emergency, the immediate delivery of calling number to an Emergency Service Bureau (ESB) quickly and accurately identifies the location of the caller and the site of the emergency. It is important that if someone served by a PBX dials an ESB, an identifying number is delivered to the ESB for quick response. The situation is somewhat more complicated by the fact that stations served by a PBX may not have a public DN. For PBXs connected to the DMS by a PRI link, this
Correction- This Order Code is not MD.		NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AJ0385	ISDN DTC PM Maintenance	This feature provides maintenance support for the ISDN Digital Trunk Controller (DTCI), including the central controller software required to datafill the DTCI and basic maintenance capabilities, including load, test, busy, and return to service.

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			Order Code Name	Order Code Description	Ris	RIS	MD RIs	Code	PCID		Feature Name	Feature Description
Correction- This Order Code is not MD.		NI000022	NIO ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AD2606	ISDN DTC Robustness	This feature enhances the robustness of the ISDN Digital Trunk Controller in the following ways. Provides a datafill option for Inverted High Level Data Link Control (HDLC)—a digital format used by some ISDN vendors for a Primary Rate Interface—in which all 0's are changed to 1's and vice versa. Provides new operational measurements to monitor the performance of Primary Rate D channels.
Correction- This Order Code is not MD.		NI000022	NIO ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AD2231	ISDN DTC Static Data	This feature enables the ISDN Signaling Pre-Processor (ISP) to terminate Primary Rate D channels. The ISP performs D-channel signaling on the DTCI. The feature also simplifies the datafiil requirements for Primary Rate Interface.
Correction- This Order Code is not MD.		NI000022	NIO ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of Ni-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AD2097	ISDN DTC Table Control	This feature provides maintenance support for the ISDN Digital Trunk Controller (DTCI), including the central controller software required to datafill the DTCI and basic maintenance capabilities, including load, test, busy, and return to service.
Correction- This Order Code is not MD.		NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and	5					AC0267	ISDN Primary Rate Interface Maintenance—B, D Channel	This feature allows basic maintenance operations for the Primary Rate Interface B and D channels to be performed from the Maintenance and Administration Position (MAP). These maintenance operations include "busy" and "return-to-service" for Primary Rate trunks.
Correction- This Order Code is not MD.		NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NL-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AD1294	ISDN Primary Rate Interface Maintenance—Test Lines	This feature provides Primary Rate Interface access to the DMS trunk maintenance facility. Primary Rate trunk testing is performed from the MAP. Access is provided for: bit error rate testing of Primary Rate trunks, verification of Primary Rate translations and routing data, and automatic trunk test facility.
Correction- This Order Code is not MD.		NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AJ0463	Layer II Signaling for ISDN PRI on the DTCI	This feature supports layer 2 signaling, based on the LAPD Q.921 protocol, for Primary Rate D channels on the DTCI.

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	Ann	Order Code	Order Code Name	Order Code Description	Ris		MD RIs		PCID	ACTID	Feature Name	Feature Description
			NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5	, Kið		oue	1010		PRI Calling-Line ID Screening	This feature modifies the Calling-Number Delivery feature by allowing the ability to suppress or override the presentation of calling number on a per–call-type basis (i.e., on the basis of Network-Specific Facilities [NSF] value) for calls incoming over a PRI link.
Correction- This Order Code is not MD.	14	NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AG1300	Group Types	This feature enhances billing and maintenance capabilities by enabling the interworking needed for Primary Rate trunks to complete calls and provide billing for the following trunk group types: Centralized Automatic Message Accounting (CAMA) trunk groups. Operator Position trunk groups. Automatic Message Recording 5 trunk groups. To accommodate billing, the Primary Rate trunk provides the calling party number to the Automatic Message Accounting (AMA) trunk with which it is interworking. This feature also allows Primary Rate trunks to interwork with existing dialed loopback trunk facilities for testing purposes. The originating office an invoke the dialed loopback stithe terminating office by dialing the proper access code. The originating office is then permitted to perform tests on the looped back circuit.
Correction- This Order Code is not MD.	14	NI000022	NIO ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AC0270		This Primary Rate Interface (PRI) feature provides the capability to network ISDN services between the DMS and digital private branch exchange (PBX) equipment, such as the Northern Telecom SL-1. The Primary Rate Interface uses DS-1 facilities and provides 64 kbps clear B channels that can be used to transport voice or data. Signaling is handled out-of-band on the PRI D channel. This feature provides the following PRI capabilities: Calling Number Delivery (CND) to and from the PBX over the D channel. Support for public and private call types.
Correction- This Order Code is not MD.	14	NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AC0474	Number (XPM)	This feature allows the delivery of redirected, redirecting, and connected numbers to ISDN terminals over ISDN Primary Rate Interface links. Network-wide delivery and display capabilities are provided for the following features: Call Forwarding, Unconditional Call Forwarding, Busy Call Forwarding, No Answer Call Transfer, Call Pickup. Display information is delivered to the ISDN subscriber transparently; there is no indication that the information has been delivered over Primary Rate and CCS7 links.
Correction- This Order Code is not MD.	14	NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AJ0789	LTCI	This feature provides software support for both Primary and Basic Rate Interface on the ISDN Line/Trunk Controller (LTCI). The LTCI is identical to the DTCI except that it supports Basic Rate Interface lines as well as DS-1/Primary Rate links.
Correction- This Order Code is not MD.	14	NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AJ0170	Interworking	This feature allows interworking between CCS7 Integrated Services User Part (ISUP) and ISDN Primary Rate Interface so that redirected, redirecting, and connected numbers can be provided to ISDN terminals across hybrid networks (see figure). This feature coincides with SL-1 redirection features in X.11 Release 16. Network- wide delivery and display capabilities are provided for the following features: Call Forwarding, Unconditional, Call Forwarding, Busy,Call Forwarding, No Answer, Call Transfer, Call Pickup.
Correction- This Order Code is not MD.	14	NI000022	NI0 ISDN PRI Base	This feature provides the ISDN Primary Rate Interface (PRI) base code to support Nortel's implementation of NI-1 PRI services and includes Calling Line Identification, Redirected Number Delivery, Call Forward Reason Display, and connectivity to Meridian, SL-1, SL-100, and PBXs from various vendors.	5					AE1089	Protocol Variant Control	This software contains a Global PRI-Protocol Variant Control feature that simplifies the management of the various implementations of PRI access, such as 4ESS, 5ESS, and different vendors' PBXs.
MD'd the order code	14	NI000023	NI0 Intertol ISUP & SS7	This feature provides the intra/inter-LATA wideband connectivity over CCS7 trunks for wideband trunking between offices. This extends the reach of DWS connectivity, previously limited to locations served by Primary Rate Interface trunks.	6		10	NI000073	865		DWS Intertoll Trunks ISUP	This software provides the CCS7 trunk type for wideband trunking between offices, enabling interoffice/intraLATA wideband connectivity. The software does not, however, provide the equal access signaling necessary to place a call through an IEC from within an LEC (see "DWS FGD Trunking," previous page, for DWS Feature Group D access to IECs).

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Issue 2		Onden Onde	Ouder Orde News	Orden Orde Description	NCS	Enh		Repl Ord	DOID	ACTID	Frature News	Frature Description
MD'd the order code				Order Code Description This feature provides the intra/inter-LATA wideband connectivity over CCS7 trunks for wideband trunking between offices. This extends the reach of DWS connectivity, previously limited to locations served by Primary Rate Interface	RIs 6	Ris	MD RIs 10	Ni000073	865			Feature Description These features provide the CCS7 wideband trunking capability, call control, and messaging required for intraLATA DWS applications conforming to North American CCS7 trunk standards With dialable wideband access from a PRI loop, the software enables wideband calls ranging from 128 kbps through 1.536 Mbps to be transported over CCS7 wideband trunk groups to the destination office within the LATA.
	14	NI000024	on NI-1 PRI	trunks. This feature on NI-1 Primary Rate Interface trunks allow the DMS switch to more efficiently use PRI trunk connections for ISDN-based private branch exchange (PBX) calling traffic. When a forwarded or transferred call is set-up using two channels in a PRI trunk to the DMS switch, the PRI trunk channels that were used to make the connection can be dropped and made available for future calls. Without RLT on NI-1 PRI, these channels would unavailable for the duration of the call.	6					AF6371, AN1927	Release Link Trunking on NI-1 PRI	Release Link Trunking (RLT) on NI-1 Primary Rate Interface trunks allow the DMS system to more efficiently use PRI trunk connections for ISDN-based private branch exchange (PBX) calling traffic. In a PBX or a network of PBXs, multiple call forward and transfer situations are typical. When a forwarded or transferred call is set-up using two channels in a PRI trunk to the DMS system, the PRI trunk channels that were used to make the connection can be dropped and made available for future calls (see the figure for an example scenario). Without RLT on NI-1 PRI, these channels would be unavailable for the duration of the call, wasting precious telecommunications resources. Typical applications for RLT on NI-1 PRI include the traffic routing and call set-up scenarios of business services such as PBX Centralized Attendant, Automatic Call Distribution (ACD), and Integrated Voice Response (IVR) systems. Also, after a call
MD'd the order code	14	NI000025		This feature enables the DMS switch to verify the calling number (valid numbers are listed in a software table) and send that verified number into the network. If the number fails to pass screening, the DMS switch delivers a network- provided number previously datafilled for that PRI line. When the PBX number passes screening, the number is provided to the CCS7 Initial Address Message (IAM) or to the line in a PRI-to- line call. This feature may be turned on or off on a per-PRI link basis.	6		10	NI000033 or NI000043 depending on whether NI-1 or NI-2 is being utilized.	8695			Distribution (ACD), and integrated voice Response (VR) systems. Also, after a Call NI-1 PRI Calling Number Screening enables the DMS switch to verify the calling number (valid numbers are listed in a software table) and send that verified number into the network. If the number fails to pass screening, the DMS system delivers a network-provided number previously datafilled for that PRI line. When the PBX number passes screening, the number is provided to the CCS7 Initial Address Message (IAM) or to the line in a PRI-to-line call. Only calls entering the public network are screened. This feature may be turned on or off on a per-PRI link basis since not every PBX requires numbers to be screened. Regulatory agencies in parts of North America require that a valid number be delivered and identified to the terminating directory number. This software is designed to meet that requirement for PBX-originated calls over PRI trunk facilities. Along with regulatory compliance, this feature enhances billing accuracy for ISDN- based, PBX-originated 800 calls.
MD'd the order code	14	NI000027		This feature provides flexible channel selection on the DWS PRI access loop to accommodate a wide variety of customer premises equipment (CPE) and offers DWS that supports a wide range of CPE through three different access subscription options: fixed channel selection, and flexible channel selection (the most sophisticated method).	6		10	NI000073		876	Flexible PRI Access	This feature provides flexible channel selection on the DWS PRI access loop. DWS allows three different access subscription options: fixed, floating, and flexible. These subscription options correspond to different CPE channel selection capabilities allowed by the S/DMS-100 Family switch for a DWS call. Subscription options, requested by subscribers, are based primarily upon the capabilities of their CPE, since some CPE may not be able to handle the more sophisticated channel selection capabilities. The least sophisticated method is fixed channel selection, while the most sophisticated method is flexible channel selection.
	14	NI000028		This feature provides the CCS7 equal access wideband trunking capability and Feature Group D (FGD) support to allow local providers to send Dialable Wideband Service calls to destinations that cross LATA boundaries; thus, extending DWS network connectivity to include interexchange carriers (IECs).	5					AD4732	Dialable Wideband Service — Feature Group D Trunking	This software provides the CCS7 equal access wideband trunking capability and Feature Group D (FGD) support to allow LECs to send dialable wideband calls to destinations that cross LATA boundaries. The call originator can use the presubscribed IEC or identify a preferred IEC before dialing the wideband call. Typically, this software would be used in an access tandem to coordinate traffic going to IECs.

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		Order Code NI000030	Order Code Name NIO ISDN PRI CNAM	Order Code Description This feature provides Transaction Capabilities Application Part (TCAP) TR-1188-based name services to a PBX or other NI-2 customer premises equipment (CPE) to allow end users to know the name of person calling.	9	Ris	MD RIS	Code	PCID	ACTID AF7209, AF7210, AF7211, AX0518	Feature Name NI-2 PRI Calling Name Delivery	Feature Description This feature provides Transaction Capabilities Application Part (TCAP) TR-1188- based name services to a PBX or other NI-2 customer premises equipment (CPE) t allow end users to know the name of person calling.
	14	NI000032	NI0 PRI Hotel/Motel	This feature promotes proper billing and helps prevent certain types of fraud by delivering a special code to the operator services system to restrict station dialing. This feature passes along the appropriate service class of call screening (SCOCS) code to the operator over multifrequency (MF) trunks so that station- restricted phones, such as those found in hotels, and motels, prisons, or hospitals, can still provide proper billing from the operator system. This feature routes the received digits from the PBX to the MF ANI spill going to the operator services system.	9					AF7215, AF7216, AF7217, AX0515	NI-2 PRI Hotel/Motel Services	This feature promotes proper billing and helps prevent certain types of fraud by delivering a special code to the operator services system to restrict station dialing. This feature passes along the appropriate service class of call screening (SCOCS) code to the operator over multifrequency (MF) frunks so that station-restricted phones, such as those found in hotels, and motels, prisons, or hospitals, can still provide proper billing from the operator system. This feature routes the received digi from the PBX to the MF ANI spill going to the operator services system.
Added	14	NI000033	PRI NI-1 Base	This feature in NCS10 becomes the PRI NI-1 Base and contains the features that were included in NI000011 NI-1 PRI Base, NI000012 NI-1 PRI Interworking, NI000013 NI-1 PRI Networking, and NI000025 PRI Calling Number Screening.	10		1		12918	See ACTIDs for NI000011, NI000012, NI000013, NI000025	PRI NI-1 Base	This feature in NCS10 becomes the PRI NI-1 Base and contains the features that were included in NI000011 NI-1 PRI Base, NI000012 NI-1 PRI Interworking, NI000013 NI-1 PRI Networking, and NI000025 PRI Calling Number Screening.
Ndded	14	NI000035	NIO Circular Hunt NI	This feature enhances National ISDN (NI-2) PRI to promote trunk availability for Internet traffic.	10				13466		Circular Hunt Services-National ISDN 2/3	This feature enhances National ISDN PRI to promote trunk availability for Internet traffic.
\dded	14	NI000036	NI0 Circular Hunt NA	This feature enhances the Nortel Networks proprietary (NI-1) ISDN PRI to promote trunk availability for Internet traffic.	10				13468		Circular Hunt Services-Nortel North American ISDN	Supporting the explosive growth potential that Internet access offers for PRI trunks, Nortel Networks' industry-leading Circular Hunting feature expands trunking capabilities for facility-providing switch owners and IAPs (Internet Access Providers) With the Nortel Networks-designed circular-hunting algorithm, the system can direct calls to a significantly higher number of trunks. Now calls are routed not only to trunk within a specific PRI trunk group, but to all the trunks in the many PRI trunk groups th make up an IAP's RTE (Route) list. Because each hunting cycle begins at the last RTE channel that carried traffic, circular hunting increases the predictability of incoming traffic, distributes traffic more evenly among trunk groups, and reduces operations, administration, and maintenance (OAM) costs. Call completion is enhanced as well. For example, if a faulty modem is accessed during the circular-hunting cycle, the modern will not be accessed again during that RTE round trip, unlike the current ascending/descending hunt process that repeated tries to access the damaged modem. To help IAP's take greater advantage of Internet revenue opportunities, Nortel Networ Also, this software streamlines DN-maintenance activities for the IAP. This optional software delivers the following advantages: • Helps increase end-user call-completion rates. • Makes calling more convenient for end users by supporting access to an entire sup • Distributes Internet traffic evenly and efficiently across PRI access facilities. • Enhances traffic predictability for smoother flow of Internet traffic. • Enalitates end-user testing, now that IAP's can determine the trunks on which calls • Reduces OAM cost for the IAP.

Change In Issue 2					1st NCS	Enh		Repl Ord				
	Арр 14	Order Code NI000040	Order Code Name NIO NI-2 DWS Scvs	Order Code Description This feature enables subscribers to select the desired n x 64 bandwidth-from 128 kilobits per second (kbps) through 1.5 megabits per second in 64kbps increments-and dial a single standard directory number to make a connection to any multi-rate ISDN subscriber. The subscriber chooses the bandwidth required for a particular application on a per-call basis, so there's no need to lease a dedicated end-to-end T-1 line. DWS uses an ISDN PRI access link and public network CCS7 interoffice trunking.	<u>Rls</u> 9	Ris	MD RIS	Code	PCID		Feature Name NI-2 Dialable Wideband Service	Feature Description This feature enables subscribers to select the desired n x 64 bandwidth-from 128 kilobits per second (kbps) through 1.5 megabits per second in 64kbps increments-and dial a single standard directory number to make a connection to any multi-rate ISDN subscriber. The subscriber chooses the bandwidth required for a particular application on a per-call basis, so there's no need to lease a dedicated end-to-end T- 1 line. DWS uses an ISDN PRI access link and public network CCS7 interoffice trunking.
Added	14	NI000043	PRI NI-2 Base	This feature in NCS10 becomes the PRI NI-2 Base and contains the features that were included in NI000015 NI-2 PRI Base, NI000016 NI-2 D-Channel Backup, NI000017 NI-2 Call by Call, and NI000025 PRI Calling Number Screening.	10				12919	See ACTIDs for NI000015, NI000016, NI000017, NI000025		This feature in NCS10 becomes the PRI NI-2 Base and contains the features that were included in NI000015 NI-2 PRI Base, NI000016 NI-2 D-Channel Backup, NI000017 NI-2 Call by Call, and NI000025 PRI Calling Number Screening.
	14	NI000050	NI0 NI 2/3 BRI Svcs Ph I	This feature introduces key NI-2 and NI-3 BRI requirements for uniform interface configurations in SR-2120 and SR-2457. These National ISDN- 2/3 BRI services increase the operational versatility of BRI line interface configurations and expands the BRI service options available to end users.	6					AF6536, AF6469, AF6440, AF6439, AF6432, AF6599	National ISDN-2/3 BRI Services - Phase I	Beginn ing with NI-2, several standards-based BRI features are supported in a uniform. manner to provide ubiquitous service to subscribers. Nortel is bundling and introducing these features in N1000050 to expedite NI-2 and NI-3 compliance in the marketplace. Included in this release is support for the following interface configurations: • Single DN for BRI. Enables an integrated terminal (a terminal that supports both speech and circuit-switched data call types) to have one directory number (DN). This same number can be used for all circuit-switched call types and can simultaneously access both B channels. • Single TEI for BRI. An integrated terminal may also be operated using a single Terminating Endpoint Identifier (TEI), regardless of the number of call types supported on that terminal and regardless of whether one B channel or two B channels are being used simultaneously. • Support for Non-Initializing Terminals (NI-3). Supports a non-initializing terminal. (NIT • Assignment of Feature Keys to Default TSP for Non-Initializing Terminals. Permits tf National ISDN-2/3 BRI Services increase the operational versatility of BRI line interface
	14	NI000051	NIO NI 2/3 BRI Svcs Ph II	This feature further expands National ISDN compliance on the DMS switch with a broad range of NI-2 and NI-3 services and provides considerable revenue-generating opportunities with new ISDN services.	8	9				AF7293	Default Services for Terminals	This feature enables limited call-origination activities such as 611, BRI verification, and others for non-provisioned lines. The service provider determines the list of dialable numbers.
	14	NI000051	NI0 NI 2/3 BRI Svcs Ph II	This feature further expands National ISDN compliance on the DMS switch with a broad range of NI-2 and NI-3 services and provides considerable revenue-generating opportunities with new ISDN services.	8					AF6638, AF6646, AF6646, AF6649, AF66715, AF6655, AF6655, AF6655, AF6603, AF6693	National ISDN-2/3 BRI Services Phase II	KEY CAPABILITIES A host of new features and enhanced functions are being added with the release of this ordering code. Some of the key ISDN features in this release include the following: • Electronic Key Telephone Service (EKTS) and Virtual Key Application. Provides (1) call handling flexibility for multiple appearances of the same directory number using Call Appearance Call Handling (CACH) so that calls can originate from and terminate to any combination of call appearances; and (2) end-user provisioning of the call offering sequence. • Call Forward Enhancements. Supports a variety of call forwarding types (Universal, Busy, Don't Answer) for incoming calls to an ISDN set. Additional enhancements include the following: • Call Forward Keylist per directory number/call type (DN/CT)—Universal • Feature Key Activation/Deactivation per DN/CT—Universal • Call Forward Activation/Deactivation Outside Call Context—Universal • Call Forward Reminder Notification • Call Forward Reminder Notification • Call Forward Courtesy Call • Remote DN Validation during Programming

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	Ann	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
			NIO NI 2/3 BRI Svcs Ph II	This feature further expands National ISDN compliance on the DMS switch with a broad range of NI-2 and NI-3 services and provides considerable revenue-generating opportunities with new ISDN services.	8	9				AF7282	TR-303 NI-2 Service Enablers	This feature expands the NI-2/3 feature content currently available for host lines to BRI lines served by Nortel's AccessNodes or TR-303 generic remote digital terminals. This feature supports the use of a single directory number across multiple terminals, and more than two B-channel terminals interface configurations, parameter downloading, and flexible calling and calling name delivery enhancements.
	14	NI000052	NIO NI 2/3 BRI Svcs Ph III	This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9					AF7223, AF7252	Delivery of Network Provided Calling Party Number	This enhances current Calling Party Number Screening to provide NI-2 compliance. The switch uses a network-provided number unless the user-provided calling-party number is available and passes screening.
	14	NI000052	NIO NI 2/3 BRI Svcs Ph III	This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9					AF7249, AF7329	Eight Fully Initializing Terminals (FITs) on a BRI Loop	This feature supports up to eight terminals in any combination of fully initializing or non- initializing types. Each terminal can access both B-channels by using any combination of circuit-mode call types that simultaneously use a single Terminating Endpoint Identifier (TEI).
	14	NI000052	NI0 NI 2/3 BRI Svcs Ph III	This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9					AF7241, AF7242, AF7243	Free Format SPID Provisioning	This feature alleviates the requirement for the DMS system to associate a Service Profile Identification (SPID) with the primary DN. So, when a NPA split occurs, customers are no longer required to change the SPID. Although a customer's phone number changes, the change is transparent from a CPE perspective. The local service provider can set the SPID to any value from 3 to 20 with no internal switch restrictions.
	14	NI000052	NIO NI 2/3 BRI Svcs Ph III	This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9					AF7190, AF7253	Operations, Administration, and Maintenance (OAM) Multi-Termina Maintenance	This feature provides valuable diagnostic information that streamlines BRI remote maintenance. Currently, the Logical Terminal Identifier (LTID) has a one-to-one relationship with a physical terminal, and the status of the terminal cannot be determined. This software enhancement displays the physical terminal on an LTID and indicates if the physical terminal is up or down. This software also provides a single command to display: the status of each terminal sharing the same DN and LTID, the call types provisioned on each terminal, the SPID associated with the DMS switch as well as the terminal. If a SPID mismatch occurs, the incorrect SPID and a valid SPID display.
	14	NI000052	NIO NI 2/3 BRI Svcs Ph III	This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9					AF6788, AF6790, AF6791, AF7315	Packet Interface Configurations	This feature enables the use of a single directory number on a non-initializing terminal (NIT) device that supports circuit-mode voice, circuit-mode data, and D-channel packet data services (that is, an integrated voice and data terminal that does not use SPID registration procedures).

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	App	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
Added				This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9	10			12564	AF7444, AF7455,		 Call Forward Programming for Secondary Members enables any EKTS Call Appearance Call Handling (CACH) directory number (DN) member to program Call Forwarding Universal for a non-primary set. When two ISDN phones share call appearances in an EKTS CACH environment, call-forwarding instructions for either phone can be activated, deactivated, or modified from the other phone via feature codes. Two B-Channel Access for EKTS Terminals enhances the B-Channel Manager by enabling EKTS CACH to use the same DN for two simultaneous voice calls. (Basic EKTS requires separate DNs for two simultaneous voice calls.) Single DN for EKTS (VI, CMD, and PMD) provides a single DN for access to voice (VI), circuit-mode data (CMD), and packet-mode data (PMD). Voice service is shared among all EKTS members, while CMD and PMD are assigned to individual EKTS terminals.
												By providing feature flexibility and improved line-sharing methods for users in EKTS CACH environments, this suite of enhancements delivers greater revenue opportunities to the network provider, along with more efficient conservation of directory numbers.
Added	14	NI000052	NI0 NI 2/3 BRI Svcs Ph III	This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9	10			13187	AF7503, AF7504	Uniform Usage Measurements	This feature enables the network provider to bill selected Basic Business Group (BBG) dial-access subfeatures (Intercom Dialing, Public Network Access, Private Facility/Network Access, and Facility Overflow) on a usage-sensitive basis.
												With the ability to charge for established ISDN features on a per-usage basis, service providers can encourage subscribers to activate these features more frequently. Previously, providers were required to charge a flat monthly fee in exchange for unlimited use of ISDN features.
Added	14	NI000052	NIO NI 2/3 BRI Svcs Ph III	This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9	10			13186	AF7454	CNIS Billing without Intra/Inter BBG Segregation	This enhancement gives the DMS system the option to generate separate counts for different circuit-mode call types within the same billing record. Additionally, this software can create a detailed record that defines how many times a specific user invokes privacy to prevent the delivery of caller identification to the called party. This feature delivers greater control and accuracy to network providers when billing for Calling Number Identification Service (CNIS) features on a per-use basis.
Added	14	NI000052	NIO NI 2/3 BRI Svcs Ph III	This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9	10			12872	AF7446, AF7447		This feature enables the DMS system to monitor and log abnormalities and errors that occur at Layer-2 and Layer-3 levels during packet-network data transactions. Faster resolution of data packet problems promotes more efficient operation of the network, and, because fault resolution is usually transparent to the subscriber, greater customer satisfaction.
Added	14	NI000052	NI0 NI 2/3 BRI Svcs Ph III	This software continues the rollout of National ISDN BRI and adds new features and enhanced capabilities for NI-2 services on the DMS switch.	9	10			13688	AF7460, AF7486, AF7622	Busy/Idle Feature Interaction	This feature enhances the current procedures for optional services — such as Automatic Call Back (ACB), Automatic Recall (AR), and Ring Again (RAG) — that monitor busy/idle status. As a result, incoming callers are provided with more accurate status information as to whether the ISDN set being called is busy or idle. By improving the ISDN line-status identification process, this software contributes to more accurate and efficient network operation. And, because incoming callers receive accurate information about line status, greater customer satisfaction is promoted.
	14	NI000060	NI0 NI-2 Completion	This feature adds to existing DMS switch services National ISDN enhancements identified and driven by the National ISDN Council (NIC).	9					AF7333	Audible Voice Mail Message Waiting Indicator	This feature provides an audible indication to the user, upon call originations, whenever a message is waiting. The feature also enhances the current visual message-waiting indication.

Change In Issue 2					1st NCS	Enh		Repl Ord				
	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	14	NI000060	NI0 NI-2 Completion	This feature adds to existing DMS switch services National ISDN enhancements identified and driven by the National ISDN Council (NIC).	9					AF7240	Automatic SPID	This feature automates the terminal initialization procedures by having the switch send the SPID to the terminal, rather than have it entered by the user
	14	NI000060	NI0 NI-2 Completion	This feature adds to existing DMS switch services National ISDN enhancements identified and driven by the National ISDN Council (NIC).	9					AF7250, AF7326	B-Channel Restrictions on a TSP Basis	This feature provides the ability to restrict a group of one or more Terminal Service Profiles (TSPs) to share a single B-channel, rather than allowing the TSP or group of TSPs to use both B-channels in a shared BRI environment. This prevents one user from using both B-channels simultaneously, which would prevent other users to make or receive a call.
	14	NI000060	NI0 NI-2 Completion	This feature adds to existing DMS switch services National ISDN enhancements identified and driven by the National ISDN Council (NIC).	9					AF7191, AF7254	BRI Verification-Office Equipment (BRIV-OE)	This feature enables normal call control procedures for retrieving the office equipmen identifier of the line card associated with an ISDN BRI line. BRIV-OE can be used by field personnel to verify that the subscriber's access line is connected to the correct switch port. BRIV-OE applies to voice and circuit-mode-data type calls and supports access line installation and maintenance with line-side (customer premise) verification and testing.
	14	NI000060	NI0 NI-2 Completion	This feature adds to existing DMS switch services National ISDN enhancements identified and driven by the National ISDN Council (NIC).	9					AF7256, AF7297	Flexible Calling: Deactivate Conference Facility	This feature enables the deactivation (removal) of a conference resource when only two parties remain on an established conference call and when a connection to the third conference party is unsuccessful because of a no answer or busy condition.
Added	14	NI000061	NIO NI-98 Enhancements Phase II	This feature adds enhancements to existing DMS National ISDN Basic Rate Interface services.	10		1		13691	AF7448, AF7459	Auto Lamp Refresh	This feature provides an automatic update of an ISDN terminal's feature indicator lamps when the terminal initializes, so that the user can view immediate, accurate status displays for active features. By simplifying service set-up and automatically displaying currently activated features, the software contributes to faster, easier, and more efficient installations.
Added	14	NI000061	NI0 NI-98 Enhancements Phase II	This feature adds enhancements to existing DMS National ISDN Basic Rate Interface services.	10				11049	AF7328, AF7329, AF7330, AF7331, AF7394, AF7468	Directory Number Sharing Over Multiple Terminals	This software enables multiple terminals with different call types — such as voice, circuit mode data, or D-channel packet mode data — to share a common DN (directory number). This software benefits both the subscriber and the service provider: • Network providers lower costs and improve efficiencies by reducing the number of DNs assigned. • Subscribers enjoy the economy of having a single DN assigned to more than one terminal. • Users benefit from the convenience of publishing a single phone number, further reinforcing the attractiveness of ISDN.
Added	14	NI000061	NI0 NI-98 Enhancements Phase II	This feature adds enhancements to existing DMS National ISDN Basic Rate Interface services.	10				13180	AF7449, AF7461, AF7462, AF7466	Rapid Messaging BRI	This feature monitors the rate of incoming Q.931 messages from a BRI terminal and, if the pre-defined rate is exceeded, takes the terminal out of service temporarily. This capability allows defective or "babbling" terminals to be identified, and prevents them from monopolizing messaging resources. This self-regulating feature helps lower service providers' costs and broadens subscriber satisfaction by enhancing the availability of messaging resources for all

users.

Change In Issue 2					1st NCS	Enh		Repl Ord				
Added			Order Code Name PRI DWS Base	Order Code Description This feature in NCS10 becomes the PRI DWS Base and contains the features that were included in NI000004 NI-1 Dialable Wideband Service (DWS), NI000023 DWS Intertoli ISUP and SS7, and NI000027 DWS Flexible Access.	Ris 10	RIS	MD RIS	Code	PCID 12920	ACTID See ACTIDs for NI00004, NI000023, and NI000027	Feature Name PRI DWS Base	Feature Description This feature in NCS10 becomes the PRI DWS Base and contains the features that were included in NI000004 NI-1 Dialable Wideband Service (DWS), NI000023 DWS Intertoll ISUP and SS7, and NI000027 DWS Flexible Access.
	44	NPE00001	NPE Nbr Plan Evol 1	This feature expands the DMS switch call processing, provisioning, and line maintenance capabilities to support the use of duplicate NPA/NXX combinations within the same switch.	9					AF7345, AR2229, AR2230, AU2462, AU2462, AU24589	North American Numbering Plan Evolution-Duplicate NXX	This new ordering code expands the DMS Call Processing, provisioning, and line maintenance capabilities to support the use of duplicate NPA/NXX combinations within the same switch. • Duplicate NXX Line Maintenance. This feature enhances Line Maintenance functions to support duplicated NXX codes on a single switch. Now line maintenance commands, logs, and displays expand from seven-digit directory numbers (DNs) to ten-digit DNs. This expansion involves such system resources as Maintenance and Administration Position (MAP) displays, command interpreter commands, log texts, and resident tools. • Duplicate NXX Provisioning SERVORD Enhancements. This feature enhances the Bellcore-MARCH components of the SERVORD system to: • Handle line provisioning input and queries of up to 10 digits. • Help resolve potential ambiguities brought on by duplicate NXX datafill. NPE00001 capabilities focus on automated flowthrough processes in the duplicate NXX environment.
Added			NPE Nbr Plan Evol 1	This feature expands the DMS switch call processing, provisioning, and line maintenance capabilities to support the use of duplicate NPA/NXX combinations within the same switch.	9	10			12196		Duplicate NXX Support Enhancements	This ordering code expands the DMS-500 call processing, Service Order (SERVORD) provisioning, line maintenance, and subscriber line usage capabilities to support the use of duplicate NPA/NXX combinations within the same switch. In NCS09, NPE00001 capabilities focused on <i>automated</i> flowthrough processes in the duplicate NXX environment. In NCS10, this software delivers a range of manual line and number management capabilities for SERVORD queries — with special emphasis on line and number management functions. There are no changes to Automatic Message Accounting (AMA) billing reports. Because of the limitations of the existing North American Dialing Plan, number translation ambiguities can arise as exhaust issues force overlay Numbering Plan Area (NPA) implementations. When this occurs, it is possible to have the same NXX code for different NPAs appearing on the same DMS SuperNode system. For example, both 613-541-XXXX and 815-541-XXXX could be valid number combinations in the same switch.
	44	NPE00002	NPE Nbr Plan Evol 2	This feature extends the DMS switch provisioning system to support additional NPA/NXX combinations and expands table TOFCNAME to enable the provisioning of up to 8171 NPA/NXX combinations in a single switch. Each numbering plan area can serve up to 800 NXX codes.	9					AU2541	North American Numbering Plan Evolution-8000 NPA/NXX	NPE00002 significantly extends the DMS provisioning system to support additional NPA/NXX combinations. This optional ordering code expands table TOFCNAME to enable the provisioning of up to 8192 NPA/NXX combinations in a single switch. With NPE00002, network providers can serve a larger geographic area containing many NPA/NXX combinations with a single DMS SuperNode switch. This software

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	App 0	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID		Feature Description
	22 1	NPRI0001	NPRI PRI Network Interface	This feature provides the carrier with features that enhance PRI signaling.	5							This optional feature permits certain Primary Rate Interface (PRI) Q.931 optional information elements to be transported across a DMS-500 system ISUP Network vi the Access Transport Parameter (ATP) of an ISUP message. The DMS-500 Acces Transport feature carries Q.931 optional information elements from the originating node, which provides PRI/ISUP interworking, to the terminating node. At each intermediate nodes in the DMS-500 system ISUP network, the optional information elements to be transported by the Access Transport Parameter remain in Q.931 format. This software provides the following: • Ability to datafill PRI optional information elements into an ISUP ATP • Interworking between PRI and ISUP when ATP is in operation • Transport of Q.931 optional information elements across a DMS-500 ISUP network in the ATP • Method A name display • Locking shift to extension codesets 5, 6, or 7 • Transport of the following Q.931 optional information elements: - Higher Layer Compatibility (HLC) - Called Party Subaddress (CDS)
	22	NPR10001	NPRI PRI Network Interface	This feature provides the carrier with features that enhance PRI signaling.	5							This feature provides a back-up D-Channel (other than the primary D-Channel) to increase reliability and guarantee continued PRI service between any switching node or networks that are using ISDN PRI. This offers increased reliability for PRI applications.
dded	22 1	NPR10002	NPRI PRI II Digits	This feature provides the ability to outpulse Originating Line Information (OLI) or information digits (II) received from the originator or PRI terminations within the SETUP message based on a new TRKGRP parameter. The OLI/II is used to identify the origination location of the call, such as payphone, prison, etc.	10		1		15566	PSD07017		This feature provides the ability to outpulse Originating Line Information (OLI) or information digits (II) received from the originator or PRI terminations within the SETUP message based on a new TRKGRP parameter. The OLI/II is used to identify the origination location of the call, such as payphone, prison, etc. Under the 1996 FCC Payphone provision, IXCs must compensate payphone owners on a per-call basis for toil-free calls. This feature allows the service provider to market the sending the of OLI/II information to PBX customers who can tailor services to specific originating location types.
	22	NSER0001	Base Network Services	This feature provides various network-level services that can be combined in such way as to allow the carrier to differentiate itself in the market.	5							This feature provides real time calling number delivery on Dedicated Access Line (DAL) TIE (Terminal Interface Equipment) trunks terminating from the DMS-500 system. It combines ANI and address digits in a single stream using dual-tone multi- frequency (DTMF) signaling. With this software the customer premise equipment (CPE) end office is able to receive the address and Calling Party Information (CPI) under several outpulsing conditions. The various outpulsing options are determined by the trunk group datafill and the availability of ANI at the originating trunk.
	22 1	NSER0001	Base Network Services	This feature provides various network-level services that can be combined in such way as to allow the carrier to differentiate itself in the market.	5							This feature provides ISUP connectivity between a DMS-500 system using IMT trunks and an Nortel SL-100 using IBN7 trunks. The NETINFO parameter of the initial address message (IAM) exchanges the necessary translation information for each call.
	22	NSER0002	TCAP Authcode and Account Code Validation	This feature offers account code, speed dial, and authorization code validation services.	5						Private Speed Validation	This feature enables the service provider to offer account code and speed dial number services for subscribers using an off-board service control point (SCP) to verify the account code, translate the speed dial number, or both.
	22 1	NSER0002	TCAP Authcode and Account Code Validation	This feature offers account code, speed dial, and authorization code validation services.	5							This feature enables the service provider to offer authorization code services for their subscribers using an off-board SCP to verify the authorization code.
	22 1	NSER0003		This feature optimizes switch capabilities for intra- or inter-network IMTs.	5					AD7402	Inter/Intra IMT Support	This feature allows inter-machine trunks (IMTs) to be designated as either intra- or inter-network. According to the particular IMT type selected, associated switch capabilities are optimized. To enhance the routing for service providers with mixed networks, this software also provides IMT connectivity to the DSC DEX switch. Oth assorted enhancements provided by this feature include support for universal acces calls and reorigination on inter-network ISUP IMTs.
	42 1	NTS00002	NTS E800-CDN EOD	This feature, designed for Canadian market, provides end office display capabilities for Call Management sets, such as VISTA200, that support the TR-30 Bellcore standard.	6							This feature, designed for Canadian market, provides end office display capabilities for Call Management sets, such as VISTA200, that support the TR-30 Bellcore standard.

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		Order Code Name NTS 800+CID DNIDisp/MDC	Order Code Description This feature, designed for Canadian market, provides end office display capabilities for Meridian Digital Centrex or Automatic Call Distribution lines equipped with Meridian Business sets (MBSs) which use the MBS switch- to-Customer Premises Equipment display protocol and have a 2x16, 2x24, or 2x40 display.	RIs 6	RIs	MD RIS	Code	PCID	ACTID	Feature Name 800+ Caller ID and Dialed Number Display for Meridian Digital Centrex	Feature Description This feature, designed for Canadian market, provides end office display capabilities for Meridian Digital Centrex or Automatic Call Distribution lines equipped with Meridian Business sets (MBSs) which use the MBS switch-to-Customer Premises Equipment display protocol and have a 2x16, 2x24, or 2x40 display.
18	NTS00005	NTS E800 US	This feature enhances 800 services in the U.S. networks and provides interworking between the SSP and SCP in a CCS7 network for 800 routing, 10-digit routing, comfort tones, four-digit Carrier Identification Codes, and support for E800-type services in the future with other number codes.	5					AR0984	Cellular Trunks for 800 Service	This software expands access to 800 service to offer additional revenue-generating opportunities for the 800 service provider. With feature AR0983, calls originating from Feature Group B trunks and terminating on a line that has been call forwarded to an 800 number can now be connected to 800 service over an Access to Carrier (ATC) trunk. Feature AR0984 lets E800 calls originating from cellular trunks be connected, through standard translations, to 800 service over an ATC trunk. Billing is adjusted for this type of call so that no charge is attached to the originating cellular caller.
42	NTS00006	NTS E800SVS-Canada	This feature, designed for the Canadian market, provides service switching point (SSP) office functionality for number translation services for DMS SSP switches in a CCS7 network and provides 800 Biling Enhancements, Calling Party ID Number Delivery, 800Plus, addition of carrier IDs into AMA records, and Overflow Call Routing (OCR) on BUSY.	6					AR0982, AR1083	Overflow Call Routing for 800+	SSP office capabilities include 800 Billing Enhancements, Calling Party ID Number Delivery, 800 Plus, addition of carrier IDs into Automatic Message Accounting (AMA) records, and Overflow Call Routing (OCR) on Busy. Also, NTS0006 can enable 800 calls to overflow when an answer indication is not received at the DMS SSP from a terminating directory number's (DN) end office (OCR No Answer). With both OCR Busy and OCR No Answer, NTS00006 can process up to four terminating numbers provided by the SCP. The list of terminations may include domestic (Canadian) numbers, international numbers, standard announcements, or U.Sassigned numbers. This software adds the power and flexibility of the CCS7 network to extend number translation services. For example, this software can enhance the network provider's revenue stream by helping to increase the call completion rate for E800 calls through overflow routing features (800 number service revenues are in direct proportion to call completions).
42	NTS00009	NTS Dial Nu Dsply/BCLID	This feature, designed for the Canadian market, enhances the Bulk Calling Line Identification (BCLID) feature of RES00028 to include the dialed 800 number as a part of the BCLID message whenever this feature is subscribed.	6						Dial Number Display/Bulk Calling Line ID	This feature, designed for the Canadian market, enhances the Bulk Calling Line Identification (BCLID) feature of RES00028 to include the dialed 800 number as a part of the BCLID message whenever this feature is subscribed.
42	NTS00011	NTS RLT w No 3 Pty ltctn	This feature, designed for the Canadian market, is intended for use with Call Prompter service that is designed to redirect calls to a third party. It is also referred to as Call Completion with Trunk Optimization (CCTO), and will remove redundant ISDN User Part (ISUP) trunks in the event of call transfer or redirection on certain call types such as ISUP to Simplified Message Desk Interface (SMDI) and ISUP to Integrated Business Network (IBN) line.	6					AG2329	CCTO with No Third Party Interaction	This feature is designed to work with Call Prompter service, which redirects calls to a third party. After a call is redirected by an operator performing the Call Prompter service, software automatically removes redundant ISDN User Part (ISUP) trunks used to complete the call. The following types of calls are supported by this feature: ISUP trunk to Simplified Message Desk Interface (SMDI) line. ISUP trunk to Integrated Business Network (IBN) line. When seized trunks are quickly released after calls are transferred, those trunks become available for additional revenue- generating calling traffic and services. This optimizes switching resources and increases network efficiency, making the entire network easier to manage and operate over time.
18	NTS00012	NTS Extended Capability	This feature expands access to E800 service in the U.S. market for the network provider that will incorporate cellular trunks and call forwarding involving 800 numbers. It allows calls originating from Feature Group B trunks and terminating on a line that has been call forwarded to an 800 number to be connected to 800 service over an Access to Carrier (ATC) trunk. It enables E800 calls originating from cellular trunks be connected, through standard translations, to 800 service over an ATC trunk. Billing is adjusted for this type of call so that no charge is attached to the originating cellular caller.	5						Extended Capability	This feature expands access to E800 service in the U.S. market for the network provider that will incorporate cellular trunks and call forwarding involving 800 numbers. It allows calls originating from Feature Group B trunks and terminating on a line that has been call forwarded to an 800 number to be connected to 800 service over an Access to Carrier (ATC) trunk. It enables E800 calls originating from cellular trunks be connected, through standard translations, to 800 service over an ATC trunk. Billing is adjusted for this type of call so that no charge is attached to the originating cellular caller.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
	18	NTS00016	NTS E800 Expand-888 Code for AT	This feature provides the basis for 8xx functionality for support of 888 in an access tandem office and provides the same functionality as current 800 service offerings.	6					800 Expansion - 888 Code	Because of the success and popularity of 800 service, the national database is running out of available numbers. To add new numbers to support this profitable service, the industry–through the Industry Numbering Committee (IINC)–agreed to open 8xx (the 'xx' will always be the same number) for toll-free service codes. Under this agreement, 888 is the first code to be used, leaving 877, 866, 855, 844, 833, and 822 on reserve for future expansion after 888 numbers are exhausted. NTS00016 (for access tandems) and NTS00023 (for end offices) provide the basis for 8xx functionality with support of 888. The software to support each of the remaining 8xx codes is scheduled to be offered with separate ordering codes, listed on the next page. This expansion broadens revenue potential for network providers. The special billing and routing capabilities of current 800 service offerings in the Intelligent Network extends to the new codes through standard translations procedures.
	18	NTS00017	NTS 800 Expand - 877 Code	This feature adds the 877 code to 800 expansion functionality in Access Tandem and End offices.	6					NTS 800 Expand - 877 Code	This optional software adds the 877 code to 800 expansion functionality for Access Tandems and End Offices.
	18	NTS00018	NTS 800 Expand - 866 Code	This feature adds the 866 code to 800 expansion functionality in Access Tandem and End offices.	6					NTS 800 Expand - 866 Code	This optional software adds the 866 code to 800 expansion functionality for Access Tandems and End Offices.
	18	NTS00019	NTS 800 Expand - 855 Code	This feature adds the 855 code to 800 expansion functionality in Access Tandem and End offices.	6					NTS 800 Expand - 855 Code	This optional software adds the 855 code to 800 expansion functionality for Access Tandems and End Offices.
	18	NTS00020	NTS 800 Expand - 844 Code	This feature adds the 844 code to 800 expansion functionality in Access Tandem and End offices.	6					NTS 800 Expand - 844 Code	This optional software adds the 844 code to 800 expansion functionality for Access Tandems and End Offices.
	18	NTS00021	NTS 800 Expand - 833 Code	This feature adds the 833 code to 800 expansion functionality in Access Tandem and End offices.	6					NTS 800 Expand - 833 Code	This optional software adds the 833 code to 800 expansion functionality for Access Tandems and End Offices.
	18	NTS00022	NTS 800 Expand - 822 Code	This feature adds the 822 code to 800 expansion functionality in Access Tandem and End offices.	6					NTS 800 Expand - 822 Code	This optional software adds the 822 code to 800 expansion functionality for Access Tandems and End Offices.

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	App	Order Code	Order Code Name	Order Code Description	Ris	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			NTS 800 Expand - 888 Code for EO	This feature provides the basis for 8xx functionality for support of 888 in an End Office and provides the same functionality as current 800 service offerings.	6						NTS 800 Expand - 888 Code (End Office)	Supports the processing of new toll-free number codes in the Intelligent Network environment. Provides new toll-free codes with the same functionality as current 800 service offerings. Because of the success and popularity of 800 service, the national database is running out of available numbers. To add new numbers to support this profitable service, the industry—through the Industry Numbering Committee (INC)—agreed to open 8xx (the 'xx' will always be the same number) for toll-free service codes. Under this agreement, 888 is the first code to be used, leaving 877, 866, 855, 844, 833, and 822 on reserve for future expansion after 888 numbers are exhausted. NTS00016 (for access tanderms) and NTS00023 (for end offices) provide the basis for 8xx functionality with support of 888. The software to support each of the remaining 8xx codes is scheduled to be offered with separate ordering codes, listed on the facing page. This expansion broadens revenue potential for network providers. The special billing and routing capabilities of current 800 service offerings in the Intelligent Network extends to the new codes through standard translat
Added	22	NXXR0001	NXXR NXX Blocking	This feature provides the capability for the DMS switch to block NXX calls based on information digits (Infodigs) received. It provides the ability to associate a specific NXX number with any combination of Infodigs.	10				14477	AX1198	NXX Call Blocking Based on Information Digits	This feature provides the capability for the DMS switch to block NXX calls based on information digits (Infodigs) received. It provides the ability to associate a specific NXX number with any combination of Infodigs. It enables IXCs to block those NXX calls that are translated in-switch for NXX customers desiring to reject calls associated with particular Infodigs. This feature enables customers to reduce costs by blocking unauthorized calls from pay phones and enables IXCs to generate revenue by providing a service to their customers to block calls with specified Infodigs.
Added	22	NXXR0002	NXXR Toll Free NXX Acct	This feature provides the switch (long distance side) with the capability to optionally collect and validate an account code for in-switch N00/NXX called party billed calls.	10				14962	AX1302	Toll-Free NXX Account Code Activation	This feature provides the switch (long distance side) with the capability to optionally collect and validate an account code for in-switch N00/NXX called party billed calls. N00/NXX toll-free subscribers are able to provide selected callers with an account code that permits calls to be completed to the N00/NXX toll-free number.
	32	OAM00004	OAM EADAS DC I/F	This software enables administrative numbers that identify particular DMS switch peripheral modules (PMs) for the Engineering and Administration Data Acquisition System (EADAS) to remain constant over dump and restore operations during software upgrades. As PMs are added or deleted, their identifying numbers are either added or deleted in the inventory table, allowing the operations system (OS) interface to peripherals to remain constant.	6					AG4842	EADAS Data Collection Interface	This option permits the DMS system to communicate with an external EADAS data collection (EADAS/DC) center. When polled by the EADAS/DC, the DMS system transmits statistical information to the downstream processor. This information can be used as a major performance indicator to help engineer the switch, fine-tune the network, and issue standard reports, such as the AM Report. Once the data has been sent to an EADAS/DC center, it can be transferred to a EADAS Network Management location for administrators to monitor network performance (see OAM00005). The information transmitted over this interface can be analyzed to enhance call completion, thus helping to broaden revenue generation and enhance the class of service.
			OAM EADAS DC I/F	This software enables administrative numbers that identify particular DMS switch peripheral modules (PMs) for the Engineering and Administration Data Acquisition System (EADAS) to remain constant over dump and restore operations during software upgrades. As PMs are added or deleted, their identifying numbers are either added or deleted in the inventory table, allowing the operations system (OS) interface to peripherals to remain constant.	6					NC0390	EADAS Hardware Inventory Freeze—Part 1	This software enables administrative numbers that identify particular DMS Family peripheral modules (PMs) for the Engineering and Administration Data Acquisition System (EADAS) to remain constant over dump and restore operations during software upgrades. As PMs are added or deleted, their identifying numbers are either added or deleted in the inventory table, allowing the operations system (OS) interface to peripherals to remain constant. This software provides the first phase of the PM inventory control package for the operational measurement (OM) groups Line Module Data (LMD) and Universal Tone Receiver (UTR). This feature saves the network provider money by reducing the resources needed to synchronize DMS OM data with EADAS after software upgrades and to make "cut-and-paste" adjustments to engineering data at the end of the year.
	32	OAM00005	OAM EADAS N/M I/F	This option enables the passage of key statistical information through the EADAS/DC to the EADAS network management (EADAS/NM) center and offers the messaging required for the DMS switch to communicate with the EADAS/NM processor.	6						EADAS Network Management Interface	This option enables the passage of key statistical information through the EADAS/DC to the EADAS network management (EADAS/NM) center. OAM00005 offers the messaging required for the DMS switch to communicate with the EADAS/NM processor. The system's traffic load monitoring and control capabilities help network providers determine options to avoid call congestion. This can enhance revenue potential that would be affected by blocked traffic.

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
				This feature expands the number of Network Management trunk groups covered by the five minute EADAS network management data. The number of Network Management trunks groups is increased from 250 to 1024. This feature also provides the DMS switch interface to the Lucent Technology NetMinder machine which is used to collect large trunk group network management data at 19.2 KBits/sec. This feature also covers all existing network management messages including the 30 second Discrete Message.	6					AR2119, AR2120, AR2121	NetMinder Communication Interface	This feature expands the number of Network Management trunk groups covered by the five minute EADAS network management data. The number of Network Management trunks groups is increased from 250 to 1024. This feature also provides the DMS switch interface to the Lucent Technology NetMinder machine which is used to collect large trunk group network management data at 19.2 KBits/sec. This feature also covers all existing network management messages including the 30 second Discrete Message.
			OSM EADAS Buffer Increase	This feature expands the original EADAS thirty- minute buffer size and increases the range of values available for the data collection thirty- minute, sixty-minute, and twenty-four hour buffers—up to a maximum of 256,000 words. Also, this feature eliminates the need for a restart when the network provider changes the size of these buffers.	8					AR2247, AU2334	EADAS Buffer Increase	This feature expands the original EADAS thirty-minute buffer size and increases the range of values available for the data collection thirty-minute, sixty-minute, and twenty-four hour buffers—up to a maximum of 256,000 words. Also, this feature eliminates the need for a restart when the network provider changes the size of these buffers. Since the network elements involved will transition at different times to the new interface, this expansion is offered with feature software optionality. Data collection requirements have grown at some network provider locations beyond the original design capacity of the EADAS interface. Optional OAM00007 expands the buffer size at the DMS system to help in transfer efficiency and reduce the possibility of buffer overflow during high-volume collections. To promote continuity of service, this software does not require a restart for the changes to take effect. In addition to enhancing the communication interface between the DMS system groundwork for future data collection enhancements.
	30	OSAN0001	OSAN OSSAIN	This feature provides the basic prerequisite for AIN capabilities that can interwork with DMS operator service features, bringing basic AIN functions and benefits to the operator services environment.	9						Operator Services System AIN (OSSAIN)	OSAN0001 is the enabling ordering code for the new OSSAIN software group. Purchase of this code is a prerequisite for the use of other OSSAIN features.
	30	OSAN0002	OSAN OSSAIN Initial Rel	This feature supports basic AIN capabilities in the operator services environment and is the replacement order code for ENSV0014. Operator Services AIN facilitates a wide variety of new services, including third-party vendor services. The TOPS switch supports AIN principles in the operator services environment.	9					AN1527, AN1529, AN1528, AN1528, AN1629, AN1635, AN1531, AN1530, AN1537, AN1532, AN1537, AN1589, AN1867	OSSAIN Initial Release	KEY CAPABILITIES Operator Services AIN facilitates a wide variety of new services, including third-party vendor services. In NA006, the TOPS switch supports AIN principles in the operator services environment with the following capabilities: • TOPS Programmable Switch (TPS) data communications—Provides datafilling of TPS nodes on the DMS switch, message routing of Open Automated Protocol (OAP) messages on the DMS switch, musage monitoring of TPS services. • TPS protocol—Defines the OAP for interfacing between the switch and service node for the TPS product. This feature also provides the OAP software for the TPS. • TPS call processing—Provides the base software architecture for TPS call processing. • TPS transitions—Allows calls to flow to and from new systems—and interact with existing systems. This allows services to be created using building blocks: TPS functions provided by service nodes, TOPS operators, or existing automated systems. • TPS triggers—Along with other TPS features, implements the portion of the Operato • TPS routing and queuing—Primarily responsible for selecting an idle queuing agent t • TPS billing—Provides Bellcore Automatic Message Accounting Format (BAF) record

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			Order Code Name OSAN OSSAIN 07 Enhancements	Order Code Description This feature is the replacement ordering code for ENSV0020 and provides maintenance, operations, and billing enhancements for OSSAIN deployment.	<u>9</u>	RIS	MD RIs	Code	PCID	ACTID AN1926, AF6493, AF6495, AN1536, AN1899	Feature Name Operator Services System AIN (OSSAIN) Enhancements	Feature Description A number of new standard features to SERVORD will help enhance the automated Integrated Services Digital Network (ISDN) flowthrough capabilities of the DMS system with provisioning systems such as MARCH. These new features enable SERVORD to: • Expand change capabilities. The craftsperson can now manipulate a line feature while the line is Call Processing Busy (CPB) for ISDN order codes P, Q, S, T, and V. • Reduce steps to change a customer premises set. Now, when changing an ISDN set to or from Electronic Key Telephone Service (EKTS), it is no longer necessary to remove the line from service or to rebuild the service. • Simplify ISDN Authorized Bearer Service (ABS) prompting. The craftsperson can use permitted bearer services rather than listing bearer services not supported by the Logical Terminal Identifier (LTID). • Streamline Line Equipment Number (LEN) changes. This software extends the Change LEN (CLN) command to permit LEN updates without having to first remove Call Pick Up (CPU) or Speed Calling User (SCU) features from the line.
	30	OSAN0004	OSAN OSSAIN 09 Enhancements	This feature expands OSSAIN capabilities and includes Three-Way Conferencing, Broadcast Connections, Triggering Directly to Operator, Expansion of Open Automated Protocol (OAP) to support fast, flexible delivery of new services.	9						Operator Services AIN Enhancements	This feature expands OSSAIN capabilities and includes Three-Way Conferencing which provides three-way conference call capabilities on the TOPS switch in the OSSAIN environment, and Broadcast Connections which enables line information announcement devices to broadcast announcements to up to 1023 lines at once, as opposed to current one line/one device requirements. It also includes Triggering Directly to Operator which permits a call to trigger directly to an operator, and Expansion of Open Automated Protocol (OAP) which allows additional calling number information to be provided to Intelligent Peripherals over the OAP to support fast, flexible delivery of new services.
Added	30	OSAN0005	OSSAN OSSAIN 10 Enhancements	This feature expands on the AIN capabilities offered in OSAN0004 including queueing enhancements.	10				12843	AF7439, AF7592	OSSAIN 10 Enhancements	 New Operator Services System Advanced Intelligent Network (OSSAIN) software enhancements offered in NCS10 include: OSSAIN QMS MIS — enhances the Queue Management System – Management Information System (QMS MIS) by routing event data about OSSAIN agents and call queues to off-board reporting facilities and real-time displays. OSSAIN SN Translations — enables a Service Node (SN) assignment to override switch translations and screening. OSSAIN International Inbound Country Direct — permits OSSAIN to support the International Inbound Country Direct Teature to bypass the operator and send calls directly to the SN to collect the terminating number and billing information. This enhancement also collects originating country, terminating domestic number or country code, and billing information for automatic message accounting (AMA) records before releasing a call to the TOPS switch for standard routing. OSAN0005 continues the expansion of OSSAIN capabilities to offer greater flexibility and functionality on of-switch intelligent peripherals.
	30	OSAN0100	OSAN OSSAIN Sessions	This feature offers an alternate pricing option for OSSAIN features and permits OSSAIN software features to be priced on a per-session basis.	9					AF7156	Session Pricing for Operator Services AIN	This feature offers an alternate pricing option for OSSAIN features and permits OSSAIN software features to be priced on a per-session basis.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5	7				AG5019, AN1807	TOPS Robustness	This introduces the Home Numbering Plan Area/Serving Numbering Plan Area Expansion feature that permits the attachment of area codes onto directory numbers for billing purposes.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AF1447	0- Routing from TOPS Serving Multiple NPAs	In some cases, DMS TOPS operators serve calls from multiple Numbering Plan Areas (NPAs, or area codes) arriving over a common trunk. In these cases, callers attempting to reach emergency assistance or directory assistance by dialing a zero (0) rather than 911 or 411, respectively, may be routed incorrectly, because the number being outpulsed assumes the NPA of the operator rather than of the caller. This software automatically provides for the inclusion of the calling number NPA in the outpulsing of emergency assistance and directory assistance calls forwarded from the TOPS operator position. If this feature is not used, incorrect call routing can be avoided by having the operator dial all ten digits (NPA + DN) when outpulsing these calls.

Change In Issue 2	۸۰۰	Order Code	Order Code Name	Order Code Description	1st NCS RIs	Enh Ris	MD Ris	Repl Ord	PCID	ACTID	Feature Name	Feature Description
			OSB Operator Services	District outer personners the foundation for a wide portfolio of operator services on the DMS switch.	5	KIS	MD RIS	Code		AF1527	AABS TOPS Voice and Data Link Utilities	This feature allows for the selection of both voice and data connections necessary to link a DMS switching system to a Voice Service Node (VSN), thus permitting the implementation of Automated Alternate Billing Service (AABS). This feature provides the software necessary for: sending specific VSN messages across the multiprotocol controller (MPC) datalinks, receiving and directing incoming messages to the appropriate call process, producing audits that test the sanity of the datalinks, and providing the capability to switch links within a given link set in the event of link failure. The connections are accomplished by means of a new common language location identifier (CLLI), a new generic trunk group type, and a new table within the maintenance and administration position (MAP). In addition to supporting the AABS function, these parameters can be used to augment future TOPS service offerings.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AF1120		This feature eliminates the need for the operator to enter the telephone number associated with a busy line verify request more than once during a single call. Using this feature, the operator inputs into the TOPS system a telephone number associated with a Busy Line Verify request. This number remains in the TOPS system and eliminates the need to rekey the number during subsequent call handling (e.g., verify with scrambler and call completion). Prior to this feature, the operator was sometimes required to rekey the called number as many as three times.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AF2019		This optional feature supports the telephone operating company with unique audio announcements for callers to directory or toll assistance prior to connection to an operator or to queue. This feature uses DRAM technology to route specific calls, defined by the telephone operating company, to specific announcements.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AF2529		When the TOPS MP position is performing multiple functions (e.g., Toll and Assistance, Directory Assistance, Intercept), this optional feature significantly improves the measurements collected by Force Management for the TOPS Mechanized Force Administration Data System (MFADS) interface and introduces a new MFADS message format. These measurements can also be used in existing
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AF2022	Management Capability	This optional capability adds a new data port on the Input/Output Controller (IOC) that allows detailed information on operator performance to be sent to an off-line processor for storage and report generation. The data sent over this link include operator log-in and log-off times and work volume in CCS for each call type the operator handled during the time he/she was logged in. The information provided by this feature and the information available from the Mechanized Force Administration Data System (MFADS) port, used in conjunction with a report generation program, provides telephone operating companies with all the information necessary to optimize management of the operator workforce. Improved Statspac uses a new DMS port assignment.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AN0259	Area (NPA) Codes	Because the currently available Numbering Plan Area (NPA) codes are nearing exhaustion, the North American Numbering Plan (NANP) is being expanded. The NPA (or area code) format is being revised from N0/1X to NXX, where N indicates
	30		OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AF2372		anu dioit from 2 through 9; 0/1 indicates a 0 or a 1 and X indicates anu dioit from 0. Service Assistant Log-On allows operating companies to require Service Assistant (SA) and In-Charge (IC) operators to log on by using a special SA identifier at an authorized TOPS MP or TOPS MPX position. Service Assistant and In-Charge operator privileges were previously a function of a proper operator identifier given from an authorized position. This feature restricts access to an SA/IC position by requiring a special identifier and password to be entered at log-on. If incorrect entries are made, the log-on is terminated and another log-on attempt must be initiated. This feature also provides for automatic log-on to outside databases, such as Directory Assistance (DA) and Operators Reference Database (ORDB).
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AF1121	Enhancement	This feature improves operator average work time by providing a simplified method of handling bill-to-third-party calls that reduces the required number of keystrokes on the verification portion of this call type. Operators can now contact the third party without having to access a second position loop.

Change In					1st							
Issue 2					NCS	Enh		Repl Ord				
			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5	7				AF6625	TCAP TRID Replacement	This enhancement to OSB00001 introduces an enhanced interface for the TOPS External Real-Time Rating System (RTRS) and Originating Line Number Screening (OLNS). These applications use a Transaction Capabilities Application Part (TCAP) interface for rating and subscriber information queries. The existing interface for the Transaction Identifier (TRID) sent in the TCAP query is being replaced through this feature by a new Identifier Pool (IDPL) interface.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AJ0388	TOPS Administration—1200 Baud Printers	This feature enables TOPS input/output teletypewriter devices to receive data at 1200 baud. This change allows such devices as the Traffic Office Administration Data System (TADS) and the Force Administration Data System (FADS) to output more data in shorter periods of time.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5	7				AF6511	TOPS AMA Modifications	An enhancement, Modifications to the Extended Bellcore AMA Format (EBAF) Specification Table 281 Byte 1 (Rate Indicator), recognizes that a connection followed a credit request so that the "minutes of use" can be billed on a reconnect and
												the Operator Surcharge dropped by the billing system. This software can also indicate that the operator invoked a manual handling rate on a Directory Assistance Call Completion (DACC) call.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide	5					AF1103	TOPS AMA on Operator	This feature provides TOPS software that allows operators to generate multiple
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AF2036	TOPS E911	This feature allows an operator to transfer an emergency call that was dialed as a 0- call to the Public Safety Answering Point (PSAP) serving the caller's area and to forward Automatic Number Identification (ANI) with the call. Three-way voice connection is also available to allow the operator to converse with the PSAP attendant, if necessary. The call record is generated automatically. Currently, when a caller seeks emergency assistance by dialing 0- rather than 9-1-1, the incoming ANI is displayed to the operator. The operator must then determine the appropriate PSAP, execute a manual transfer, and stay on the line to ensure that the proper PSAP has been reached and that the PSAP agent will accept that call. (Because ANI is not currently sent with the forwarded call, the correct PSAP cannot be determined using the selective routing database at the tandem. Thus, the operator must remain on the line to be sure that the routing is correct.) Once the call has reach
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AG0931	TOPS Operator Password	This feature allows an operator password to be associated with each operator number, so that only one operator knows the password for a given number. This capability enhances tracking, because the operator number on any AMA record can only be that of the operator who used the password to log on. Prior to this feature, operators could log onto a TOPS position using any datafilled operator number so long as that number was not currently in use.
			OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5					AF2023	TOPS Revertive Call Hold	This feature allows TOPS operators to place on hold calls that do not have calling party supervision, so that they can be manually timed and ticketed. In addition, the feature allows operators to assist subscribers with extensions in remote locations (e.g., farmer with one phone in the house and an extension in the barn) in placing a call from one extension to the other.
	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5	7				AF6674	TOPS Year 2000	This enhancement to OSB00001 helps TOPS switches to operate correctly in the year 2000 and beyond. There are three major areas of TOPS software addressed by this feature, to correctly recognize 21st century dates: • Protocols • Leap year checks • Addition, subtraction, and comparison of years

Change In Issue 2					1st NCS	Enh		Repl Ord	DC:T	4.0===			
Added			Order Code Name OSB Operator Services	Order Code Description This feature provides the foundation for a wide	RIs 5	RIs 10	MD RIs	Code	997		Feature Name PICNAME Expansion	Feature Description This software enhancement expands the maximum number of carriers that can be	
nuudu	50	CCD00001	ood operator dervices	portfolio of operator services on the DMS switch.	5	10			337	AF7429, AF7430		Adatilied in the PICNAME table from 256 to 1000 entries. This feature also expands the following referencing tables to support up to a thousand InterLATA Primary Interexchange Carriers (PICs): DNPIC DNLPIC CARRTRF TOPECAR TRKLATA	
Added	30	OSB00001	OSB Operator Services	This feature provides the foundation for a wide portfolio of operator services on the DMS switch.	5	10			997	AF7498	Bill Code Enhancements & STS/SNPA Decoupling	This feature offers a new way to perform NXX validation for some or all incoming Traffic Operator Position System (TOPS) trunk groups. The new table TBILCODE contains the TOPS Bill Code information and accommodates the expansion of Automatic Number Identification (ANI) from seven to ten digits.	
												This feature introduces an enhanced method of determining the TOPS Bill Code information. In addition, this software provides the first step in TOPS to decouple the Serving Translation Scheme (STS) from the Serving Numbering Plan Area (SNPA) with respect to translations and screening. Subsequent enhancements are planned to	
	00	000040004			_			1		151000			
	30	OSDA0001	OSDA Directory Assistance	This feature provides directory assistance services on the DMS TOPS switch.	5					AF1266	IBM Directory Assistance Protocol	The IBM Directory Assistance (DA) Protocol is a TOPS central controller (CC) based interface that supports data messaging between the DA Gateway system and the DMS Traffic Operator Position System (TOPS). This interface communicates messages for call arrival, audio response unit (ARU) requests, billing, DA call	
												completion, position recalls, and call end. This call processing interface is used for both TOPS MP and TOPS MPX applications.	
	30	OSDA0001	OSDA Directory Assistance	This feature provides directory assistance services on the DMS TOPS switch.	5	9				AF7132, AF7150	Miscellaneous Directory Assistance Enhancements	This feature enhances the flexibility of the Expanded Subscriber Carrier Module-100 Access (ESMA) table Remote Digital Terminal Inventory (RDTINV) to more effectively support and provision remote digital terminals (RDTs) of varying line sizes This software also enables network providers to increase or decrease the capacity an RDT. The current datafill procedure involves classifying RDTs into specific size categories with applicable quantity limits (per peripheral) for each size class. This feature enhancement removes all size-classification requirements, enabling service providers to mix and match different size RDTs with the same switch peripheral.	
	30	OSDA0001	OSDA Directory Assistance	This feature provides directory assistance services on the DMS TOPS switch.	5	7				AN1844	Multi-Directory Assistance Database Support	This software allows service providers who use TOPS Queue Management System (TOPS QMS) to have access to up to 100 directory assistance (DA) databases for DA-based services in simplex mode—up to eight databases in duplex mode. Workin with the capabilities of TOPS QMS, the service provider can define calls for different DA systems as different QMS services—and route them accordingly. This software makes it possible to expand directory assistance offerings (to serve other geographic areas or to provide new revenue-generating listing services). As an added benefit, this capability also makes network upgrades much easier when moving from one DA database to another.	
	30		OSDA Auto DACC w/ Alt	This feature provides Nortel's Automated	5					AF2086	Automatic DA Call Completion with	This feature supports Mechanized Calling Card Service (MCCS) or Automated	
			OSDA Auto DACC W/ Alt	This feature provides Nortel's Automated	5				ļ		Alternate Dilling	Alternate Dilling Consists (AADC) after call constanting has been assessed by the	
	30	U3DA0002	Bill	This readure provides Noriel's Automated Directory Assistance Call Completion (ADACC) service which offers callers automatic connection to the requested number during a Directory Assistance call. With ADACC, after the requested listing is provided, callers can choose to let the switch complete the call immediately, without redialing.	5						Completion	all This feature allows automatic completion of Directory Assistance (DA) calls withou operator involvement, offering both significant savings and new revenues for telephone companies with TOPS. After a requested number is quoted to the customer by the audio response unit (ARU), the customer is offered an opportunity complete the call to that number. If the subscriber accepts, an AMA record is madd of the call, and the DMS switch attempts to complete the call using the current billing method. Of course, all billing and LATA restrictions enforced by the TOPS toll application are integrated and enforced in deciding whether to offer call completion	

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name OSDA Auto DACC w/ Alt Bill	Order Code Description This feature provides Nortel's Automated Directory Assistance Call Completion (ADACC) service which offers callers automatic connection to the requested number during a Directory Assistance call. With ADACC, after the requested listing is provided, callers can choose to let the switch complete the call immediately,	RIs 5	Ris	MD RIS	Coae	PCID	ACTID NC0316	Feature Name DA Call Completion Restrictions	Feature Description This feature enables telephone operating companies to offer subscribers the option of disallowing "sent paid" billing (i.e., bill charges to calling number) for Automatic Directory Assistance Call Completion (ADACC) calls. For example, a private branch exchange (PBX) that presents one calling number for numerous extensions could be datafilled so that local calls could be completed using ADACC, but toll calls would require alternate billing to allow completion. This feature provides a new field (CCPDTYPS) in table RESTBIL. Restrictions can be imposed for calls to toll
	30	OSDA0003	OSDA Auto Int Call Comp	This feature provides enhanced call interception services and unlike basic intercept treatment (provided in OSB00001), callers are automatically connected to the new number rather than to an announcement of a number change that leaves them to initiate a second call to the new number. Unlike directory assistance, charges for Automatic Intercept Call Completion are paid for by the subscriber and not the caller.	5					NC0146	Automated Intercept Call Completion	Automated Intercept Call Completion (AINTCC) allows calls that would normally be interrupted and sent to intercept treatment to be completed directly to the called party, even though that party's number has been changed (see figure). An announcement of the number change can be provided optionally, at the discretion of the customer or the telephone operating company. With AINTCC, telephone company business offices can realize new revenues from subscribers who expand their businesses or change locations but want to protect their incoming calls (and the revenues from those calls). AINTCC makes their change transparent to their customers—when customers dial, they are connected to the business itself rather than to an announcement of a number change that leaves them with the responsibility for initiating a second call. AINTCC is convenient for callers and offers a substantial revenue-generating opportunity for telephone operating companies. Two billable AMA
			OSDA Auto DA Srvc (ADAS)	This feature automates the greeting and inquiry portion of a Directory Assistance call. Callers are greeted by the automated system and asked to state the name of the city and listing they are seeking. Automated Directory Assistance Service (ADAS) records the caller's responses, removes initial and closing pauses, and replays	5					AN1433, AN1013	TOPS ADAS	Irecords are nenerated for each AINTCC call—one from the orininating end office to. Northern Telecom's new Automated Directory Assistance Service (ADAS) automates the greeting and inquiry portion of the directory assistance (DA) call. With ADAS, DA callers are greeted by the automated system and asked to state the name of the city and listing they are seeking. If a response is too long, ADAS prompts the caller to repeat only the essential information. ADAS records the caller's responses, removes initial and closing pauses, and replays the edited recording to the operator. The operator hears only the information needed to complete the call.
			OSDA Cell/IXC/LEC ADACC	This feature allows the directory assistance provider to offer call completion service to cellular callers - local customers and "roamers" alike - and to provide for the correct billing of these calls.	5					AN0262, AN0410, AN0841	Cellular/Interexchange Carrier/Local Exchange Carrier Automated Directory Assistance Call Completion	This feature allows the directory assistance provider to offer call completion service to cellular callers - local customers and "roamers" alike - and to provide for the correct billing of these calls. The new call-completion features enable the switch to complete calls for interexchange carrier subscribers and cellular "roamers", create carrier information modules, as defined by Bellcore, to be appended to the AMA record for the call, define unique call-handling procedures for different carriers, and provide DA branding on a carrier basis.
	30	OSDA0006	OSDA DA Automation I/F	This feature automates the greeting and inquiry portions of the typical DA call and enhances the protocol between the DMS switch and Directory One software to enable ADAS+ capabilities.	5					AN0880	Directory Assistance Automation	This feature automates the greeting and inquiry portions of the typical DA call and enhances the protocol between the DMS switch and Directory One software to enable ADAS+ capabilities. This new architecture places ADAS on the NAV platform with three levels of automation including Automated Language Selection, Automated Locality Name Recognition, and Automated Call Deflection.
	30	OSDA0008	OSDA LPP/APU Support	This feature provides supporting Link Peripheral Processor (LPP) and Application Supporting Unit (APU) software needed to implement Automated Directory Assistance Service to support other kinds of applications in the future.	5						UNIX Application Environment	ADAS Architecture. ADAS was designed for DMS SuperNode switches, whether configured as host, remote, or stand-alone operator centers. ADAS works with TOPS MP, TOPS MPX, TOPS MPX-IWS, and other Open Position Protocol (OPP) positions. Because the functionality is contained in the switch, ADAS can be used with any commercially available DA system. Link Interface Units— Link Interface Units (LIUs) in the Link Peripheral Processor (LPP) provide the hardware and logic to control ADAS functions. • Voice Processing Units store and play prompts, tones, and caller responses; and detect dual-tone multifrequency (DTMF) tones. • Application Processing Units control the resources of the LPP, ADAS application, and voice processors. • Network Interface Units provide an interface to DS-30 links in the switch network. • An Ethernet Interface Unit provides a link to the LAN serving the OAM workstation. With the LPP and modular IUs, changing the service mix is as simple as adding the appropriate IUs and software. This strategy gives the operating company maximum flu
	30	OSEA0001	OSEA TOPS Equal Access	This feature provides operator services in the Equal Access environment and enables the DMS TOPS switch to receive and process modified Feature Group C signaling with two-digit ANI IDs, route calls to the appropriate carrier using the carrier code and class of service screening, connect to Access to carrier (ATC) trunks and	5					NC0293	Feature Group B Carrier Code Expansion	This feature permits TOPS to support 9999 unique carrier access codes, rather than the current 999. In Feature Group B 950 calls, 950-0/1xxx dialing is replaced with 950-xxxx.

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	Δnn	Order Code	Order Code Name	Order Code Description	Ris	RIs	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
			OSEA TOPS Equal Access	This feature provides operator services in the Equal Access environment and enables the DMS TOPS switch to receive and process modified Feature Group C signaling with two-digit ANI IDs, route calls to the appropriate carrier using the carrier code and class of service screening, connect to Access to carrier (ATC) trunks and propagate coin control signals from an end office to a carrier, record carrier information in AMA records, and allows an operator to transfer a call to a carrier.	5				AN0834	Feature Group D Carrier Code Expansion	This software permits TOPS to support 10,000 unique carrier access codes, rather than the current 1,000. For Feature Group D calls, 10xxx carrier code identification dialing is replaced with 101xxxx. In addition, this software enables network providers to administer operator services for Interexchange Carriers more easily, ensuring appropriate grade of service and billing treatment for calls by: Expanding all tables associated with carrier identification and routing to accommodate the expanded carrier access codes. Expanding current carrier identification codes from three to four digits. This software enhances tables TOPEACAR, OCCINFO, and others. No new hardware interfaces or firmware changes are required for this software.
	30	OSEA0002	OSEA TOPS InterLATA Carr	This feature enables network providers to perform operator services on a contractual basis to interLATA carriers. The operator can complete 0, 0+, and 1+ interLATA calls originating from Equal Access or non-Equal Access end offices.	5					TOPS InterLATA Carrier Service	This feature enables network providers to perform operator services on a contractual basis to interLATA carriers. The operator can complete 0, 0+, and 1+ interLATA calls originating from Equal Access or non-Equal Access end offices.
	30	OSEA0003	OSEA TOPS ExcAcc Op Svc Sig	This feature provides the ability to combine operator services traffic with other traffic on the same trunk between an Equal Access End Office (EAEO) and the TOPS switch. This is achieved by enabling the DMS TOPS switch to accept Feature Group D Equal Access Operator Services. Signaling (EAOSS) from the end office.	5				NC0340	TOPS EAOSS Enhancements	This feature enhances existing TOPS Exchange Access Operator Services Signaling (EAOSS) capabilities by providing the ability to support international equal access operator assisted calling and its associated operator services signaling functions (multiple [4] winks for ANI forwarding without operator hold) using Equal Access (EA) Feature Group D (FGD) signaling between DMS TOPS and InterLATA carriers.
	30	OSEA0003	OSEA TOPS ExcAcc Op Svc Sig	This feature provides the ability to combine operator services traffic with other traffic on the same trunk between an Equal Access End Office (EAEO) and the TOPS switch. This is achieved by enabling the DMS TOPS switch to accept Feature Group D Equal Access Operator Services Signaling (EAOSS) from the end office.	5				AN0325	TOPS Operator Hold	This software provides datafillable operator hold for calls outgoing from the TOPS switch on Access to Tandem Carrier (ATC) trunks with outgoing Equal Access FGD signaling, providing full functionality for 1+ coin calling support. A timeout provides both outgoing Feature Group C (FGC) and FGD signaled calls, permitting the release of facilities if the carrier fails to release a call following subscriber on-hook after a datafillable period of time.
	30	OSEA0004	OSEA TOPS Incom FGD Sig	This feature permits the TOPS switch to receive and process standard Feature Group D signaling from interexchange carriers or cellular switches. It enables a network provider to modify the carrier associated with a call based upon dialed digits if the carrier prefers to not process certain types of calls.	5				AF1781	Alternate Carrier Selection	This feature allows telephone operating companies using TOPS InterLATA Carrier Service (TICS) to route incoming TOPS 0- calls to alternate interexchange carriers (IECs) other than the subscriber's primary interLATA carrier (PIC). In addition, this feature allows the telephone operating company to route TOPS 0+ and 1+ domestic and international calls automatically to a carrier other than the PIC based on the IEC's preselected alternate carrier.
	30	OSEA0005	OSEA GR317/394 ISUP/TOPS	This feature permits calls using pre-Operator Services Signaling System No. 7 (OSS7) ISUP signaling defined by standards GR-317/GR-394 to connect to a TOPS environment and receive Operator Services processing and implements release link trunking on an incoming trunk group basis for selected types of calls, such as sent paid directory assistance call completion.	7				AN1515, AN1656	ISUP to/from TOPS	This feature permits calls using pre-Operator Services Signaling System No. 7 (OSS7) ISUP signaling defined by standards GR-317/GR-394 to connect to a TOPS environment and receive Operator Services processing. In addition, this feature implements release link trunking on an incoming trunk group basis for selected types of calls, such as sent-paid directory assistance call completion. OSEA0005 introduces pre-standard ISUP signaling so service providers can have an early entry into providing CCS7 services.
	30	OSEA0006	OSEA TOPS ILP via OLNS	This feature uses TOPS Originating Line Number Screening (OLNS) to retrieve intraLATA presubscription information for processing 0- and 411 Directory Assistance Call Completion calls which are routed to the DMS TOPS switch.	7				AN1842	TOPS ILP via OLNS	IntraLATA Presubscription (ILP) permits a subscriber to select a carrier to handle intraLATA calls—that may be different from the carrier selected for interLATA calls. TOPS Originating Line Number Screening (OLNS) is used to retrieve ILP information from a Line Information Database (LIDB). Existing end office functionality currently supports ILP for 0+ and 1+ calls. OSEA0006 expands this capability to support ILP for 0- and 411 Directory Assistance Call Completion (DACC) calls routed to TOPS. This software makes it possible for service providers to meet regulatory requirements in markets where intraLATA competition is mandated.

Change In Issue 2					1st NCS	Enh		Repl Ord				
			Order Code Name ENSV TOPS RLT Phase I	Order Code Description This feature allows usage of SS7 ISUP trunks to be maximized by releasing ISUP connections between a previous exchange and a TOPS switch. After the Release Link Trunking (RLT) operation is performed, ISUP connections are released, freeing circuits for additional traffic and reducing the number of ports being used. Without RLT trunking at least one ISUP connection must be maintained between the previous exchange and the TOPS switch.	<u>RIs</u> 7	RIs	MD RIS	Code	PCID		Feature Name RLT Interworking with TOPS and OSSAIN	Feature Description This feature allows usage of SS7 ISUP trunks to be maximized by releasing ISUP connections between a previous exchange and a TOPS switch. After the Release Link Trunking (RLT) operation is performed, ISUP connections are released, freeing circuits for additional traffic and reducing the number of ports being used. Without RLT trunking at least one ISUP connection must be maintained between the previous exchange and the TOPS switch.
	30	OSEA0008	OSEA TOPS LNP	This feature enables the TOPS switch to communicate with Local Number Portability Service Control Points (LNP SCPs) to obtain the Location Routing Number of ported numbers and enables network providers to meet regulatory requirements to support Local Number Portability.	7					AF6549, AF6548, AF6554, AF6553, AF6550, AF6550, AF6552, AF6551, AF6524	TOPS Local Number Portability	This feature enables the TOPS switch to communicate with Local Number Portability Service Control Points (LNP SCPs) to obtain the Location Routing Number of ported numbers, to support the following functions: • When connecting to a number (calling, called, or validation of third numbers), redirects calls that have been "ported" from one switch to another. • When validating a billing number that has been ported from one switch to another, routes the calling card validation of billed number screening query to the line information database (LIDB) associated with the ported number. • When generating Automatic Message Accounting (AMA) billing records, generates TCAP queries on the CCS7 (Common Channel Signaling System No. 7) network to identify the service providers associated with calling, called, and alternate billing numbers. • When performing busy line verification, recognizes ported numbers and gives the operator a variety of options for completion, based upon operator service center practices. The TOPS system generates measurements of the number of LNP SCP queries sent
	30	OSEA0009	OSEA TOPS Carrier RLT- 2	This feature helps to maximize the efficient use of trunks between a TOPS switch and a UCS DMS-250 switch and enhances the Release Link Trunking functionality to calling card services.	9					- /	TOPS Carrier Release Link Trunking II	This feature helps to maximize the efficient use of trunks between a TOPS switch and a UCS DMS-250 switch and enhances the Release Link Trunking functionality to calling card services. OSEA0007 enabled the TOPS switch to release Integrated Services Digital Network (ISDN) User Part (ISUP) connections into a UCS DMS-250 carrier network or long distance side of the DMS-500. An SS7 trunk with release link trunking (RLT) capability connects a UCS DMS-250 to a TOPS switch. The RLT functionality allows a UCS DMS-250 switch to bridge calls and release SS7 ISUP
Added	30	OSEA0010	OSEA TOPS Bellcore LNP	This feature complies with the second LNP specification (GR-2936, a modification of the original ICC specification) to expand number portability implementation in the TOPS environment.	10		'	'	12841	AF7428, AF7558, AF7496	TOPS Bellcore LNP	Ordering code OSEA0010 complete with the second LNP specification (GR-2936, a modification of the original ICC specification) to expand number portability implementation in the TOPS environment.
Added	42	OSEA0011	Equal Access	The feature provides the capability requested by Canadian companies to help ensure the correct display of pre-subscribed carriers on an operator terminal for all calls arriving at a TOPS operator.	10				12842	AF7577	TOPS Canadian Equal Access	Although Canadian telephone companies have implemented a form of Equal Access processing that differs from the United States, one similarity is that Stentor companies provide operator services for all subscribers, including subscribers pre- subscribed to other telephone companies. All these calls complete on the Stentor networks along with the production of all associated automatic message accounting (AMA) records. OSEA0011 provides the capability requested by Canadian companies to help ensure the correct display of pre-subscribed carriers on an operator terminal for all calls arriving at a TOPS operator. This feature enhances call processing and operator handling, in response to Canadian network provider needs.

Change In Issue 2					1st NCS	Enh		Repl Ord	BCIT	10		
Added			Order Code Name OSEA TOPS Flex ANI	Order Code Description This feature enables the TOPS switch to forward to the carrier the ANI ID digits received from an end office. This enables Local Exchange Carriers to comply with the new FCC regulations that define how ANI information digits are sent to the carrier to identify calls originating from a payphone.	RIs 10	RIS	MD RIS	Code	PCID 13911		Feature Name TOPS Flexible ANI	Feature Description OSEA0012 enables the TOPS switch to forward to the carrier the ANI ID digits received from an end office. This enables Local Exchange Carriers to comply with new Federal Communications Commission (FCC) regulations that define how ANI information digits are sent to the carrier to identify calls originating from a payphone. Carriers are required to compensate payphone service providers on a per-call basis in the absence of an existing service agreement — a condition that generally applies when the carrier is not the presubscribed carrier for the paystation. This feature enables ANI information codes to designate the originating station as standard coin, inmate terminal, or smartset. This ordering code enables carriers to comply with and benefit from the FCC requirement to compensate certain payphone service providers.
	22	PRLT0001	(FI) ISDN PRI RLT	This feature reduces port and trunking requirements by introducing Release Link Trunk efficiencies.	5					AD7730	PRIRLT	The Release Link Trunk (RLT) feature enables service providers to optimize trunking facility by releasing PRI trunks after call redirection occurs. The feature also enables the operating company to save on ports between the DMS-500 system and IP/PBX, since the RLT portion significantly reduces holding times. For example, the holding time for an Interactive Voice Response application is reduced from 3 minutes per call to less than 1 minute due to the RLT. This efficiency reduces the port requirements between the DMS-500 system and IP/PBX.
	44	PUMA0001	PUMA Product Upgrade Mgr	The Product Upgrade Manager (PUMA) subsystem devoted to the automation of peripheral module (PM) software loading, provides an upgrade plan outlining the PM sets that can be upgraded together, the preferred upgrade order, and the best method (such as parallel set upgrades or broadcast upgrades).	6					AR1713, AR2300, AR2310, AR2320	Product Upgrade Manager (PUMA) - Panther	The Product Upgrade Manager (PUMA) subsystem devoted to the automation of peripheral module (PM) software loading, provides an upgrade plan outlining the PM sets that can be upgraded together, the preferred upgrade order, and the best method (such as parallel set upgrades or broadcast upgrades).
	26	RES00001	RES Access Management	This features provides CLASS display features to remote locations that are served by a TR-008- compliant digital loop carrier (DLC) hosted by a Remote Switching Center (RSCS).	5						Calling Number Delivery (CND) on SMS-R	This feature enhancement extends Calling Number Delivery to subscribers served by a TR-008-compliant Digital Loop Carrier (such as a SLC-96) that subtends from a Remote Switching Center (RSC). Customer premises equipment with display capability is required to receive and display the calling number information. Additional hardware requirements are a CLASS Modern Resource (CMR) circuit pack (NT6X78AA) and a Combined Messaging and Tone Generator circuit pack (NT6X69AB). For a CLASS subscriber served by a TR-008-compliant Digital Loop Carrier (DLC) (such as the SLC-96) that is digitally interfaced to a DMS switch, this feature allows the subscriber to view the originating party's directory number on incoming calls . Customer premises equipment with display capability is required to receive and display the calling number information. Additional DMS hardware requirements are a CLASS Modern Resource (CMR) circuit pack (NT6X78AA) and a Combined Messaging and Tone Generator circuit pack (NT6X78AA).
	26	RES00001	RES Access Management	This features provides CLASS display features to remote locations that are served by a TR-008- compliant digital loop carrier (DLC) hosted by a Remote Switching Center (RSCS).	5					AF2957	SMS-R Additional CLASS Features	This feature extends advanced CLASS features to subscriber lines served by the SMS-R. These features include: • Bulk Calling Line Identification • CLASS Message Waiting Indicator • Spontaneous Call Waiting Identification

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			Order Code Name RES Advanced Custom	Order Code Description This feature provides additional Custom Calling	RIs 5	RIs	MD RIs	Code	PCID	ACTID NC0028	Feature Name Residential Call Hold	Feature Description Residential Call Hold allows the subscriber to place a call on hold and then continue
			Calling	services such as Single-party intercom, Distinctive ringing patterns, and the ability to place a call on hold and then continue the conversation, either from the same set or from another set to.								the conversation either from the same set or from another more convenient extension. The feature is activated by flashing the hookswitch, dialing a two-digit access code, and then hanging up. The call is resumed when the handset is picked up. The service is deactivated when the held station hangs up, or when the holding station hangs up after reconnecting with the held station. Calls can be held for any length of time. A periodic short ring reminds the subscriber that a call has been placed on hold.
	26	RES00002	RES Advanced Custom Calling	This feature provides additional Custom Calling services such as Single-party intercom, Distinctive ringing patterns, and the ability to place a call on hold and then continue the conversation, either from the same set or from another set to.	5					AF2307	Single-Line Variety Package	This package offers three separate services to the residential/small business subscriber who has a single line (and single directory number) with multiple extensions: • Single Party Intercom—allows the subscriber to initiate internal conference calls. • Distinctive Ringing—provides distinctive ringing patterns to direct incoming calls to the appropriate extension. • Call Hold—allows incoming calls to be placed on hold and picked up from the same or another extension. Dialing an access code activates each of these services on a per-call basis. This package provides significant revenue-generating opportunities for telephone operation companies services reviewed the services of the service service service service of the services of the service service service service services of the service services of the service service services of the service service service services of the service services of the services of the service services of the service services of the service service service services of the service services of the service service service service services of the service services of the service services of the service service service services of the service services of the service services of the service services of the service service service services of the service services of the service services of the service services of the services of the service services of the services of the service services of the service services of the service services of the services of the service services of the service
	26	RES00003	RES Displ Funct & Prvcy	This feature provides Calling Number Display, Calling Number Delivery Blocking, and Dialable Number Delivery.	5					AG0781	Calling Number Delivery	Calling Number Delivery (CND) allows a subscriber to view on incoming calls the Directory Number (DN) of the originating subscriber. The DN is delivered for display during the silent period between the first and second ringing cycles. The subscriber requires a telephone with display capability to receive and display the calling number information. Additional hardware requirements for the DMS are: Extended Line Concentrating Module (LCM) Processor circuit packs (NT6X78AA) in the LCM serving the subscriber, and CLASS Modern Resource (CMR) circuit packs (NT6X78AA) mounted in the Line Group Controller (LGC) serving the LCM.
	26	RES00003	RES Displ Funct & Prvcy	This feature provides Calling Number Display, Calling Number Delivery Blocking, and Dialable Number Delivery.	5					AG0778	Calling Number Delivery Blocking	Calling Number Delivery Blocking (CNDB), a CLASS Phase 1 feature, permits the originating subscriber to block the display of his/her directory number on a terminating subscriber's set to which the Calling Number Delivery (CND) feature has been assigned. To block the delivery of his/her DN, the subscriber dials an activation code prior to placing the call. The feature is automatically deactivated when the subscriber hangs up. This feature can also be applied in reverse: the originating party can subscribe to permanent blocking of his/her number display. When this is the case, dialing the activation code causes the number to be displayed to the terminating subscriber.
	26	RES00003	RES Displ Funct & Prvcy	This feature provides Calling Number Display, Calling Number Delivery Blocking, and Dialable Number Delivery.	5					AG1155	CLASS– Calling Number Delivery Blocking Enhancements	This feature enhances Calling Number Delivery Blocking (CNDB) to allow: generation of AMA records for usage sensitive pricing for CNDB and collection of operational measurements for CNDB, as required by Bellcore specification TR-TSY-000391.
	26	RES00003	RES Displ Funct & Prvcy	This feature provides Calling Number Display, Calling Number Delivery Blocking, and Dialable Number Delivery.	5					AG1515	Dialable Calling Number Delivery	This feature enhances Calling Number Delivery by delivering the originating party's directory number (DN) in the exact form required for the terminating subscriber to return the call. Only those digits that are required for dialing are displayed (e.g., the area code is or is not displayed, depending on the originating party's location). With Dialable Calling Number Delivery and customer premises equipment that allows automatic dialing of displayed numbers (such as the Northern Telecom Mæstro), subscribers can return unanswered calls with the push of just one button. The originating DN is delivered for display during the silent period between the first and second ringing cycles.

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App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
26	RES00003	RES Displ Funct & Prvcy	This feature provides Calling Number Display, Calling Number Delivery Blocking, and Dialable Number Delivery.	5					NC0292	Office-Wide Activation of CNDB for POTS	This feature provides Calling Number Delivery Blocking (CNDB) capabilities for non- RES lines. Since some legislative actions have mandated that CNDB be made available to all lines served from a switch that sends calling number identification (CND) information, this feature makes it possible to provide CNDB capability to all lines. Users activate CNDB by dialing a '67 access code. Calling number information can be sent or suppressed for all lines on an office-wide basis. In addition, individual lines can be set up either to send or to suppress calling number information. When the line or the office is set up to send calling number information, dialing the access code suppresses the calling number information for that call. If the line is set up to suppress calling number information, dialing the access code sends the calling number information for that call. Once the call is complete, the default send or suppress value is reinstated. A new office parameter, CNDB_ON_POTS, is provided with this feature to allow office-wide activation. CLASS—Calling-Number Delivery Blocking Administration is required for operation of this feature.
26	RES00003	RES Displ Funct & Prvcy	This feature provides Calling Number Display, Calling Number Delivery Blocking, and Dialable Number Delivery.	5					AF2255	SMU Calling Number Delivery (CC)	These features together extend the Calling Number Delivery (CND) feature to subscribers served by a DMS-1 Urban. The subscribers receive the incoming calling number, time, and date of the call on display terminals at their premises. This feature requires that CLASS Modem Resource Cards (NT6X78) be equipped in the SCM-100U (SMU) that digitally interfaces the DMS-1U to the host DMS switch.
		RES I/F Functionality	This feature serves as the prerequisite software for functions that support special interfaces for specific capabilities and supports special Simplified Message Desk Interface (SMDI) data link interfaces so voice mail systems can operate in a Residential Enhanced Services environment.	5						High Speed SMDI	Through the implementation of this package, transmission rates of higher than 1200 bps are possible over the SMDI data link. Multi-Protocol Controller utilization for Simplified Message Desk Interface (SMDI) enables bit rates of 1200 to 4800 bps at full duplex operation. Engineering rules and guidelines are available to assist in determining proper configuration and operation. The MPC offloads the DMS CPU by performing message compression and protocol process-processing on the card. The MPC has additional buffering over the conventional Input/Output Controller, which
26	RES00004	RES I/F Functionality	This feature serves as the prerequisite software for functions that support special interfaces for specific capabilities and supports special Simplified Message Desk Interface (SMDI) data link interfaces so voice mail systems can operate in a Residential Enhanced Services environment.	5					AF2301	Simplified Message Desk Interface (SMDI) on Hunt Groups	This feature allows the telephone operating company to deliver SMDI operation in line with the already tariffed capabilities of the 1AESS. It provides the user with the ability to configure a Simplified Message Desk Interface (SMDI) based system using Hunt Groups, thus enhancing the capability of the DMS to support a range of customer premises equipment, including Non-Data Link Consoles and Voice and Text Messaging Systems. Currently, onJu Uniform Call Distribution terminations are supported. This enhancement also supports the advanced Message Desk functionality of Personal Computer (PC) based attendant consoles.
		RES I/F Functionality	This feature serves as the prerequisite software for functions that support special interfaces for specific capabilities and supports special Simplified Message Desk Interface (SMDI) data link interfaces so voice mail systems can operate in a Residential Enhanced Services environment.	5						SMDI: Called DN Option and KSH Support	This feature allows the telephone operating company to deliver SMDI operation in line with the functionality of the 1AESS for calling number delivery. It also allows Key Short Hunt of the Electronic Business Set to interact directly with SMDI. As a result, this feature enhances current Simplified Message Desk Interface (SMDI) operation in two ways: customer offices can select, on a per-SMDI data link basis, whether the first or last party in the call forward chain is considered the called party, and thus, the recipient of the message; and calls that overflow to an SMDI agent by means of Key Short Hunt (KSH) can be treated as "indirect" calls to the message desk (as if they were call forwarded busy or no answer), so that they can be answered with the specified called party's personal greeting, rather than with the generic system greeting.
26	RE\$00005	RES Non-Display Services	This feature provides Automatic Callback and Automatic Recall and is the foundation for a number of other features that do not require displays.	5					NC0314	ACB/AR Scans Entire Hunt Group	This feature enhances the Automatic Callback (ACB) and Automatic Recall (AR) services by performing busy/idle monitoring of all lines in a hunt group. Previous to this feature, busy/idle monitoring was performed on only the pilot DN of a hunt group. Thus, call setup is attempted when any member of the hunt group becomes idle.

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			Order Code Name	Order Code Description	RIs	Rls	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	26	RES00005	RES Non-Display Services	This feature provides Automatic Callback and Automatic Recall and is the foundation for a number of other features that do not require displays.	5					NC440	CLASS – ACB/AR AMA Privacy Indicator	The introduction of CLASS features into the marketplace has produced subscriber concerns about the identification of private numbers. The ACB/AR AMA (Automatic Message Accounting) Privacy Indicator provides a method for identifying private (calling number blocked) billable calls that have been completed using Automatic Callback (ACB) or Automatic Recall (AR). When ACB or AR is activated normally, the called number is recorded on an AMA record if that call is billable. ACB/AR AMA Privacy Indicator additionally marks as private any calling number blocked for display purposes by the originator. This gives service providers the option of not printing an originating private number on a terminating subscriber's bill.
			RES Non-Display Services	This feature provides Automatic Callback and Automatic Recall and is the foundation for a number of other features that do not require displays.	5						CLASS Automatic Call Set-Up	This Custom Local Area Signaling Services (CLASS) Phase 1 feature allows subscribers to access two services: Automatic Callback (ACB) allows a subscriber to originate a call to the last number dialed from his/her set by simply dialing an access code. The DMS attempts to set up the call regardless of whether the previous call was answered, unanswered, or busy. • Automatic Recail (AR) enables a subscriber to dial an access code and automatically recall the last person who placed a call to his/her set. Automatic Recall functions whether or not the subscriber answered the last incoming call or and whether or not the subscriber knew the identity of the calling party.
	26	RES00005	RES Non-Display Services	This feature provides Automatic Callback and Automatic Recall and is the foundation for a number of other features that do not require displays.	5					AG1228	CLASS-Auto Call Back/Auto Recall Enhancements+N334	This feature enhances Automatic Callback (ACB) and Automatic Recall (AR) with the following capabilities: • Optional two-level feature activation with Directory Number (DN) Voiceback for AR. • Generation of AMA records for usage sensitive pricing for ACB and AR • Collection of operational measurements for ACB and AR, as required by Bellcore specifications TA-TSY-000215 and TA-TSY-000227. Two-level feature activation with DN Voiceback allows the subscriber to dial the access code for Automatic Recall and then, before the recall is set up, to hear an automatic recording that announces the DN of the last incoming call. The DMS then prompts the subscriber so that he or she can decide whether or not to proceed with the recall. Two-level Automatic Recall requires additional Digitally Recorded Announcement Machines (DRAMs) and new PROMs for DN Voiceback.
	26	RES00005	RES Non-Display Services	This feature provides Automatic Callback and Automatic Recall and is the foundation for a number of other features that do not require displays.	5					AG1631	CLASS—Automatic Recall Date and Time	This feature enhances Automatic Recall two-level activation by providing an announcement to the subscriber specifying the date and time the last incoming call was received. The date and time announcement accompanies the directory number voiceback announcement, thus providing the subscriber with additional information before he or she decides to proceed with the recall. The voiceback of date and time is a requirement specified by Bellcore document TR-TSY-000227.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					NC0485	Additional Line Class Codes in RES	This feature makes it possible to assign RES/CLASS features to an expanded group of line class codes. Compatibility with RES is provided on both the Zero Minus Zero Plus Access (ZMZPA) and Zero Minus Denied (ZMD) line class codes. Line option Remote Message Register—Toll Calls (RMT) is also available on RES with this feature, further opening RES to additional station options and line features.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AN0632	ADSI Services Protocol TR Compliance	This software provides the protocol for ADSI signaling in the DMS to support a variety of display-based services, in compliance with Bellcore TR-1273. Existing DMS display-based services, Network Call Logging, Visual Screening List Editing, and Spontaneous Call Waiting ID with Disposition build upon this new protocol so they can be accessed from industry-standard ADSI terminals. Coupling this non-proprietary, Bellcore-compliant signaling interface with the DMS ADSI-enabled services offers
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AG2057	CLASS Feature Not Allowed Announcement	This feature improves customer service by providing an announcement to subscribers who attempt to activate a CLASS feature not assigned to their lines. Previously, subscribers received a tone when attempting to access a CLASS service not assigned to their lines. The announcement can also provide additional information to the subscriber. The operating company can, for instance, use it to increase market penetration by informing the subscriber how to obtain the feature he or she was trying to use.

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	App	Order Code	Order Code Name	Order Code Description	Ris	Rls	MD RIs	Code	PCII			Feature Description
			RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AG158		This package provides the platform for subscriber-programmable treatment for incoming calls using CLASS and CLASSPLUS features such as: Selective Call Acceptance, Selective Call Rejection, Selective Call Forwarding, and Distinctive Ringing/Call Waiting. Screening List Editing (SLE) allows the subscriber to program a list of directory numbers for one or more of these services as well as to activate and deactivate the service. With SLE, subscribers have keypad control over which incoming calls they wish to accept, reject, forward, or be identified by distinctive ringing/Call waiting tones. Up to 31 different list entries are allowed for each service. The subscriber can activate/deactivate the screening list features, obtain feature status reports, and create or modify the directory number screening list. This package is a prerequisite for any of the screening list features. Additional DRAM hardware must be provisioned to support Screening List Editing features. For screening lists of up to 12 directory numbers, 7 packs (NT1X76AP–AV) must be provisioned. To extend screening list size up to 31 directory numbers, 3 additional pack provisioned. To extend screening list size up to 31 directory numbers, 3 additional pack provisioned. To extend screening list size up to 31 directory numbers, 3 additional pack provisioned. To extend screening list size up to 31 directory numbers, 3 additional pack provisioned. To extend screening list size up to a 31 directory numbers, 3 additional pack provisioned. To extend screening list size up to a 31 directory numbers, 3 additional pack provisioned. To extend screening list pack pack by the 31 directory numbers, 3 additional pack provisioned. To extend screening list pack pack by the screening list pack pack by
			RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5						2 CLASS—Call Memory Enhancement	This feature writes additional indicators into the CLASS call memory slots to ensure that other CLASS features properly use the DNs stored in the slots (see CLASS Incoming and Outgoing Call Memory Slot Call Processing). For example, included in the incoming memory slot along with the DN of the last incoming gal are two new indicators: • a DN uniqueness indicator, which specifies if the DN is unique or ambiguous (i.e., the last call originated from a PBX interface or multiparty line), and • a call waiting indicator, which specifies whether the last call recorded in the incoming memory slot was waited against the line. When the DN in the incoming slot is read during a Customer Originated Trace (COT), these two indicators are included in the report to the monitoring agency to alert them that the DN they received may not accurately identify the DN the customer wanted to trace. This feature also provides for not updating DN in the outgoing memory slot following such calls as operator-assisted calls (0-and 0+ dialing), special three-digit calls (e.g., 141, 641, end 041, end diverse orgenitated calls (action and blocks).
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AG095	GLASS—Incoming/Outgoing Memory Slot Call Processing	This feature establishes and updates the incoming and outgoing call memory slots associated with each CLASS line. The incoming memory slot is updated with the calling DN for each incoming call to the CLASS line. The outgoing memory slot is updated with the called DN for each outgoing call from the CLASS line. The calling DN stored in the incoming call memory is used by the Customer-Originated Trace (COT) and Automatic Recall (AR) features. The called DN stored in the outgoing call memory is used by the Automatic Call Back (ACB) feature.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AC025	3 CLASS—Line and Office Data	This feature provides the common tables and parameters that are necessary to support the CLASS Phase 1 services. The introduction of CLASS requires some common datafill for all of the Phase 1 features (i.e., Automatic Callback, Automatic Recall, Customer-Originated Trace, Calling Number Delivery, and Calling Number Delivery Blocking).
			RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5						4 CLASS-Usage Sensitive Pricin Billing	usage basis for the following CLASS features: • Automatic Callback (ACB) • Automatic Recall (AR) • Calling Number Delivery (CND) • Calling Number Delivery Blocking (CNDB) • Customer-Originated Trace (COT) A CLASS subscriber can be charged based on the actual usage of each feature on his/her line. To this end, two new call codes and two new structure codes have been assigned for use by the above CLASS applications for generating Bellcore format, Automatic Message Accounting (AMA) records.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					NC036	Coin on RES Enhancements	This feature makes it possible to assign RES/CLASS features to coin lines such as CCF, CDF, CFD, and CSP, thereby extending the scope of CLASS features across additional line types and the compatibility of line options on the RES platform.

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Issue 2					NCS	Enh		Repl Ord				
			Order Code Name RES Service Enablers	Order Code Description This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	<u>RIs</u> 5	RIs	MD RIS	Code	PCID	AG1544	Feature Name One-Party Message Rate (1MR) Service in RES	Feature Description This feature provides one-party message rate (1MR) functionality in the RES environment. Automatic change of line class code (LCC) from 1MR to RES occurs when a 1MR line is assigned a RES-specific line option. If, before the conversion, the line has no flash options assigned, then when it is converted to RES, the "flash ignore" line option is automatically assigned as part of this process.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AG0968	RES Feature Set Expansion II	This feature set provides Group Intercom, a Meridian Digital Centrex feature, to POTS subscribers with the Residential Enhanced Services (RES) line option. In this application, Group Intercom permits the DMS switching system to support fewer-than- seven-digit dialing in small groups with common interests (e.g., condominium dwellers, small business etc.) and provides standard intercom capability to the RES-optioned line.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AG1246	RES/CLASS Service Order Simplification & OAM	This feature simplifies the Service Order requirements to allow the efficient addition of new Residential Enhanced Services (RES) and Custom Local Area Signaling System (CLASS) subscribers to the DMS switching system. Subscription to the RES option is required in order to access CLASS and other enhanced feature offerings from the DMS switch.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AG0504	RES—Digit Collection Enhancements	This feature establishes a recommended Plain Old Telephone Service (POTS) dialing plan for use with Residential Enhanced Services (RES). The POTS dialing plan provides the customer with normal seven-digit dialing for local calls and the 1+ ten- digit dialing plan for most long distance calls. In addition, this feature includes the ability to dial the many new activation/deactivation codes for enhanced services that are being planned for future availability.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADS1 services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AG0503	RES—Feature Transparency	This feature modifies Meridian Digital Centrex features to make their activation and use transparent to Plain Old Telephone Service (POTS) subscribers using Residential Enhanced Services. With this feature, subscribers with features such as Call Forwarding (fixed/variable/busy, don't answer), Call Waiting, Cancel Call Waiting, Speed Calling, and three-way Calling do not experience changes in how they use these excitence features: they become Residential Enbanced Source currements.
			RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5						Residential Enhanced Services	This feature provides a new Plain Old Telephone Service (POTS) line option that lays the groundwork for future access to sophisticated subscriber line features such as the CLASS feature set and specific Meridian Digital Centrex features.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AF2384	Screening List Editing Enhancements	This feature increases the operating company's flexibility in marketing CLASS by enhancing the current Screening List Editing capability to add Subscription Usage Sensitive Pricing (SUSP) capability for screening list features.

Change In Issue 2					1st NCS	Enh		Repl Ord				
	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	26	RESO0006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AG1542	Service Order Simplification for Hunt Groups	This feature allows the conversion of non-RES (e.g., 1FR or 1MR) hunt groups to RES hunt groups. This feature is serviced through the Service Order system.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADS1 services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AF1442	Teen Service on RES	This feature allows Teen Service to be assigned as a line option to a Residential Enhanced Service line. Teen Service allows up to four directory numbers (DNs) to be assigned to each single party, flat rate line. Distinctive ringing patterns differentiate DNs addressed. Lines with Teen Service have one primary directory number and up to three secondary DNs. Each DN assigned to a line is designated with a specific ringing pattern. If Call Waiting occurs, distinctive Call Waiting tones are used to distinguish calls for the separate DNs. Subscribers are therefore afforded important advance information about incoming calls.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AN0314	Timed Release Disconnect via Customer Group	This feature provides individual customer groups with the option of having the same values for call disconnection timing and office-wide disconnect timing. Customer groups are given greater flexibility and independence with this enhancement to the RES base. Continuing to refine and enhance the RES base can open the residential and small business market to greater penetration by other RES- based features, including CLASS features.
	26	RESO0006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADSI services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AG1543	Toll Denied	With this feature, when a RES subscriber with the toll denied line option dials a direct or operator-assisted long distance call, the call is blocked and sent to toll denied treatment. Operator-assisted calls include zero minus calls. Operator-assisted 800 calls and 555 calls are not blocked if the appropriate office parameter (incorporated in this feature) is set to N. Direct-dialed 800 calls and 555 calls are not blocked, nor are service calls and 950-1XXX (Feature Group B) calls.
	26	RES00006	RES Service Enablers	This feature provides functional support for all residential enhanced services (RES) including the RES base, Enhanced RES services, ADS1 services protocol, and Screening list editing and is a prerequisite ordering code for all other RES features.	5					AF2244	Wide Area Telephone Service (WATS) on RES	This feature provides the capability to assign Wide Area Telephone Service (WATS) to RES lines. The OWT, INW, 2WW, EOW, and ETW line class codes are supported. With this feature, Enhanced WATS capability can also be provided in the RES environment.
	26	RES00007	RES Signling, Routing, OAM	This feature provides the operations and administrative capabilities required for network providers to maintain CLASS feature operation through the "permissive dialing period" for those subscribers who are to be reassigned from an existing to a new NPA or area code and allows the two different numbers to be dialed to reach the same subscriber line.	5					NC0483	CLASS — Split NPA Management	This feature assists implementation of a new NPA into the dialing network. Screening lists have to be reprogrammed when a new NPA is added to an office in the network, because CLASS features store screening lists and perform other functions based on 10 digits. Without Split NPA Management functionality, features such as Automatic Callback (ACB) would not work properly. Split NPA Management provides software that supports a "two-pass" technique for feature operation. Initially, the new NPA would be used for the operation of a feature; if unsuccessful, the replaced NPA would be substituted. After a "permission period" for this two-pass technique has expired, Split NPA Management and its particular

Change In Issue 2 Changed App from 26 to 42	Арр		RES Lng Dist Indicator	Order Code Description This feature visually presents call type information to differentiate incoming long- distance calls from incoming local calls. This visual display functionality is specific to the Canadian market.	1st NCS RIs 6	Enh Ris	MD RIS	Repl Ord s Code	PCID 1313	ACTID	Feature Name Long Distance Indicator	Feature Description This feature visually presents call type information to differentiate incoming long- distance calls from incoming local calls. This visual display functionality is specific to the Canadian market.
	26	RES00010		This feature permits an utility company or enhanced service provider to connect and communicate with interface devices connected to telephone subscriber lines to read meters. Connection is permitted only over an idle line, and ringing current is not applied so household phones do not ring.	5					NC0362	Suppressed Ringing, Telemetry Access	This software offers a new revenue-generating service that network providers can offer utility providers. The Utility Telemetry Access feature provides no-ring access through the public switched telephone network for utility companies and other enhanced service providers (ESPs) to connect and communicate with interface devices connected to telephone subscriber lines. Connection will only be made over idle lines, and ringing current will not be applied. The initial application for this software is Automated Meter Reading (AMR). AMR permits utility companies (such as water, gas, electric, and the like) to connect their host interface equipment (with meter reading devices) at customer locations—to electronically record utility usage. The service provider can provide this application to other utility companies for remote meter reading over existing exchange facilities. This service is an alternative to other methods of providing meter reading services such as cable TV, pocket radio, or power line carrier multiplexing. This software offers the beginning of future home services opportunities, open to: Utility companies—Load research, energy manageme
	26	RES00011		This feature provides an alternative method of implementing non-display CLASS services on an office-wide basis. This capability allows the subscriber to access non-display CLASS features without having to contact their local service provider. The features include Automatic Callback, Automatic Recall, Customer-Originated Trace, Anonymous Caller Rejection, Calling Number Blocking, Calling Name Delivery Blocking, Distinctive Ringing/Call Waiting, Selective Call Acceptance, Selective Call Forwarding, and Selective Call Rejection.	5						Universal Access to CLASS Features	Together, these features simplify the implementation of CLASS services. The software allows the service provider to make one or more non-display CLASS features available office-wide to all RES lines. This permits subscribers to activate CLASS features as needed on a per-call basis using access codes, and also enables service providers to charge for CLASS features on a usage basis. To streamline implementation, the MAKERES command permits office-wide conversion of subscriber lines from POTS to RES, replacing conventional service order procedures. There is also a subcommand to clean up CLASS feature assignments on individual subscriber lines. If a CLASS feature is assigned to an individual line, that assignment takes precedence over the office-wide, or universal, assignment. A line denial option is available in this software, as well as class-of- service provisioning, to allow or deny subscriber access.

Change In Issue 2					1st NCS	Enh		Repl Ord				
	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
				This feature provides universal access to Three- Way Calling for POTS and RES subscribers, allowing them to use Three-Way Calling without having the feature explicitly assigned to their line. This feature also provides the required AMA recording capability so the network provider can bill subscribers each time the feature is used.	5					AQ1302, AQ1340	Universal Access to Three-Way Calling	This feature provides universal access to Three-Way Calling for POTS and RES subscribers, allowing them to use Three-Way Calling without having the feature explicitly assigned to their line. This feature also provides the required AMA recording capability so the network provider can bill subscribers each time the feature is used.
	26	RES00013	RES Ext. Bridged Svcs.	This feature permits one directory number in multiple locations, thus providing an off-premises extension with custom-calling options. This capability is useful for multi-line residences, or small businesses with multiple locations.	5					AF0827	Extension Bridged Services	This feature is a new variation of the Multiple Appearance Directory Number (MADN) feature. Extension Bridging is identical to the MADN Single-Bridged Arrangement that permits one Directory Number (DN) in multiple locations, except for the implementation of Call Forwarding and Speed Calling. With this variation, Call Forwarding or Speed Calling may be assigned to the primary station and controlled by any extension within an Extension Bridging (EXB) arrangement. Extension Bridged Services requires Residential Enhanced Services , Meridian Business Set , and Enhanced Business Set software.
	26	RES00014	RES Call Wake Up Svc.	This feature allows a subscriber to program a specific time to be called by the DMS switch for an automated message or treatment.	5					NC0343	Wake-Up Service	This feature provides wake-up call service for RES and MDC subscribers. Using access codes, subscribers can program a time at which they wish to be rung back by a wake-up call announcement. The call must be requested within a 24-hour period, and each subscriber is allowed only one outstanding wake-up call request within the next 24-hour period. If the first call is not answered, a second call is placed at a later time. If the second call is not answered, the event is recorded, but no further attempt is made.
	26	RES00015	RES Sub Act Code Blking	This feature gives the subscriber more control and protection from unwanted outgoing calls by using an access code and a personal identification number (PIN).	5					AF1094	Subscriber Activated Call Blocking	
	26	RES00016	RES Expansion Svcs.	This feature extends advanced custom calling functionality to residences and small businesses and includes Group Intercom, Call Pickup, Call Transfer, and Make Set Busy	5						Expansion Services	This feature extends advanced custom calling functionality to residences and small businesses and includes Group Intercom, Call Pickup, Call Transfer, and Make Set Busy

Change In Issue 2				1st NCS	Enh		Repl Ord				
			Order Code Description This feature allows four different ringing cadences for up to four separate DNs assigned to the same single-party line without having to add a secondary line to the household. All billing for this capability is assigned to the primary DN.	<u>Ris</u>	RIs	MD RIS	Code	PCID	ACTID AF2021	Options	Feature Description This enhancement to Teen Service allows simultaneous call forwarding of the primary DN (PDN) and secondary DNs (SDNs) to different locations. For example, the PDN can be forwarded to a voice messaging service while an SDN is forwarded to another residence. Call Forward options are available to SDNs with this feature: • Call Forward Prixed (the forward-to DN is datafilled at the central office) • Call Forward Programmable (the forward-to DN is selected during feature activation) • Call Forward Series Completion (a group of forward-to DNs is selected by the subscriber) Series Completion takes precedence over all other forms of Call Forward. By allowing SDNs to have some originating station characteristics, Teen Service addresses the traditional two-to-four-line market more cost effectively.
	26	RES00018	This feature allows a call to be automatically dialed to a predesignated telephone number (such as 911) when the telephone goes off-hook and no dialing occurs within a defined timeframe.	5					NC0011	MDC/RES Warm Line	This feature allows the currently available Warm Line feature to be provided to lines with the Residential Enhanced Services (RES) and Meridian Digital Centrex feature capabilities. When a line with the Warm Line option goes off-hook and no dialing occurs within a defined period, a call is automatically dialed to a predesignated telephone number. With this service, users have normal access to a telephone, but they can summon help in emergencies just by knocking the receiver off the hook.
	26	RES00019	This feature allows the subscriber to activate and deactivate Call Forward Universal, Call Forward Intragroup, or Call Forward Fixed from a remote line and provides Station Programmable PIN (SPP), which allows subscribers to change their PIN from their own telephone without having to contact the service provider.	5					NC0192	Unique PIN	This feature allows Call Forward Remote Access Personal Identification Numbers (PINs) to be subscriber-programmable. Subscribers can change their PINs from their base telephone by means of a feature access code, allowing them greater flexibility and security and simplifying service order demands on the telephone operating company. Previously, Call Forward Remote Access used authorization codes as PINs. HARDWARE: This feature requires Digital Recorded Announcement Machines (DRAMs) for recorded announcements.
	26	RES00020	This feature allows a local directory number to be forwarded to a number in another calling area making it possible for the calling party not to incur a long distance charge. This feature allows businesses to customize different mailboxes within the same voice mail system for different promotions, language, or originating areas.	5						Remote Call Forward Enhancements	This feature allows a local directory number to be forwarded to a number in another calling area making it possible for the calling party not to incur a long distance charge. This feature allows businesses to customize different mailboxes within the same voice mail system for different promotions, language, or originating areas.

Change In Issue 2					1st NCS	Enh		Repl Ord				
L			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID		Feature Name	Feature Description
	26	RES00021	RES Anonym. Caller Rej.	This feature allows subscribers with or without Calling Number or Calling Name Delivery to reject calls that have calling name/number intentionally blocked.	5					AF2879	Anonymous Caller Rejection	This feature allows subscribers with or without CLASS Calling Number Display and/or Calling Name Display to reject calls for which calling name/number display information has been intentionally blocked. Only calls for which the information has been blocked are rejected. If the display information is not available due to network restrictions or for other reasons, the receiving customer premises equipment—if equipped—is presented with a message to indicate the unavailability of the calling information. Rejected calls are sent to an operating company announcement. Anonymous Call Rejection can be overridden by an operator in case of emergency.
	26	RES00022	RES Calling Na Del Bikng	This feature offers privacy to subscribers who choose not have their name displayed on the called party's display set and can be used on a call-by-call basis.	5						Calling Name Blocking for Lines	This package provides Calling Name Blocking, which allows calling subscribers to keep their name from appearing on a called party's display unit. The feature is used on a call-by-call basis and is available as a line option. Due to regulatory requirements and specific subscriber concerns, providing this feature will be necessary to successfully market Calling Name Delivery in certain areas of the country.
	26		RES Call Nm Disp SW/TCAP	This feature is the Bellcore-compliant version of Calling Name Display and makes use of TCAP signaling and a service control point (SCP) database to display the name of a calling party.	5					AF2858	CLASS Calling Name Delivery on MADN (SCA)	This feature allows for the delivery of the calling party's name and the current time and date to the customer premises equipment (CPE) of members of a Multiple Appearance Directory Number (MADN) Single Call Arrangement (SCA) group using 500/2500 telephone sets. As is the case with Calling Name Delivery for residential users, the information is delivered between the first and second rings. This feature, like other CLASS display features, must be assigned to members of MADN groups on an individual basis. Although up to 16 MADN members can reside on a particular XPM, assignment of the feature is limited to 8 MADN members per XPM.
	26		RES Call Nm Disp SW/TCAP	This feature is the Bellcore-compliant version of Calling Name Display and makes use of TCAP signaling and a service control point (SCP) database to display the name of a calling party.	5					AG1726	Name Display	Name Display allows a subscriber to view a caller's name on a CLASS terminal's display before answering. Having identified the calling party before answering, the called party is then prepared to personalize his or her response to the call. The name is delivered for display during the silent period between the first and second ringing cycles. The subscriber requires a telephone or adjunct set with name display capability to receive and display the calling name information. This functionality is supported in Northern Telecom's CLASS customer premises portfolio.
	26		RES Call Nm Disp SW/TCAP	This feature is the Bellcore-compliant version of Calling Name Display and makes use of TCAP signaling and a service control point (SCP) database to display the name of a calling party.	5					AN0232	TCAP for Calling Name Delivery	Calling Name Delivery allows a subscriber to view a caller's name on a CLASS terminal's display before answering, giving the called party an opportunity to personalize his or her response. The name is delivered for display during the silent period between the first and second ringing cycles. Functionally, this software enables a DMS Service Switching Point (DMS SSP) to query a Service Control Point (SCP) database for the name of a calling party when the calling number is delivered to the terminating office. The subscriber must have a telephone or adjunct set with name display capability to receive and display the calling name information. For the residential market, the display function can be provided in Northern Telecom's CLASS compliant Maestro telephones and Interlude display customer premises equipment.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	26	RES00024	RES VSLE & Call Logging	This feature provides Visual Screening List Editing which provides a visual interface for subscribers to create lists of directory numbers from which calls will be accepted, rejected, forwarded, or identified by a distinctive ring or call waiting tone and Switch-based Call Logging keeps a list of a subscriber's unanswered, busy, and forwarded calls. By highlighting an entry and pressing the Dial softkey, the subscriber can call someone directly from the Call Log list.	5						Call Logging	Network-Based Call Logging lists an end user's unanswered, busy, and forwarded calls—even if the caller doesn't leave a message. Each log entry provides the following information: Calling party directory number and name (if available), Time and date, Number of times that the calling party called, Status of the subscriber's line when the call was logged, and Current status (new or old entry). By pressing the Dial soft key, the subscriber can call someone directly from the Call Log entry-even if the call was from a private, or unlisted, number. Hardware: This software requires the provisioning of a CLASS Modem Resource pack (NT6X78), the Universal Tone Receiver pack (NT6X92), and a Combined Message and Tone Generator pack (NT6X69AD). This feature also requires the Extended Peripheral Module PLUS (XPM+).
	26	DE600024		This feature provides Visual Screening List	F						Visual Screen List Editing	Visual Screening List Editing provides a visual interface for CLASS Phase II features,
				Editing which provides a visual interface for subscribers to create lists of directory numbers from which calls will be accepted, rejected, forwarded, or identified by a distinctive ring or call	5					450000		allowing a subscriber to create lists of directory numbers from which calls will be accepted (Selective Call Acceptance), rejected (Selective Call Rejection), forwarded (Selective Call Forwarding), or identified by a distinct ring or call waiting tone (Distinctive Ringing/Call Waiting). These lists can be edited quickly and easily using the call the set of
	20	RE500025	RES Call Waiting Display	This feature displays the name/number associated with a call-waiting call immediately when the call arrives at the subscriber's line.	5					AF2830	Call Waiting Display XPM Changes	This feature provides signaling capability necessary to support the delivery of calling party information for waiting calls. This feature, together with feature AF2073, provide for the implementation of the CLASS feature, Call Waiting Display.
	26	RES00025	RES Call Waiting Display	This feature displays the name/number associated with a call-waiting call immediately when the call arrives at the subscriber's line.	5					AG2073	CLASS Call Waiting Display	With this feature, the name and/or number associated with a waiting call is displayed immediately upon the call's arrival at the subscriber's line, thus helping the subscriber decide whether to continue the call in progress or to answer the incoming call. Customer premises equipment with display capability is required to receive and display the incoming information; the customer equipment must be capable of recognizing 202 modem transmission in the off-hook state.
	26	RES00025	RES Call Waiting Display	This feature displays the name/number associated with a call-waiting call immediately when the call arrives at the subscriber's line.	5					AN0616	CLASS Call Waiting Display TR Compliance	With this software (also known as spontaneous call waiting display—SCWID) the name and/or number associated with a waiting call displays immediately upon the call's arrival at the subscriber's line, thus helping the subscriber decide whether to continue the call in progress or to answer the incoming call. Customer premises equipment with display capability is required to receive and display the incoming information. The customer equipment must be capable of recognizing 200 modem transmission in the off-hook state. This SCWID feature complies with specifications
	26	RES00027	RES Visual Msg. Waiting	This feature provides visual display options so subscribers can see when messages have been left for them.	5					NC0499	CMWI on Non-Integrated DLC	This feature gives the service provider the capability to offer CLASS Message Waiting Indication (CMWI) to subscribers served by a non-integrated digital loop carrier (DLC). To alert the telephone set that the message waiting indicator is to be turned on or off, the DMS system sends a burst of ringing current, or ring splash, to the subscriber's phone.
	26	RES00027	RES Visual Msg. Waiting	This feature provides visual display options so subscribers can see when messages have been left for them.	5					AG1954		For customers who forward their telephones to a Voice Messaging Service (VMS) provider so that they can leave and receive voice messages, this feature provides a visual message indication at the user's station that messages are waiting. An incoming message is accompanied by an optional reminder ring. An optional stutter dial tone is also available as a reminder. To receive visual notification, the subscriber needs a specially equipped telephone or an adjunct device to attach to the phone line. Maestro, Northern Telecom's line of CLASS residential phones, uses an LCD display to alert the subscriber of a waiting message. The Maestro 1000 phone also has an
	26	RES00028	RES Bulk Call Line ID	This feature enhances the delivery information about incoming calls for all lines in a Bulk Calling Line ID group (BCLID), including the date and time the call was received, the calling and called directory numbers, the busy/idle status of the	5					AF2810	BCLID — USP and DN Changes in Messaging Format	This feature provides a usage sensitive pricing (USP) AMA record of the BCLID usage of a BCLID group. This periodic record (from 1 through 24 hours) includes PEG counts of DNs delivered and the number of private and out-of-area call indications delivered. This feature also adds the ability to eliminate information about calls to busy lines and record call forwarding activity for the BCLID group.

Change In Issue 2		Order Codo	Order Code Name	Order Code Description	1st NCS Ris	Enh Ris	MD RIs	Repl Ord	PCID	ACTID	Feature Name	Feature Description
			RES Bulk Call Line ID	This feature enhances the delivery information about incoming calls for all lines in a Bulk Calling Line ID group (BCLID), including the date and time the call was received, the calling and called directory numbers, the busy/idle status of the called line and the calling line type.	5	KIS		Coue		AG1839		Peature Description This feature allows the operating company to deliver key information about a subscriber group's incoming calls for immediate use or for storage and later analysis by that subscriber group. Available information—sent for all lines in a BCLID group—includes the date and time the call was received, the calling and called directory numbers, the busy/idle status of the called line, and the calling and called directory numbers, the busy/idle status of the called line, and the calling gant called other customer premises equipment on a BCLID data link using CLASS Modem Resource (CMR) technology. This feature is particularly useful for businesses—such as pizza delivery services, teleordering agencies, law offices, etc.— that require detailed information on incoming calls. A pizza delivery service, for instance, can use BCLID to screen against crank calls. The teleordering firm can use the information to indicate when new lines are needed to handle increased traffic loads or to call back potential customers who initially called when all lines were busy. A maximum of 2048 BCLID course, each having a maximum of 16 data links, can be defined in the switch.
	26	RES00029	RES Auto. Recall	This feature enhances the "2-Level Activation" Automatic Recall Feature by adding to the recall announcement a message which will alert the subscriber whenever a recall will result in toll charges, enhancing feature operation by repeating an announcement if the user happens to press the wrong key or wait too long to respond, and expanding the maximum number of digits in the announcement that informs the	5					NC0299	Two-Level Automatic Recall Enhancements	This optional feature provides Automatic Recall (AR) with a voice announcement so the subscriber can hear the last incoming directory number as it should be dialed in order to return the call (e.g., the area code is or is not announced, depending on the location of the originating and receiving parties). In addition, this feature enhances Automatic Recall with Two-Level Activation by providing a user-friendly level of tolerance for incorrect dialing. After recorded instructions inform the user to dial "1" to place the call or to hang up to abandon, the system replays the instructions when one or more invalid digits are dialed or a timeout occurs. The number of replays (0–7) is defined by the operating company.
	26	RES00030	RES Customer Tracing	subscriber of a calling party's number. This feature allows subscribers to activate an immediate trace of the last incoming call without requiring prior approval and costly manual intervention by network provider personnel. Upon completion of the search, the subscriber receives an announcement confirming that the trace was successful and should now contact the business office for further assistance. The subscriber does not have access to the trace as it is kept as a DMS log at the central office.	5					AG0762	CLASS—Customer-Originated Trace	Customer-Originated Trace, a CLASS Phase 1 feature, enables the terminating subscriber to request an automatic trace of the last call received. The trace record identifies the calling DN and other call related information. The results of the trace are not provided directly to the subscriber, but are output through an input/output channel to an authorized agency, such as the telephone operating company or a law enforcement agency.
	26	RES00030	RES Customer Tracing	This feature allows subscribers to activate an immediate trace of the last incoming call without requiring prior approval and costly manual intervention by network provider personnel. Upon completion of the search, the subscriber receives an announcement confirming that the trace was successful and should now contact the business office for further assistance. The subscriber does not have access to the trace as it is kept as a DMS log at the central office.	5					AG1151	CLASS-Customer-Originated Trace Enhancements	The feature enhances Customer-Originated Trace (COT) to provide the following capabilities: • Optional two-level feature activation with recorded announcements. • Generation of AMA records for usage sensitive pricing of COT • Collection of operational measurements for COT, as required by Bellcore specification TR-TSY-000216. Two-level feature activation provides optional recorded announcements that prompt the subscriber as to the status of the COT feature. For example, when the subscriber dials the COT activation code, the DMS plays a message announcing that the COT feature activation code, the the Subscriber either to dial 1 to continue the trace or to hang up, thereby canceling the trace request.

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			Order Code Name RES Cust Tracing Enh	Order Code Description This feature provides flexibility in choosing the language that is associated with the announcement that plays during a customer trace.	5	KIS		Coue		NC0117	User Specific Customer Originated Trace Announcement	Feature Description This feature allows CLASS Customer Originated Trace (COT) subscribers to select the secondary language for the recorded announcements delivered by the COT feature. The options available are English, French, or Bilingual. With this feature, CLASS COT users have the same flexibility in recorded announcement selection that CLASS Automatic Call Back (ACB) and Automatic Recall (AR) subscribers have now. If French is chosen, French DRAM recordings (NT1X76BA-BW) are required for feature operation.
	26	RES00032	RES Selective Call Fwd.	This feature offers flexibility to subscribers who are on the move, but would still like selected incoming calls to reach them. The subscriber dials a service-specific access code and follows instructions given by recorded voice prompts to select or modify up to 31 DNs that will forward to another location and specify the destination for the forwarded calls.	5					AG1628	Selective Call Forwarding	Selective Call Forwarding (SCF) allows subscribers to ensure that important calls reach them when they are away from their telephone. Incoming calls from up to 31 directory numbers can be forwarded to another location. The subscriber activates and deactivates the feature by dialing an SCF access code. Through automatic announcements, the subscriber can receive a report on the status of the feature (i.e., activated or deactivated, screened-for DNs, forwarded-to DN, etc.). Guided by prompts from the DMS, the subscriber can easily modify any of the currently specified feature information. An optional ring reminder can be provided at the called party's station when this service is activated.
	26	RES00033	RES Selective Call Rej.	This feature enables a subscriber to program a list of up to 31 DNs from which calls are to be rejected or blocked. Incoming calls that are on the list are routed to an announcement informing the caller that the called party does not wish to receive the call.	5					AG1605	Selective Call Rejection	Selective Call Rejection (SCR) allows the subscriber to program a list of up to 31 directory numbers from which calls are to be rejected, or blocked. Incoming calls that are on the list are routed to an announcement informing the caller that the called party does not wish to receive the call. The subscriber activates and deactivates the feature by dialing an SCR access code. Through automatic announcements, the subscriber can receive a report on the status of the feature (i.e., activated or deactivated, screened-for DNs, etc.). Guided by prompts from the DMS, the subscriber can also modify any of the currently specified feature information. Selective Call Rejection can be used to great advantage in conjunction with Customer Originated Trace (COT). After activating COT, the subscriber can program Selective Call Rejection to reject calls from the last incoming (and unwanted) number.
	26	RES00034	RES Dist Ring Call Wtg	This feature allows a subscriber to be alerted with distinctive ringing or call waiting tones at the arrival of incoming calls from a list of DNs that have been specified by the subscriber.	5					AG1629	Distinctive Ringing/Call Waiting	Selective Call Acceptance (SCA) screens incoming calls against a list of subscriber- specified directory numbers (DNs) and then accepts any calls from those DNs. Calls from any other DNs are routed to an announcement that the subscriber does not wish to receive the call. This feature is especially convenient for subscribers who do not wish to be interrupted by unwanted calls—such as sales calls during dinner—but who want to ensure that important calls—such as calls from relatives—get through. This feature can also be used to control access to computer lines for security purposes. Only those calls from DNs datafilled in the SCA list are allowed to terminate on the computer lines. In this case, the screening list can be modified to accept calls from up to 8000 directory numbers. A service order is required to modify the screening list. The subscriber activates and deactivates the feature by dialing an SCA access code. Through automatic announcements, the subscriber can receive a report on the status of the feature (i.e., activated or deactivated, screened-for DNs, etc.). The subscriber can also modify any of the currently specified feature information while bein

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	Ann	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs	Repl Ord	PCID	ACTID	Feature Name	Feature Description
	26	RES00035	RES Select Call Accept	Order Code Description This feature screens incoming calls against a list of subscriber-specified DNs and accepts any calls from those DNs. Calls from any other DN route to an announcement that the subscriber does not wish to receive a call.	5	KIS		Code		ACTID	Selective Call Acceptance	This feature screens incoming calls against a list of subscriber-specified DNs and accepts any calls from those DNs. Calls from any other DN route to an announcement that the subscriber does not wish to receive a call.
	26	RES00036	RES Auto-Recall Blocking	This feature ensures that subscribers with private directory numbers will not have their numbers revealed as part of an Automatic Recall attempt.	5						Auto-Recall Blocking to Private Numbers	This feature ensures that subscribers with private directory numbers will not have their numbers revealed as part of an Automatic Recall attempt.
	26	RES00037	RES Sbscr Prgmbl Rng Ctl	This feature gives the subscriber control over the number of rings delivered to the customer premises before an incoming call forwards to a remote station when Call Forward Do not Answer (CFDA) is active.	5						Subscriber Programmable Ringing for CFDA	This feature gives the subscriber control over the number of rings delivered to the customer premises before an incoming call forwards to a remote station when Call Forward Do not Answer (CFDA) is active.
Md'd the order code	26	RES00038	RES Toll Alert	This feature permits subscribers to identify long- distance calls through distinctive alerting tones, resulting in increased toll call completion. The tones that are used include a distinctive ringing cadence if the subscriber is on-hook and a distinctive call-waiting tone if the subscriber is off- hook.	5		6	RES00059	1132		Long Distance Alert	This feature permits subscribers to identify long-distance calls through distinctive alerting tones, resulting in increased toll call completion. The tones that are used include a distinctive ringing cadence if the subscriber is on-hook and a distinctive call- waiting tone if the subscriber is off-hook.

Change In Issue 2					1st NCS	Enh		Repl Ord				
	Ann	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
	26	RES00039	RES SMDI CLID Suppr	This features provides the capability to override Simplified Message Desk Interface (SMDI) restrictions on Calling Line Identification Display (CLID) among members of a Uniform Call Distribution (UCD) group.	5			code		AG1980	Blocking of Restricted Directory Number on SMDI	This feature prevents a Simplified Message Desk Interface (SMDI) from forwarding restricted directory numbers (DNs) to an enhanced service provider (ESP). It supports nodal, PRI, and CCS7 networked calls. When the message center receives a forwarded call, the serving switch checks the appropriate DN parameter or the DN attribute table of the initial address message. If the "presentation restricted" field is found set to "yes," the DMS collocated with the message center prevents transmission of the calling or called party's DN over the SMDI data link in accordance with tables provided by this feature. This feature allows for many combinations of restriction and non-presentation of both calling and called directory numbers. In the example below, Caller A—who has a restricted DN—calls B, who has his phone forwarded to the voice messaging center. The serving DMS marks A's DN with "presentation restricted" in the CCS7 Initial Address Messages parameter. A's call is forwarded to the message center, but A's D
	26	RES00039	RES SMDI CLID Suppr	This features provides the capability to override Simplified Message Desk Interface (SMDI) restrictions on Calling Line Identification Display (CLID) among members of a Uniform Call Distribution (UCD) group.	5					AF3679	SMDI Calling DN Optionality	This software allows the network provider to override Simplified Message Desk Interface (SMDI) restrictions on Calling Line Identification Display (CLID) among members of a Uniform Call Distribution (UCD) group. Using this feature, the network provider can offer message services to business clients regardless of state CLID regulatory requirements. The software also allows for the blocking of group members' CLID for any calls made outside the group.
	26			This feature builds upon the DMS switch TR- compliant Call Waiting Display and TR-compliant ADSI protocol capabilities to provide a service that is accessible from industry-standard ADSI terminals. The new options include the Conference feature to enable the user to add a waiting party into an existing conversation creating a three-way conference, Drop First which allows the user to drop from the conference the person that was involved in the original two party call, and Drop Last allows the user to drop from the conference the person that was originally the call waiting party.	5						Call Waiting Display with Disposition	When a subscriber is already on the phone, Call Waiting Display with Disposition (DSCWID) not only identifies the incoming caller on the telephone's display window, but provides options for handling the second call. The subscriber can send a "wait a minute" or "call me back" message, or route the call to a voice messaging service simply by pressing a soft key. The DSCWID feature builds upon the DMS TR- compliant Spontaneous Call Waiting Display (see top of page) and TR-compliant ADSI protocol (see page 180) capabilities to provide a service that is accessible from industry-standard ADSI terminals. Hardware: This software requires the provisioning of a CLASS Modern Resource pack (NT6X78), the Universal Tone Receiver pack (NT6X92), and a Combined Message and Tone Generator pack (NT6X69AD). This feature also requires the Extended Peripheral Module PLUS (XPM+).
				This feature builds upon the DMS switch TR- compliant Call Waiting Display and TR-compliant ADSI protocol capabilities to provide a service that is accessible from industry-standard ADSI terminals. The new options include the Conference feature to enable the user to add a waiting party into an existing conversation creating a three-way conference, Drop First which allows the user to drop from the conference the person that was involved in the original two party call, and Drop Last allows the user to drop from the conference the person that	5					AN1249, AN1286		This feature builds upon the DMS TR-compliant Call Waiting Display and TR- compliant ADSI protocol capabilities to provide a service that is accessible from industry-standard ADSI terminals and that complies with the Bellcore service defined by TR-416. This software supports the following additional disposition options as defined by TR-416: Conference—enables the user to add the waiting party into their existing conversation, creating a three-way conference. Drop First—allows the user to drop from the conference the person that was involved in the original two party call. Drop Last—allows the user to drop from the conference the person that was originally the call waiting party. This software also supports the TR-416 requirement for 2500 set access to Call Waiting Deluxe. Hardware: This software requires the provisioning of a CLASS Modem Resource pack (NT6X78), the Universal Tone Receiver pack (NT6X92), and a Combined Message and Tone Generator pack (NT6X69AD). This
	26	RES00040	RES Call Wtg Delux (TR)	This feature builds upon the DMS switch TR- compliant Call Waiting Display and TR-compliant ADSI protocol capabilities to provide a service that is accessible from industry-standard ADSI terminals. The new options include the Conference feature to enable the user to add a waiting party into an existing conversation creating a three-way conference, Drop First which allows the user to drop from the conference the person that was involved in the original two party call, and Drop Last allows the user to drop from the conference the person that was originally the call waiting party.	5	9				AF7229	TR- Compliant Call Waiting Deluxe	This feature offers an additional, simplified way to provision Spontaneous Call Waiting Identification and Disposition (DSCWID) to help streamline service processing. DMS software uses a dual Universal Service Order Code (USOC) provisioning method to add DSCWID to lines with and without Call Forwarding Don't Answer (CFDA). This feature enables the use of a single USOC to provision DSCWID both with and without CFDA. Currently, if CFDA is assigned to a line, only proprietary DSCWID can be assigned to that line. With this feature, any type of DSCWID can be assigned. This gives service providers the flexibility to decide whether to use the single or dual USOC approach to provision DSCWID.

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	App	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	26	RES00043	RES Ntwk Suprsd Ringing	This feature provides the terminating switch functionality to achieve no-ring cut-through to a customer's line. The Suppressed Ringing Access functionality is provided as part of a network Suppressed Ringing Service whereby a suppressed ringing call can be originated from any point in the network to any customer's line network-wide.	5					AG4004	Suppressed Ringing Access	This feature provides the terminating switch functionality to achieve no-ring cut- through to a customer's line. The Suppressed Ringing Access functionality is provided as part of a network Suppressed Ringing Service whereby a suppressed ringing call can be originated from any point in the network to any customer's line network-wide.
	26	RES00044	RES UVM Access	The Universal Voice Message service is offered to residential and small business end-users within an operating telephone company's network. It provides access to a voice messaging service from the end-office through simplified dialing. The actual voice messaging service is offered from a Voice Messaging System (VMS) which can be provided by different messaging service providers. This service provides to its users a default voice mailbox where no prior arrangement with the operating telephone company is required.	5					AQ1303	Universal Voice Messaging	The Universal Voice Message service is offered to residential and small business end-users within an operating telephone company's network. It provides access to a voice messaging service from the end-office through simplified dialing. The actual voice messaging service is offered from a Voice Messaging System (VMS) which can be provided by different messaging service providers. This service provides to its users a default voice mailbox where no prior arrangement with the operating telephone company is required.
	26	RES00047	RES Call Screening	This feature allows the monitoring of a call that has been forwarded to a network-based answering service (NBAS). Like current CPE terminals, the NBAS subscriber can listen to the caller leaving a message without alerting the calling party that the message is being monitored. Then, if desired, the subscriber can intercept the call.	5					AQ1402	RES Call Screening, Monitoring, and Intercept (CSMI)	One of the reasons subscribers say they rely on an answering machine, or similar telephone answering device (TAD) on the customer premises, is the option to listen to callers as they leave messages, and, if desired, to intercept certain calls. Similar functionality from the central office is now being planned, with a feature called Call Screening, Monitoring, and Intercept (CSMI). With CSMI, the subscriber is able to monitor a call that has been forwarded to a network-based answering service (NBAS). Like current CPE terminals, the NBAS subscriber can listen to the caller leaving a message without alerting the calling party that the message is being monitored. Then, if desired, the NBAS subscriber can intercept the call, either as a standard two-party call, or as a three-party call with the NBAS as the tertiary party. These functions are planned to be available to end users with Residential Enhanced Services or Centrex lines that subscribe to a NBAS and a call forwarding feature that directs calls to that service. CSMI is planned to be bilable to the subscriber either on
	26	RES00049	Automatic Recall Limited to 1	This feature restricts the use of Automatic Recall to one attempt to meet regulatory guidelines in some areas and also blocks the operation of other automated features such as Last Number Redial and Automatic Call Back, from dialing subscribers that have just been reached by Automatic Recall. This feature prevents subscribers from repeatedly harassing a party that may have reached them by error on with the intention of a one-time contact (as with survey takers, telemarketers, or fund-raisers).	6					AQ1395	Automatic Recall Limited to 1	Automatic Redial, a CLASS/CMS Residential Enhanced Services feature, allows a subscriber to return the last incoming call attempted on the line, without needing to know the calling party's number. The Automatic Recall Limited to 1 feature gives network providers the option of restricting the use of Automatic Recall to one successfully returned call. This software also blocks the operation of other automated features (such as Last Number Redial and Automatic Call Back) from dialing subscribers that have just been reached by Automatic Recall. The two stations involved can be on different switches (the originating and destination nodes communicate over the CCS7 network). To meet regulatory requirements in some serving areas, and to promote goodwill and enhanced harassment protection, this optional software prevents subscribers from repeatedly harassing a party that may have reached them by error or with the intention of a one-time contact (as with survey takers, telemarketers, or fund-raisers). Also, for added security, subscribers are prevented from trying to work around the imposed limitation through Last Number Redial or other automated features.

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	App	Urder Code	Order Code Name RES Office Conversion	Order Code Description	Ris	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	20	RES00052	Enhancement	This feature enables a network provider to convert all the POTS line equipment numbers (LENs) to 'RES' that fall within a range specified by the craftsperson. This feature is also known as "Make RES, Stay RES."	6					AN1561	Office Conversion Enhancement	Among the many benefits of the "Universal Access to CLASS" feature is the ability of the network provider to make CLASS features accessible to subscribers without requiring the features to be manually added to each subscriber's line. The MAKERES command streamlined provisioning by converting selected POTS lines in the office to "RES"—without having to complete labor-consuming Service Order procedures. RES00052 offers an enhanced version of MAKERES capabilities in a cost-effective package. Designed for offices that do not require the higher level of service available with Universal Access to CLASS software, the Office Conversion Enhancement numbers (LENs) to "RES" that fall within a range specified by the craftsperson. This optional software offers a cost-effective, convenient tool that significantly simplifies changing POTS lines to RES, so a group of subscribers can gain access to revenue-producing CLASS services in a short period of time. This has the dual benefit of reducing operating costs for translations while accelerating revenue-generat
												Also, since the craftsperson specifies the start and stop LEN for each MAKERES oper
	26	RES00053	RES Enhanced CSMI	This feature makes available to Centrex lines that subscribe to a network-based answering service (NBAS) the ability to screen, monitor and intercept calls that are forwarded to the NBAS. These Centrex lines will have provisioning options for billing the service on a pay-per-use, usage-sensitive, or subscription basis.	6					AN1439, AQ1440	Call Screening, Monitoring, & Intercept CCSMI) Enhancement	With CSMI, a subscriber to a network-based answering service (NBAS) has the option to listen to a caller as the party leaves a message, without alerting the party that the message is being monitored, and to intercept the call, if desired. This functionality is similar to the monitoring capabilities of current customer premises equipment (CPE) terminals. With RES00047, these capabilities are available to end users with Residential Enhanced Services that subscribe to a NBAS and a call forwarding feature that directs calls to that service. RES00053 supports Centrex lines with provisioning options for billing the service on a pay-per-use, usage- sensitive, or subscription basis. This optional software expands the types of lines that can support CSMI to include Centrex lines, to expand the subscriber base and broaden the revenue potential for service providers. Flexible billing capabilities provide Automatic Billing Accounting records for pay-per-use, subscription, and usage sensitive billing arrangements.
	26	RES00054	RES EXB simplified ServOrd	This feature simplifies transferring a copper facility to broadband, such as coaxial, with no disruption of service to the subscriber. Extension bridging enables two different line equipment numbers (LENs) to have the same directory number and associated services at the same time. This simplified Service Order (SERVORD) process transparently performs the line association activity, such as copying all features from one line to the other, with a single "high- level" command that previously had to be done manually in SERVORD by entering a long string of commands.	8					AF6921	Service Order Simplification for Extension Bridging	Extension Bridging (EXB) enables two different line equipment numbers (LENs) to have the same directory number and associated services at the same time. This simplified Service Order (SERVORD) process transparently performs line association activity, such as copying all features from one line to the other, with a single "high-level" command that previously had to be done manually in SERVORD by entering a long string of commands. As the use of integrated digital loop carriers and broadband facilities increases, network provider administrative personnel require an efficient and error-free method of assigning, changing, and removing the EXB feature. Extension Bridging can help reduce administration time by as much as 70 percent to transfer a subscriber line from copper to broadband (such as coaxial) facilities, with no disruption of service to the subscriber.
	26	RES00059	RES LDA Enhancements	This feature encourages the completion of toll calls by providing a distinctive call-waiting tone or distinctive ringing cadence that alerts the subscriber to an incoming long distance call.	6					AQ1508, AQ1509	Long Distance Alerting (LDA) Enhancements	LDA encourages the completion of toll calls by providing a distinctive call-waiting tone (if off-hook) or distinctive ringing cadence (if on-hook) that alerts the subscriber to an incoming long distance call. Since subscribers generally value long distance calls, and are more likely to answer them, helping them distinguish between local and long distance calls benefits the revenue stream for both local exchange carriers and interexchange carriers. Optional RES0059 software offers new flexibility in feature operation. Now either distinctive ringing or distinctive call-waiting tones, or both, can be enabled and disabled by the network provider. By making Long Distance Alerting more flexible, this software enhances the appeal of this revenue-generating feature to a wide range of subscribers, and makes this service easier to administer at the switching office.
	26	RES00060	RES Usage sensitive Call Forward	This feature provides simplified access to call forwarding with billing based on usage which is attractive to subscribers who do not wish to pay a flat monthly fee for call forwarding.	6					AQ1505, AQ1506	Usage-Sensitive Call Forwarding	service easier to administer at the switching office. This feature increases the use of call forwarding by providing the subscriber simplified access to call forwarding, with billing based on usage. This is especially attractive to subscribers who do not wish to pay a flat monthly fee for call forwarding. Pay-per-use billing becomes a beneficial option that can help stimulate feature usage. This software provides three key benefits: • Lowers the service provider's administrative costs. • Allows end user access without having to subscribe to the feature. • Supports pay-per-use billing as well as monthly subscription.

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	Ann	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs Code	PCID	ACTID	Feature Name	Feature Description
			In Session ACTN	This In-Session Activation (ISA) feature provides callers with a convenient means of accessing a call completion service during unsuccessful call attempts. This feature also promotes pay-per- use call completion services such as Automatic Call Back/Automatic Call Return (ACB/AR), Message Delivery Service (MDS) or Universal Voice Messaging (UVM). Through ISA, pay-per- use call completion services are offered and made accessible to customers in the same session as an unsuccessful call attempt.	6				AQ1700, AQ1702, AQ1703	In-Session Activation (ISA)	This In-Session Activation (ISA) feature provides callers with a convenient means of accessing a call completion service during unsuccessful call attempts. This feature also promotes pay-per-use call completion services such as Automatic Call Back/Automatic Call Return (ACB/AR), Message Delivery Service (MDS) or Universal Voice Messaging (UVM). Through ISA, pay-per-use call completion services are offered and made accessible to customers in the same session as an unsuccessful call attempt. This eliminates the need for callers to hang up and start a new session in order to activate a service on the last number dialed. In this way, ISA operates as a front-end to available pay-per-use call completion services and affects only the manner in which they are accessed.
	26	RES00070	Toll Saver for call forwarding	This feature enables voice mail subscribers to avoid toll charges when no messages are available for retrieval. Unless the subscriber has requested a different ring pattern, toll saver uses a 2/4 ring pattern. If there are unanswered messages waiting, then the system forwards the call after two rings to voice mail so the caller can retrieve the messages. If there are no messages waiting, the phone rings four times before the system forwards the call to the voice mailbox.	8				AQ1596, AQ1597	Remote Message Indication for Voice Mail	This feature enables voice mail subscribers to avoid toll charges when no messages are available for retrieval. Unless the subscriber has requested a different ring pattern, toll saver uses a 2/4 ring pattern. If there are unanswered messages waiting, then the system forwards the call after two rings to voice mail so the caller can retrieve the messages. If there are no messages waiting, the phone rings four times before the system forwards the call to the voice mailbox. Subscriber billing for this feature can be based on either subscription or usage. With subscription billing, the assignment of the toll saver line option triggers billing (with no requirement for an additional AMA record). For usage billing, the system generates an AMA record each time the subscriber activates and deactivates the feature. Benefits for the service provider: This feature allows the service provider to offer the popular toll-saver feature available on most telephone answering devices. This increases the attractiveness of switch-based voice mail and can stimulate service subscription rates. Benefits for the end user: This toll-saving feature allows voice mail subscribers who an
	26	RES00072	Enhanced QCUST Command	This QCUST command retrieves information about all lines associated with one or more customer groups. This information can be uploaded from the DMS switch to an off-switch database. Uploading the information allows initialization of the database as well as synchronization between the database and the DMS switch. This feature enhances the QCUST command by adding table RESFEAT to the list of tables traversed for retrieval of line options and by generating a record 12 for LENs that have been unassigned via the CKLN command.	6				AJ4241	QCUST Command Enhancements	This QCUST command retrieves information about all lines associated with one or more customer groups. This information can be uploaded from the DMS switch to an off-switch database. Uploading the information allows initialization of the database as well as synchronization between the database and the DMS switch. This feature enhances the QCUST command by adding table RESFEAT to the list of tables traversed for retrieval of line options and by generating a record 12 for LENs that have been unassigned via the CKLN command.
	26	RES00073	RES SLE/ACBAR NO TCAP	This feature enables selective non-compliance with Bellcore specifications for networked CLASS. It provides control over the disabling of TCAP queries for Automatic Call Back and Automatic Recall (ACB/AR) and Screen List Editing (SLE) programming on a per-office basis and provides limited feature functionality to areas of the network that are non-Bellcore TCAP compliant.	6				AF6514	SLE and ACB/AR TCAP Decoupling	Original Bellcore specifications for networked Custom Local Area Signaling Services (CLASS) features—such as Screen List Editing (SLE), Automatic Call Back, and Automatic Recall—require that a Transaction Capabilities Application Part (TCAP) query be launched during the operation of these features. Many service providers do not have full TCAP connectivity throughout their entire network. Additionally, TCAP interconnections between different service providers have not been standardized and are therefore non-functional across different networks. This feature disables the TCAP query functionality for SLE and ACB/AR features on an optional, service provider controlled basis. Certain aspects of feature functionality are compromised in a non-TCAP environment, such as: • Delayed processing feature of ACB/AR. • SLE number programming cannot discern if the user-programmed number is valid. This feature enables selective non-compliance with Bellcore specifications for networked CLASS. In addition, it provides: • Control over the disabling of TCAP queries for ACB/AR and SLE programming is provided on a per-office basis.

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	Ann	Order Code	Order Code Name	Order Code Description	RIs	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
			RES Call Fwd Restriction	This feature enables service providers to restrict the types of phone numbers that can be programmed by subscribers as call forward destinations on an office-wide basis. These restrictions can then be overridden on a per-line basis to allow truly universal call forwarding for customers requesting it.	8					AJ4192, AJ4193	Call Forward Fraud Prevention	RES00074 enables service providers to restrict the types of phone numbers that can be programmed by subscribers as call forward destinations—on an office-wide basis. These restrictions can then be overridden on a per-line basis to allow truly universal call forwarding for customers requesting it. This optional feature reduces fraudulent use of universal call forwarding resulting in increased savings and security for service providers. Families with children and teen- agers can enjoy an increased level of security—knowing that 976, 900, and similar numbers cannot be used as call forwarding destinations.
	26	RES00076		This feature introduces Automatic Call Back (ACB) as an additional, optional service offering on busy calls. When a busy condition is detected, the calling party receives the option of activating ACB, messaging, both, or neither. The service provider selects which services are offered after screening.	8					AJ4122, AJ4124, AJ4123	Enhanced Busy Call Return	This software introduces Automatic Call Back (ACB) as an additional, optional service offering on busy calls. When a busy condition is detected, the calling party has the option of activating ACB, messaging, both, or neither. The service provider selects which services are offered after screening. When a busy condition is encountered, the calling party has an option of invoking the ACB functionality—with no access codes needed to be remembered and used—as an incremental revenue producing opportunity for the service provider. Service providers also benefit from increased call completion rates on all calls—local, interLATA, intraLATA, and toll calls.
	26	RES00077		This feature allows callers of a busy or unanswered call to leave a message for later delivery to the called party. The message delivery service can be offered universally or on a per- line basis and a "deny" option is available on a per-line and per-customer group basis. It can also be assigned to coinless public lines and PBX lines on a per-line basis. Access to Messaging is offered and requested directly from the end office where the call is originating. The service itself is provided by a voice messaging system attached to the service provider's network.	8					AQ1489, AQ1404, AQ1335, AQ1408, AQ1408, AQ1408, AQ1488	Access to Messaging	 This feature allows callers of a busy or unanswered call to leave a message for later delivery to the called party. Access to Messaging enables service providers to provide universal access to the original Message Service Application (MSA) services with the following additions: Message delivery service can be offered universally or on a per-line basis. A "deny" option is available on a per-line and per-customer group basis. May be assigned to coinless public lines and PBX lines on a per-line basis. Access to Messaging is offered and requested directly from the end office where the call is originating. The service itself is provided by a voice messaging system attached to the service provider's network. Access to Messaging can be offered on an office-wide basis without having to add the option on every line or customer group. PBX agents, as well as coinless public lines, can be equipped with the service on a per-line basis. Increased revenues from call completion and feature subscription/pay-per-use.
Added	26	RES00077		This feature allows callers of a busy or unanswered call to leave a message for later delivery to the called party. The message delivery service can be offered universally or on a per- line basis and a "deny" option is available on a per-line and per-customer group basis. It can also be assigned to coinless public lines and PBX lines on a per-line basis. Access to Messaging is offered and requested directly from the end office where the call is originating. The service itself is provided by a voice messaging system attached to the service provider's network.	8	10			9135	AJ5115	Decouple Enhanced Busy Call Return and Access to Messaging	Currently, Enhanced Busy Call Return (EBCR) and Access to Messaging are accessed at the same time, if they are both available on the switch — the network provider cannot offer only one of these services. In NCS10, RES00077 enables service providers to provision these options separately on a per-line and customer-group basis. This new flexibility provides a number of enhancements: • Permits service providers to offer different subscription modes for access to EBCR and Access to Messaging services. • Enables the end user to permanently deny access to EBCR, Access to Messaging, or both on a per-line basis. • Allows access to alternate messaging providers for individual subscribers and customer groups. • Provides support for custom announcements. Service providers can choose whether a standard or custom announcement will be played during EBCR or Access to Messaging. With this feature, service providers can expand service offerings and subscriber satisfaction with the flexibility offer different call-completion services on a per-line, customer-group, and office-wide basis.

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	App	Order Code	Order Code Name	Order Code Description	Ris	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
			RES Fax-Thru Service	This feature provides the capability to route outgoing faxes to a fax messaging platform if the destination fax machine is busy or does not answer. Once the destination machine becomes available, the Fax Messaging Platform forwards the fax from storage to the destination. This Fax- Thru Service (FTS) is offered on a per-line basis from the central office.	8					AG5139, AG5140	Fax-Thru Service	Fax-Thru Service (FTS) routes outgoing faxes to a fax messaging platform if the destination fax machine is busy or does not answer. Once the destination machine becomes available, the Fax Messaging Platform forwards the fax from storage to the destination. FTS is offered on a per-line basis from the central office. Lines subscribed to the service are monitored for a busy signal or no answer. Upon detection of a busy signal, the fax is automatically routed to the FTS directory number. Calls to the destination fax machine are maintained for a pre-defined time out period. Upon time-out with no answer, the fax message and routing information is transferred to the messaging platform directory number for later delivery. The key benefits of Fax-Thru Service include: • Introduces new revenue potential with portfolio-differentiating features. • Self-defines the No Answer Time-Out duration. • Offers flexible routing destinations for intraLATA and interLATA calls. • Provides new operational measurements (OMs) for detailed feature records.
	26	RES00079	RES SACB 0- Blocking	This feature provides end users with more flexibility for controlling calls that originate from their lines. This prevents Subscriber-Activated Call Blocking (SACB) for 0- calls from being "bypassed" by dialing "0" and having the operator connect the call.	8					AF6946	for 0- Calls	Subscriber-Activated Call Blocking allows subscribers to prevent certain types of calls from being completed from their line. These "blocked" calls may include 900, 976, and long-distance calls. Individual calls to blocked numbers may be overridden with a personal identification number (PIN) code. Traditionally, both 911 and 0- calls were always completed—allowing emergency calls to be made. Today, deployment of 911 service has eliminated this concern in some markets, making 0- Subscriber-Activated Call Blocking desirable. SACB for 0- calls provides end users with more flexibility for controlling calls originated from their lines. This prevents blocked calls from being "bypassed" by dialing "0" and having the operator connect the call.
	26	RES00080	RES CNAMD Interwork	Currently, the DMS system proprietary and industry TCAP versions of the Calling Name Delivery (CNAMD) feature are not allowed to interact. If the TCAP version is active for the RES customer group, the proprietary version is inactive, requiring that a TCAP query be launched for every NAME lookup within that RES group. This feature enables the two versions of CNAMD to interwork by providing an option to check the internal DMS proprietary NAME database for a name entry before launching a TCAP query.	9					AF7157		Currently, the DMS system proprietary and industry TCAP versions of the Calling Name Delivery (CNAMD) feature are not allowed to interact. If the TCAP version is active for the RES customer group, the proprietary version is inactive, requiring that a TCAP query be launched for every NAME lookup within that RES group. This feature enables the two versions of CNAMD to interwork by providing an option to check the internal DMS proprietary NAME database for a name entry before launching a TCAP query.
Added	26	RES00081	RES Simultaneous Ring	This feature offers a simple "Find Me" service, in real time, for subscribers who are mobile but don't want to miss important calls. It is ideal for small office/home office (SOHO), small business operators, and mobile subscribers (such as real estate agents, and sales professionals). Any local or remote telephone may be used to activate/deactivate the feature to make changes to the Directory Numbers in a ring list. No special terminal or other subscriber premises equipment (CPE) is required.	10				11326	AJ4934, AJ4935, AJ4936, AJ4937		RES00081 enables up to five directory numbers (DNs) to ring simultaneously whenever there is a call to a Primary DN (PDN). The PDN can be any DMS-500 RES or Centrex line that has subscribed to this service. Whichever phone goes off- hook first receives the call. This convenience is especially useful for mobile subscribers who can be at a number of different locations throughout a workday. The subscriber has day-to-day control of this feature with the ability to: • Activate and deactivate this feature (such as at the beginning and end of a workday). • Add, change, and delete DNs in the ring list from any phone, with security, on an as- needed basis. The ring-list procedures for subscribers are intuitively menu-driven, with announcements that prompt end users through the process. Ideal for small office/home office (SOHO), small business operators, and mobile subscribers (such as real estate agents, tradespeople, and sales professionals), Simultaneous Ring offers a simple, multilocation, real time "reach-me" service. Any local or remote telephone may be used to activate/deactivate the feature and to make Non-PDN telephones on the Simultaneous Ring list continue to receive calls to their pu

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Issue 2					NCS	Enh		Repl Ord				
			Order Code Name	Order Code Description	RIs	Rls	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
			Reverse Translations Simplification	This feature reduces the datafill tasks required to maintain reverse translations and the requirement to revisit it after a new NPA/NXX code opening.	9					AU2502, AU2584	Reverse Translations Enhancements	This feature reduces the datafill tasks required to maintain reverse translations and the requirement to revisit it after a new NPA/NXX code opening. Optionally, this software supports existing DNREVXLA/DNREGION reverse translations to offer backwards compatibility and provide a simple transition.
	26	RES00083	RES NCOS Decoupling	This feature reduces the effort to maintain RES lines by separating Network Class of Service (NCOS) requirements from residential call processing. The need to define NCOS and XLANAME NET GEN default result for each RES LINEATTR is eliminated. Other translation modifications include the LINEATTR reference datafilled against the line is used rather than the one referenced by the NET GEN default result in table XLANAME and NCOS references to XLANAME are no longer needed. All RES lines can belong to a single NCOS.	9					AU2503, AU2667	Residential Decouple from Network Class of Service	This feature reduces the effort to maintain RES lines by separating Network Class of Service (NCOS) requirements from residential call processing. The need to define NCOS and XLANAME NET GEN default result for each RES LINEATTR is eliminated. Other translation modifications include the LINEATTR reference datafilled against the line is used rather than the one referenced by the NET GEN default result in table XLANAME and NCOS references to XLANAME are no longer needed. All RES lines can belong to a single NCOS.
Added	26	RES00087	RES DLCM	This feature enables two RES lines to interwork, offering increased flexibility for two-line residences or Small Office/Home Office.	10				12145	AJ4899	Dual-Line Call Management	Dual Line Call Management (DLCM) enables two residential lines to interact for more flexible call management. DLCM supports simultaneous ringing, answer, call hold, and pickup capabilities from either the subscriber line or an "associate" line. If the DLCM feature is active, both lines will ring; the associate line will receive distinctive ringing. An associate line can pick up a call on a subscribed line just by going off-hook. If DLCM is not active, then only the dialed line rings, but the call can still be answered from the DLCM associate line by dialing an access code. In addition, a call can be held and retrieved from either DLCM line. A call answered (or originated) by either line can be placed on hold. If DLCM is active, a reminder ring is applied to both DLCM lines and either line can retrieve the held call. If DLCM is inactive, the reminder ring is applied only to the line that placed the call on hold (but the associate line can still retrieve the call by dialing an access code). Sophisticated interworking enhances the value of a second line. Easily packaged with
Added	26	RES00090	RES Voice Mail Easy Access (VMEA)	This feature provides integrated access to a voice messaging service from an end office through simplified dialing.	10				13810	AJ4120, AJ4121, AJ4371	Voice Mail Easy Access	Voice Mail Easy Access provides integrated access to a voice messaging service from an end office through simplified dialing. Customers subscribed to a voice messaging service can directly access their voice mailboxes from a RES line by simply dialing a star (*) access code from their home telephone. The subscriber's Calling Line ID (CLID) is sent to the voice mail system for proper mailbox indexing. The indexing information can be sent to the voice mail system over a Simplified Message Desk Interface (SMDI) link or an ISDN PRI trunk. The Voice Mail Easy Access feature provides a simple, easy-to-remember code for
	40	SAID0004	SAID Universal	This feature makes access to SAID services available to cellular callers and potentially to any user in the network through direct inward system access (DISA).	5						Universal SAID	This feature makes access to SAID services available to cellular callers and potentially to any user in the network through direct inward system access (DISA).
	40	SAID0005	SAID ESP Phase 2	This feature provides support for SAID Enhanced Signaling Protocol (ESP) on IBN lines, IBN and RES hunt group lines, Intelligent Peripheral Dialing, SAID ESP is the optional out- of-band signaling interface for SAID services.	5					AN1211	SAID Enhanced Signaling Protocol Phase 2	This feature provides support for SAID Enhanced Signaling Protocol (ESP) on IBN lines, IBN and RES hunt group lines, Intelligent Peripheral Dialing. SAID ESP is the optional out-of-band signaling interface for SAID services.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	40	SAID0001	SAID Basics	This feature provides basic software support in the Computing Module for basic Voice-Activated Dialing (VAD) and is a pre-AIN call processing feature which involves the DMS switch and an external Intelligent Peripheral (IP) that provides VAD caabilities.	5					AN0434, AN0435, AN0849	SAID Basic	This feature provides basic software support in the Computing Module for basic Voice-Activated Dialing (VAD) and is a pre-AIN call processing feature which involves the DMS switch and an external Intelligent Peripheral (IP) that provides VAD capabilities.
	40	SAID0001	SAID Basics	This feature provides basic software support in the Computing Module for basic Voice-Activated Dialing (VAD) and is a pre-AIN call processing feature which involves the DMS switch and an external Intelligent Peripheral (IP) that provides VAD capabilities.	5	9				AF7058, AF7184	SAID on SMS-R	This feature enables the SAID option to be datafilled for the Subscriber Carrier Module-100S Remote (SMS-R) and offers new SERVORD and table control capabilities to provision SMS-R direct digital interfaces to support speech-activated options.
	40	SAID0002	SAID Plus	This feature provides voice activation of features, Automatic Message Accounting (AMA) enhancements, and additional line and trunk support. It reduces costs by simplifying AMA processing and increases ways to bill SAID services. Also, SAID Plus expands peripheral and remote support to include Remote Cluster Controller, Subscriber Carrier Module-100 Access, and ISDN Digital Trunk Controller.	5						SAID Plus	This feature provides voice activation of features, Automatic Message Accounting (AMA) enhancements, and additional line and trunk support. It reduces costs by simplifying AMA processing and increases ways to bill SAID services. Also, SAID Plus expands peripheral and remote support to include Remote Cluster Controller, Subscriber Carrier Module-100 Access, and ISDN Digital Trunk Controller.
	40	SAID0003	SAID ESP	By using out-of-band signaling, SAID Enhanced Signaling Protocol (ESP) improves performance, supplements subscriber information to the IP, provides call forwarding without subscriber validation, and synchronizes database information between the DMS switch and the IP.	5							By using out-of-band signaling, SAID Enhanced Signaling Protocol (ESP) improves performance, supplements subscriber information to the IP, provides call forwarding without subscriber validation, and synchronizes database information between the DMS switch and the IP.
	38		Service Order Enhancements	This feature provides the ability to retrieve the default (last entered) values and display them with their prompts before the user inputs for the Call Forward Don't Answer (CFDA) feature.	6					UM400010	- SERVORD Enhancements	This feature provides the ability to retrieve the default (last entered) values and display them with their prompts before the user inputs for the Call Forward Don't Answer (CFDA) feature. Previously, not all of the fields of the CFDA feature are prompted with default values. As a consequence, when a user tries to change a feature using Change Feature (CHF) command of SERVORD, the user is required to have all of the data ready, even when only part of the data is modified. What a user usually does is to query the line before issuing a CHF command. The purpose of this feature is to eliminate this problem for the CFDA feature.
This feature is changed to Not Applicable to U.S. Market. Instead, NPE00001 should be used.		SERV0002	Multiple 7-Digit Ambiguity Resolution	This optional feature was intended for European market and is not applicable to U.S. Market. NPE00001 should be used in U.S. Market.				1	10567		Multiple 7-Digit Ambiguity Resolution	This optional feature was intended for European market and is not applicable to U.S. Market. NPE00001 should be used in U.S. Market.

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			Order Code Description This feature saves times and operating costs by reducing manual intervention in service order operation and with this feature SERVORD accepts the addition of line options when they already exist and the deletion of line options even when they do not presently exist.	9 9	RIS	MD RIS	Code	PCID	ACTID AF7334	Feature Name Redundant Feature	Feature Description With this feature, SERVORD accepts and commits changes under the following conditions: • The addition of line options even when they already exist. • The deletion of line options even when they do not presently exist. In both cases an informative response from SERVORD indicates whether the command sequence was successful or not. This software enhancement eliminates two major causes of SERVORD rejects at the provisioning system. The costly, time-consuming manual provisioning rework formerly needed to respond to "Feature Does Exist" and "Feature Does Not Exist" responses
	28	SMA00001	This feature provides software support of cost- effective, digital integration of generic Remote Digital Terminals that comply with Bellcore's TR- TSY-000303 interface specification.	5	6				AF6051	TR-303 Lines Provisioning Audit	is eliminated. This software provides an automatic audit to monitor the consistency of TR-303 object data in the DMS system and TR-303 remote digital terminals. The audit schedules all TR-303 lines for validation once every 24 hours, and can be initiated on demand for a particular line. If the audit process detects any data inconsistencies, the system generates a log and attempts to correct the mismatch at the remote digital terminal. The automatic audit process enhances current methods for alerting network providers of object data mismatches between the DMS system and the TR-303 remote digital terminal before they affect service. In addition, the audit provides a means to validate data consistency on individual lines that have reported mismatches—saving valuable troubleshooting time. This feature monitors the line data for all objects provisioned by the DMS system, including: • Analog lines • ISDN access and transport
	28	SMA00002	This feature enables network providers deploying non-DMS Next Generation Digital Loop Carriers (NGDLCs) and residential broadband access systems to use DMS Meridian Business Sets over the TR-303 access protocol.	8					AN3003, AN3004, AN3010	SMA MBS/TR-303 Access	This feature enables network providers deploying non-DMS Next Generation Digital Loop Carriers (NGDLCs) and residential broadband access systems to use DMS Meridian Business Sets over the TR-303 access protocol. The Meridian Business Set provides single-button access to many DMS switch-based features. This software permits ongoing support and growth of MBS services as the access network between the host and MBS terminals continues to evolve.
	28	SMA00007	This feature optimizes the performance and capacity of the embedded operations channel (EOC) stack used in the TR-303 architecture. By migrating the EOC protocol stack from the host's Computing Module to Subscriber Carrier Module- 100 Access (SMA) and Expanded SMA (ESMA) peripherals, the new capability improves the efficiency of host/peripheral communication, and enhances processing bandwidth and real time performance for expanding EOC applications.	6	8				AF6830, AF6834, AF6836, AF6812, AF6816, AF6828, AF6829	Flexible Line Size	This feature enhances the flexibility of ESMA table RDT Inventory (RDTINV) to more effectively support and provision RDTs of varying line sizes. This software also enables network providers to increase or decrease the capacity of an RDT without impacting in-service lines. The current datafill procedure involves classifying RDTs into specific size categories with applicable quantity limits (per peripheral) for each size class. The feature enhancement removes all size-classification requirements and allows service providers to mix and match different size RDTs with the same switch peripheral.
	28	SMA00007	This feature optimizes the performance and capacity of the embedded operations channel (EOC) stack used in the TR-303 architecture. By migrating the EOC protocol stack from the host's Computing Module to Subscriber Carrier Module- 100 Access (SMA) and Expanded SMA (ESMA) peripherals, the new capability improves the efficiency of host/peripheral communication, and enhances processing bandwidth and real time performance for expanding EOC applications.	6					AN1956, AN1957	Line Service State Synchronization	This feature takes advantage of EOC Performance Enhancements software by enabling the DMS system to synchronize line service states with Nortel's AccessNode or generic remote digital terminals (RDTs). The peripheral-based EOC protocol stack provides the necessary bandwidth for the DMS system to update the line service state in response to RDT event reports indicating that a line has been removed from or returned to service by the RDT. The ability to maintain line service state synchronization between the DMS switch and RDTs enhances the following aspects of DMS TR-303 system performance: • Ensures that calls terminating to out-of-service lines are blocked at the network level rather than at the RDT. Blocking these types of calls at the network level improves the use of call-processing resources at the RDT, the DMS system, and the interoffice network.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	28	SMA00007	SMA Platform Enhancement	This feature optimizes the performance and capacity of the embedded operations channel (EOC) stack used in the TR-303 architecture. By migrating the EOC protocol stack from the host's Computing Module to Subscriber Carrier Module- 100 Access (SMA) and Expanded SMA (ESMA) peripherals, the new capability improves the efficiency of host/peripheral communication, and enhances processing bandwidth and real time performance for expanding EOC applications.	6	8				AN5002, AN5003		KEY CAPABILITIES This feature increases the number of AccessNodes or generic TR-303 RDTs per ESMA that can support ISDN services from five to seven. PRINCIPAL BENEFITS Enhancing the software to take advantage of the ESMA platform capabilities enhances TR-303 deployment economics. The 28 percent increase in the number of RDTs per ESMA supporting ISDN services improves the ESMA's cost effectiveness for small line size ISDN deployment scenarios.
	28	SMA00007	SMA Platform Enhancement	This feature optimizes the performance and capacity of the embedded operations channel (EOC) stack used in the TR-303 architecture. By migrating the EOC protocol stack from the host's Computing Module to Subscriber Carrier Module- 100 Access (SMA) and Expanded SMA (ESMA) peripherals, the new capability improves the efficiency of host/peripheral communication, and enhances processing bandwidth and real time performance for expanding EOC applications.	6					AN1728, AN1726, AN1727, AN1520, AN1520, AN1720, AN1718, AN1721, AN1722, AN1724	TR-303 EOC Performance Enhancements	This software optimizes the performance and capacity of the embedded operations channel (EOC) stack used in the TR-303 architecture. By migrating the EOC protocol stack from the host's Computing Module to Subscriber Carrier Module-100 Access (SMA) and Expanded SMA (ESMA) peripherals, this new capability improves the efficiency of host/peripheral communications, and enhances processing bandwidth and real time performance for expanding EOC applications. This software improves the performance of existing EOC applications and enables new functions—such as enhanced alarm monitoring, line state monitoring, and database audits—that empower network providers to use fully the array of existing and planned EOC capabilities with superior application response times. Access modernization is driving networks toward larger switches, with line cards migrating closer and closer to the subscriber. To meet the demand for larger "lineless" switches, this software boosts real time performance to support the shifting network topology. This functionality expands the DMS system's capability to support large numbers of remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR-303 remote digital terminals (up to 255 AccessNodes or generic TR
	28	SMA00010	RDT Refresh	This feature greatly enhances analog and ISDN services reliability by allowing the DMS switch to automatically reprovision a TR-303's line data if there is corruption or loss. Automatic recovery provides a fast, resource-efficient alternative to manual restoration of RDT line data necessary for analog, ISDN, and nailed-up ISDN B channels from a TR-303 RDT.	6						TR-303 RDT Refresh	If the line-provisioning data of a TR-303 remote digital terminal (RDT) is lost or corrupted due to a catastrophic event, this software enables the DMS system to automatically reprovision ("refresh") the line data in response to an RDT-initiated request transmitted over the embedded operations channel (EOC). RDT line data can be reprovisioned in any of the following ways: • External operations support system (OSS) • Backup data-storage device on the RDT • Switching system that terminates the TR-303 RDT The TR-303 RDT Refresh feature greatly enhances analog and ISDN services reliability by allowing the DMS system to automatically reprovision a TR-303's line data if there is corruption or loss. Automatic recovery provides a fast, resource- efficient alternative to manual restoration of RDT line data necessary for analog, ISDN, and nailed-up ISDN B channels from a TR-303 RDT. In addition, for recovery scenarios which enguine reprovision TR-303 RDT. In addition, for recovery scenarios which enguine reprovision R-803 lines while the RDT remains in
	28	SMA00012	ESMA with ICB	This feature enables Foreign Exchange Signaling (FXS) subscriber lines on D4 channel banks to directly terminate channel bank DS-1s to the ESMA. Terminating channel bank DS-1s directly on the ESMA decreases equipment costs previously incurred to support lines served by D4 channel banks. By integrating D4 FXS signaling into the ESMA platform, a channel bank DS-1 can terminate directly to an ESMA DS-1 port, thus eliminating the need to provision line cards in an ISDN Line Concentrating Module to terminate individual DS-0 channels. This feature also eliminates the requirement for a digital cross connect to convert the D4 signal format.	8					AF6723, AF6724, AF6724, AF6721, AF6721, AF6710, AF6706, AD9754, AF6716, AF6717, AF6718	Integrated Channel Bank (ICB) on ESMA	This feature enables Foreign Exchange Signaling (FXS) subscriber lines on D4 channel banks to directly terminate channel bank DS-1s to the ESMA. This capability reduces deployment costs traditionally associated with providing POTS/residential services (such as call forwarding, three-way calling, and call transfer) and Centrex features (such as call forwarding, three-way calling, and call transfer) and Centrex features (such as call forwarding, three-way calling, and call transfer) and Centrex features (such as call forwarding, three-way calling, and call transfer) and Centrex features (such as thurt groups) via channel banks for line group termination include small clusters of remote residential lines, Internet Service Provider (ISP) modern pools, and enhanced systems that provide voice mail or automated voice response for customer assistance. This optional software offers significant advantages: • Reduces capital expenses—Terminating channel bank DS-1s directly to ESMA decreases equipment costs previously incurred to support lines served by D4 channel banks. Now, by integrating D4 FXS signaling into the ESMA platform, a channel bank DS-1 can terminate directly to an ESMA DS-1 port—eliminating the need to provision line cards in an ISDN Line Concentrating Module (ISDN LCM) to terminate individual DS-0 channels. This feature also eliminates the requirement

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Added			SPMS SPM Base	This feature provides the software support for Optical Carrier signal-level 3 (OC-3) interfaces directly into the DMS SuperNode system. By supporting direct optical interfaces, high-capacity processing, high-message bandwidth, and slot- independent application cards, the SPM offers network providers new flexibility and potential for significant cost of ownership savings.	10				11243	For ISUP	ISUP over OC-3 and PTS over OC-3	Nortel Networks' Spectrum Peripheral Module (SPM) opens the door to new opportunities by introducing Optical Carrier signal-level 3 (OC-3) interfaces directly into the DMS SuperNode system. This flexible, multiple-application platform brings the latest high-speed trunking technology to the evolving DMS Family with a modular, scalable, world-class design. In NCS10, SPMS0001 supports ISDN User Part (ISUP) and Per-Trunk Signaling (PTS) protocols over the OC-3 interface. A single frame with two SPMs has the same footprint as a Digital Trunk Controller (DTC), yet supports up to 4032 DS-0s with OC-3 links. Nortel Networks designed spare processing capacity and hardware slots (near 70% free shelf space in initial releases) to help make the SPM future-ready for other trunk services, to meet network provider requirements.
												Now tandem and large-end switching offices can gain new operating cost savings by simplifying office operations, cabling, powering, planning, engineering, and heating- ventilation-air-conditioning (HVAC) — while enhancing the quality of service to subscribers. This signifi- cantly reduces the number of switching-peripheral frames and 3/1 multiplexers — to he space can be recaptured by installing SPMs back-to-back or up to 6 inches away from
												The reduction in peripheral frames, batteries, and rectifiers in the office can translate in And, with only a few card types, the SPM helps significantly lower on-going expenses i
Added	28	SPMS0002	SPMS ECAN	This feature supports the integrated echo cancellation capability for long distance trunks on the SPM. Provisioning of SPM echo control parameters will be done on per trunk group subgroup basis. New Table SPMECAN will be implemented and Table TRKSGRP will have new options.	10				11242	AD8529, AD9523, AD9617	Echo Cancellation Support on SPM	This feature supports the integrated echo cancellation capability for long distance trunks on the SPM. Provisioning of SPM echo control parameters will be done on per trunk group subgroup basis. New Table SPMECAN will be implemented and Table TRKSGRP will have new options.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						Application Processor Base	This software provides the base maintenance and user interface software for both the Application Processor and File Processor. It provides comprehensive duplex processor operating platform upon which secure fault tolerant applications can be built.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF2582	Broadcast Patching for Active and Inactive XPM Units	Broadcast Patching allows the application and removal of source code patches on several host XPMs of the same type in parallel. Broadcast patching greatly reduces the time required to patch. The following XPMs are supported: Line Trunk Controller (LTC), Line Group Controller (LGC), Digital Trunk Controller (DTC), Subscriber Module for the SLC-96 (SMS), Subscriber Module for the DMS-1U (SMU), DTC with CCS7 Signaling (DTC7), Message Switch and Buffer that supports a CCS7 link (MSB7), MP and SP in host ISDN peripherals (LGCI and DTCI).
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL1696	CC Software Support for Enhanced DRAM	This feature contains three functional components: The DRA component provides the functionality for recording on-site announcements, playing announcements, querying configurations, and performing trunk-level diagnostics; the loading component downloads the EDRAM application firmware base load and the specified announcement load from the DMS tape or disk to the EDRAM memory; the maintenance component provides the Maintenance Trunk Module (MTM)-associated functions for the EDRAM circuit pack.

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	Арр	Order Code	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AQ0984	CC Support for EDRAM Uploading	Enhanced Digital Recorded Announcement Machine (EDRAM) condenses the functionality of an entire 13-pack Digital Recorded Announcement (DRA) shelf into one circuit pack. EDRAM also offers enhancements in audio quality, reliability, and flexibility. This software contains three functional components: • • Uploads EDRAM announcement files to an external storage device such as disk or tape on a DMS switch (the uploaded announcement files can be downloaded to EDRAM later, when needed, and can be transferred to other switches that have this feature activated) • Converts various announcement file formats to binary format to reduce storage space and for faster downloading to EDRAM + Provides a mechanism for a craftsperson to query announcement file names in EDR
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL1247	LPP on CCS7-SSP	This feature enables the use of Link Peripheral Processors (LPPs) to terminate CCS7 signaling links on DMS SuperNode SSP offices. The LPP is an enhanced DMS peripheral that functions as a message switch and buffer (MSB7) for CCS7 messages. Because of its distributed processing power, the LPP offers expanded CCS7 messaging capacity and is therefore an alternative to introducing multiple MSB7 configurations. This hardware is identical to the LPP used on the DMS-STP and is therefore the first step toward integrating SSP and STP functionality on a single DMS SuperNode. The LPP contains a local message switch (LMS) pair and a minimum of two Link Interface Units #7 (LIU7s) to terminate paired CCS7 links.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL1249		This feature minimizes the possibility of data mismatches between the CM and CCS7 peripherals by enabling the Distributed Data Manager (DDM) to run static data audits for the following CCS7/Message Transfer Part (MTP) and ISUP tables. C7NETWRK, C7LKSET, C7LINK, C7RTESET, C7IMER, C7TRKMEM, C7ALIAS, C7CNGSTN. The feature runs a sequence-number audit approximately every two minutes. Static-data audit for each table are run approximately every hour.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						Channelized Access on LPP/LIS	This package provides the maintenance and control software for the Network Interface Unit (NIU)—a new Link Peripheral Processor pack set that enables direct access from the DMS SuperNode network (either ENET or Dual Shelf Network) to the LPP. This "channelized" access to the LPP/LIS provides the following key benefits: • Reduces costs by eliminating the need for external channel banks or multiplexers for applications that require DS-0 connections • Can enhance application reliability by supporting Interface Unit (IU) pooling The NIU is a duplicated unit with a DS-30 interface to the network (DS-512 is planned for ENET). On the LPP side, the NIU interfaces the Channel Bus, which is built into the backplane of the Link Interface Shelf. The first application for NIU is the DMS Packet Handler on the LPP platform
	44	TEL00001	TEL Telecom Layer Func	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and	5						CMS Base for SuperNode Data Manager	This software provides the following basic software components needed to activate the DMS SuperNode Data Manager: EXND Level of the Maintenance and Administration Position. Communications with the SDM via Ethernet Interface Unit (EIU). Log acquisition for the SDM.

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Ap	p Order Cod	Order Code Name	Order Code Description	RIs	RIs	MD RIs		PCID	ACTID	Feature Name	Feature Description
44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and	5					AJ0193	Data Integrity Mtnce Fault Sectional. Automation	Currently the output from a BERP test run is given on a per sortkey basis. The sortkeys are specified by the user on a node type basis. The sortkeys for each node type correspond to typical components found on that node type. For example, the sortkeys on a network node include such components as the cross points, the junctors, and the links. Similarly, typical sortkeys or components on an XPM include such items as the C-side links or the P-side links. With this feature, information on a per card basis is provided for each of the sortkeys specified. In addition, a record is kept of the worst N (where N is a user specified parameter) cards. This list is then output in a summary fashion at the end of the BERP output. The worst cards are
44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and	5						Digital Audio Tape	This software allows billing and intelligent-networking data to be written to a digital audio tape, providing a reliable, cost-effective storage capacity of up to 1.3 Gigabytes.
44	TEL00001	Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						Disk Shadowing	This software enhances data security and backup capabilities by allowing data to be written to multiple disks in a group. The largest individual disk provides 600 Megabytes of storage. Plans are in place to take advantage of the evolution in storage-disk technology to meet network provider requirements for increased storage capacity beyond 600 Megabytes.
44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and	5					AG1047	DS-0A Diagnostics	This feature provides software support for the DS-0A circuit pack (NT6X55AB). The feature introduces both in-service and out-of-service diagnostics for the pack. Faults occurring in the DS-0A are detected and reported to the DMS maintenance system, so that corrective measures can be initiated. The DS-0A pack is mounted in the Digital Trunk Controller (DTC) and provides a 64-kbps interface to the CCS7 network (only 56 kbps is used), eliminating the need for a channel bank for DS-0 access to the Digital Data Services (DDS) Network. This circuit pack recognizes DS- 0A loopback codes, thus enabling a remote site to set up a test path between the SSP and other CCS7 network elements. The DS-0A pack has one circuit per card and
	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AD3496	EIU Data Link Maintenance	This software provides the maintenance and control software resident in the Ethernet Interface Unit (EIU). The EIU provides communication support for LPP applications such as Automatic Directory Assistance Service, DMS SuperNode-based service control point (SCP), and DMS Mail whose terminals or workstations are served by an Ethernet LAN. See the "DMS SuperNode OAM&P" chapter for discussion of its support for the DMS SuperNode Data Manager.
44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL2107	Enable A-Law	This feature allows the option for ENET's digital pads to be set to support the International A-Law companding standard.

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		TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						ENET ICTS Application (ICERT, NETFAB)	This feature enhances ENET maintenance by providing Integrity Check Traffic Simulator (ICTS) certification and Network Fabric Test (NetFab) capabilities for the ENET system.
44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL2038	ENET Support for NT9X45BA	These two features support the new NT9X45BA interface paddleboard, enhancing the flexibility of ENET provisioning by allowing ENET to support up to 16 DS-30 and 3 DS- 512 terminations on a single paddleboard simultaneously.
44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations administration and maintenance	5						Enhanced Network Switching Matrix Subsystem	This package is the base package required for all ENET operations.
44	TEL00001	TEL Telecom Layer Function	operations administration and maintenance This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1747	Enhanced XPM Activity Tool	This feature extends the XPM ACTIVITY tool to provide similar peripheral performance information for Line Concentrating Modules (LCMs), Remote LCMs (RLCMs), Outside Plant Modules (OPMs), extended LCMs (XLCMs), and extended RLCMs (XRLCMs) that it now provides for Line Group Controllers (LGCs), Digital Trunk Controllers (DTCs), Line Trunk Controllers (LTCs), Remote Cluster Controllers (RCCs), and Subscriber Carrier Modules (SCMs).
44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1252	Expanded Trunk Guard Timing	Trunk guard timing prevents two-way or outgoing trunk members from being prematurely seized after disconnect. This feature provides improved guard timing for trunks that use the Sequential trunk selection method and the Circular trunk selection method.
44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						File Processor	This software builds on the Application Processor Base (see previous page) to provide the maintenance and user interface for the File Processor's system of storage devices. It integrates the mass storage complex into the File Processor's fault-tolerant operating platform. In.

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	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF2412	High Speed MPC Read Only Memory and Diagnostics	This feature implements the necessary Read Only Memory (ROM) and diagnostics codes to support the new, high speed, Enhanced Multi-Protocol Controller (EMPC) card, NT1X89BA. Enhancements include upward/backward diagnostics as well as support for the high speed (56 kbps) link. This feature is required for use with the Enhanced Multi-Protocol Controller (NT1X89BA).
	44	TEL00001	TEL Telecom Layer Func	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the *DMS SuperNode Platform*. The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and	5					AG1926	Inclusion of CCS7 into SPMS	This feature adds new indices to the Switch Performance Monitoring System (SPMS) that report on the performance of Common Channel Signaling No. 7 (CCS7) components. These components include the Message Transfer Part (MTP), the Signaling Connection Control Part (SCCP), the trunk user part, and CCS7-specific hardware.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AR0359	INM Load PM Enhancements	This feature provides improved fault diagnostics and isolation on links for the Application Processor, File Processor, and Network Interface Units—to reduce the time required to complete commissioning, troubleshooting, and other maintenance tasks.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1516	Link Enhancements for MPC Multilink Mngmnt	This feature supports applications such as Voice Service Node and Automatic Alternate Billing Services in the Multi-Protocol Controller (MPC) multi-link managemeni environment. Logical Link Sets have been added to allow for proper message routing to multiple voice service nodes, thus providing higher reliability for application users. Additional error controls are also available for link faults. T
		TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and	5					AI0408	Local Maintenance and Diagnostics of Network Interface	Together, these features provide maintenance and control for the Network Interface Unit (NIU)—a Link Peripheral Processor circuit pack set that enables direct access from the DMS SuperNode network (either ENET or Dual Shelf Network) to the LPP. This "channelized" access to the LPP/LIS provides the functionality for the DMS Packet Handler on the LPP platform, with the following key benefits: • Reduces costs by eliminating the need for external channel banks or multiplexers for applications that require DS-0 connections • Can enhance application reliability by supporting Interface Unit (IU) pooling The NIU is a duplicated unit with a DS-30 interface to the network (DS-512 is planned
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AQ1030	LPP (LMS) Autoloading	This software provides automatic Local Message Switch recovery from fault conditions and power loss or conditions that could potentially cause software load corruption.

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	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF3022	MAP Access via MPC	This feature provides remote terminal MAP access through an MPC/EMPC X.25 link, enabling regular (scroll-mode) capabilities to be used when a user is logged onto a MAP. This package allows remote maintenance access to be centralized to multiple users over a single switched virtual circuit (SVC) link. The MPC provides access transmission speeds of up to 19.2 kbps or EMPC at 56/64 kbps, compared to the MAP access of 1200 bps. The package also provides enhanced reliability on the link for transmission between the switch and the packet assembler/disassembler (PAD) by employing the cyclic redundancy check (CRC) character built into X.25.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1767	MPC 1980 CCITT X.25 CC Protocol Support	This feature implements enhancements to the existing Multi-Protocol Controller (MPC) Central Control (CC) software base in support of the International Telegraph and Telephone Consultative Committee's (CCITT's) 1980 X.25 recommendation. The expansion of the MPC application user interface and the enhancement of the MPC protocol support software within the DMS CC, together with the software downloaded to the MPC board, afford full product compliance with CCITT's 1980 X.25 recommendation. Compliance is accomplished by implementing the corresponding international standards ISO 7776 and 8208, along with the necessary support. Both Permanent Virtual Circuit (PVC) and Switched Virtual Calls (SVC) communications, point-to-point or through a Public Packet Switching Network (PPSN), can be used.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1768	MPC 1980 CCITT X.25 Peripheral Processor Architecture	MPC 1980 CCITT X.25 Architecture restructures the MPC Peripheral Processor (PP) software environment to meet the MPC optionality and packaging requirements. These requirements include support for potential compliance with non-X.25 protocols, as well as with the International Telegraph and Telephone Consultative Committee (CCITT) Recommendations (1980 and 1984) and International Organization for Standardization (IOS) standards for X.25.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1769	MPC 1980 CCITT X.25 Peripheral Processor L2 and L3	This feature supports low level data communication functions for both of the MPC links by implementing Level 2 and Level 3 of the X.25 protocol as dictated by the International Organization of Standardization (IOS) 7776 and 8208. For Level 3, the user facilities and the various default values for the packet layer parameters are in accordance with the 1980 ISO standards. For Level 2, this feature implements the Single Link Procedures (SLP) only.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1770	MPC 1980 CCITT X.25 PP L1	This feature enhances the hardware data-link capabilities of the MPC by providing for a larger frame size and for allowing the invocation of new protocol events based on synchronous line characteristics. Additionally, this feature creates an extendible base for integration of new asynchronous line capabilities that require integral system support. This feature is part of the new MPC software architecture that provides a multistream approach for protocol applications and flexibility for different hardware environments.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF2777	MPC 1984 X.25 CC	These features implement enhancements to the existing Multi-Protocol Controller (MPC) Central Control (CC) and peripheral processor (PP) software base in support of the International Organization for Standards (ISO) specifications for the 1984 X.25 protocol. The majority of the new functionality provided by these features is at the software interface level for application software that is required to use the 1984 X.25 protocol. All the mandatory requirements for compatibility with 1984 X.25 are implemented. The following optional 1984 capabilities are NOT included: on-line facility registration is not supported, and packet-level retransmission is not supported.

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	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AC0361	MTP—Timer/Congestion Table Improvements	This feature provides telephone operating companies with added flexibility in establishing the parameters for the operation of their CCS7 network. Previously, several of the timing values defined in sections Q703 and Q704 of the Bellcore specification for Common Channel Signaling No. 7 (TR-TSY-000 246) were not datafillable by the operating company. The improvements provided by this feature allow the timing values defined in section Q704 to be datafillable on an office basis and the values defined by Q703 to be datafilled on a per-link basis.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1214	NETPATH Automation	This feature provides for automatic isolation of an internal DMS network problem to a single faulty pack to permit easy replacement and return to service in the event of a faulty network. Fault isolation is accomplished by using the testing capabilities provided in the NETPATH test tool and adding the decision making capability in the DMS switching system to determine which pack is the most likely to be faulty. In the case of link circuit packs, two packs may be identified, since isolation to the specific side of the link may not be possible. This feature represents a considerable improvement over the manual isolation and faulty card list methods that are deployed today.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF3658	NTMX77 Firmware Download	This feature enables firmware to be downloaded into the Electrically Erasable Programmable Read Only Memory (EEPROM) Unified Processor (UP) circuit pack (NTMX77AA). The feature reduces or eliminates circuit-pack change-outs when firmware changes are made. HARDWARE: This feature requires NTMX77AA Unified Processor.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1153	OM Group Def./Collection for MPCFAST Subsys.	This feature, Operational Measurement (OM) Group Definition and Collection for MPCFAST Subsystem, provides OMs detailing traffic and exception conditions for Multi-Protocol Controller (MPC) FAST subsystem usage. MPCFAST provides streamlined access to the MPC for applications such as Auxiliary Operator Services System Voice Response (AOSSVR), where data messaging is necessary but cannot interfere with the other continuous processing requirements. The new OMs provide additional data that the MPC Multilink Management package can use to optimize traffic provisioning, service monitoring, and other data facility functions. Included for evaluation is the following information: • logical link availability, • logical link data transferred, • FAST application message output, and • FAST application output operation failed.

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			TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						Path Verification Automation	This feature provides the ability to perform scheduled, automatic NETPATH (Network Path) tests, thus eliminating the efforts required for manual testing. A summary report is generated at the end of the test. The NETPATH test tool assists in speech path maintenance by allowing the identification of faulty components that can cause integrity failures. With this feature, test data, passing from ICTS (Integrity Check Traffic Simulator), NetFab (Network Fabric Test), NETINTEG (Network Integrity Analysis), and BERP (Bit Error Rate Performance), are extracted from the path buffers and submitted to the NETPATH test automatically.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AF1456	Recording Data Timer Dump	This feature allows the DMS switching system to dump SMDR data at customer- specified time intervals, rather than just on the basis of a full buffer or a scheduled transfer. This ability permits timely accounting of facilities use for those customers who employ SMDR data to the customer location because they require rapid accounting of usage. For example, in the hotel/motel market, this rapid delivery would prevent a guest from making a last minute call and checking out before the SMDR buffers were full and dumped in the normal manner. Customers selecting SMDR data to the customer location using the Business Network Management (BNM) system can be provided with customer-specified data dumps. For other, non-BNM customers served by the same DMS switching system but receiving their SMDR information through tapes and/or Revenue Accounting Office (RAO) service, this feature does not apply.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL1271	Routine Exercise for the DMS Link Peripheral Processor	
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AG1494	SPMS Auto Report Generation and Outage Index	This feature provides the capability to have the Switch Performance Monitoring System (SPMS) report generated automatically through the Operational Measurement (OM) and Logutil system. This SPMS report is generated as an OM Reporting System (OMRS) log. In addition, changes have been made to the SPMS outlage indices to separate the system busy and manual busy components of each index.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					AL1719	SPMS for ENET	This feature enhances the Switch Performance Monitoring System to include ENET indices that report on the performance of ENET components.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5						TCP/IP Protocols	This package provides Transmission Control Protocol/Internet Protocol (TCP/IP) support software for a wide range of industry-standard and third-party vendor equipment and is compatible with the Department of Defense Arpanet (DARPA) standard.

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	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5				AF3712	Unified Processor Overload Controls	This feature adds a CPU usage trigger in the Unified Processor to handle flow control during high-traffic conditions. Flow control in earlier dual-processor equipment was handled by a "bottleneck processor," which does not exist in the Unified Processor. The UP usage trigger performs in a similar manner to the bottleneck processor by activating flow control when the CPU reaches 100 percent occupancy.
	44	TEL00001	TEL Telecom Layer Function	This functional group along with BASE0001 and TEL00001 provide the infrastructure for the "DMS SuperNode Platform". The capabilities provided by these three functional groups include base operating software, basic telephony functions, support of standard interfaces, connectivity with switch components, advanced operations, administration, and maintenance capabilities, local and centralized billing, and computing module support for other services.	5					XPM PLUS Basic	This package includes the software features required to integrate the XPM PLUS into its respective peripheral modules. The feature "XPM PLUS Integration in LGC/LTC" (AL2540) is required for ISDN peripherals and for the rollout of National ISDN-2 and 3 on the DMS. XPM PLUS provides almost twice the memory and a real-time processing improvement of about 50%: two essential conditions for the continued rollout of ISDN features and enhancements.
	44	TEL00002	TEL C7 Chan-lized Access	This feature provides support for DS-1 and PCM- 30 interfaces for CCS7 network access through the Link Peripheral Processor, as an alternative to the standard CCS7 Link Interface (LIU7) DS- 0A and V.35 interfaces.	5				Al0407	LIU7 Support for Channel Access Interface	Today, dedicated links to each LIU7 offer access to the LPP. The features in this package provide LPP access over the network, reducing costs by eliminating the need for external channel banks for DS-0 connections. A new hardware module provides the LPP interface to the network: the Network Interface Unit (NIU), residing in the Link Interface Shelf of the LPP cabinet. Access to the LPP through the NIU introduces increased flexibility in the usage of LIU7s while providing the following benefits:
	44	TEL00003	TEL Gateway Screening	This feature enables the DMS SSP or DMS STP to restrict access to network services to only authorized users, thereby providing added security within CCS7 networks. These security enhancements for CCS7 facilities include screening incoming CCS7 messages as they enter a DMS CCS7 node to ensure authorized access, enables customization of the screening criteria to meet the requirements of a network provider, and uses the standard Link Interface Unit (LIU) already provisioned in a DMS CCS7 node.	5				AL1500	CCS7 STP Gateway TRAVER	This package streamlines the implementation of Gateway Screening by providing an integrated means for verifying screening/translation rules before they are activated in a live network. The features confirm both the validity of all individual screening parameters and the progression/combination of individual tests to anticipate the consequences of a planned modification or deletion.

Change In Issue 2		0.40.1	Orden Orde Name		1st NCS	Enh	MD D	Repl Ord	DOID	ACTIC	N	Fortune Description
			Order Code Name TEL C7 Routset Increment	Order Code Description This feature supports an expansion of CCS7	RIs 5	RIs	MD RIs	Code	PCID		Feature Name STP Gateway	Feature Description The delivery of advanced network services often requires the interfacing of multiple
				routesets from 255 to 2047 in a DMS SSP office.								CCS7 networks and the use of resources owned by several operating companies and/or their customers. The DMS-STP Gateway Screening feature allows the operating company to control access to its CCS7 network and to offer revenue- generating Intelligent Network services without putting proprietary information at risk. Key initial applications include operating company verification of out-of-region credit cards and implementation of Custom Local Area Signaling Services (CLASS) in metropolitan areas served by more than one operating company. When placed on a DMS-STP at the entrance to a CCS7 network, DMS-STP Gateway Screening can use MTP and SCCP information to protect against unauthorized access to any particular database in the network and to prevent the use of unleased facilities and services. Traffic from unstable CCS7 networks can also be quickly blocked, as signs of messaging different set of screening instructions can be specified for each sig ateway function, a different set of screening instructions can be specified for each signature.
		TEL00007	TEL C7 Link Flt. Locator	This feature provides Link Fault Sectionalization to help to rapidly identify faulty segments of a DS- 0 CCS7 transmission path and is intended for use after trouble notification has been detected by CCS7 Bit Error Rate Tests.	5						CCS7 Link Fault Sectionalization	Link fault sectionalization is a maintenance procedure that allows the craftsperson to identify faulty segments of a CCS7 signaling link transmission path rapidly. CCS7 Link Fault Sectionalization helps technicians at a Maintenance and Administration Position (MAP) perform latching and nonlatching loopback tests on any network element supporting these loopback types. The tested network element must be part of a transmission path that terminates on an LIU7 at a DMS node with this feature. Different network elements that may be tested include directly connected and tandem- connected channel banks, digital cross-connects, Data Service Units (DSUs), and far end DS-0A-based signaling terminations. The sectionalization procedure places loopbacks at various points along the suspected CCS7 link and, by injecting known test patterns and detecting unexpected or missing data (such as the rate of bit errors), determines the position of the faulty section the signaling link. This test procedure helps to reduce link downtime—and because faults at remote nodes can be isolated without dispatching a maintenance technician to the site, network provider n
	44	TEL00008	TEL CCS7 Base	This feature is required to support CCS7 traffic within the network and is developed in compliance to pertinent Bellcore TRs and enables providers to maximize the control, reliability, and capacity for the networks. This feature is the prerequisite for all other CCS7-based software for both connection and connectionless services.	5					AR0295	64 Kbit CCS7 Link Interface	CCS7 links running at 64 kbps require interfaces that can accommodate this rate. The 64 Kbit CCS7 Link Interface feature provides a 64-kbps access rate for LIU7s in an LPP. This allows the network provider to selectively run individual LIU7s at either 56-kbps or 64-kbps access rates.
	44	TEL00008	TEL CCS7 Base	This feature is required to support CCS7 traffic within the network and is developed in compliance to pertinent Bellcore TRs and enables providers to maximize the control, reliability, and capacity for the networks. This feature is the perequisite for all other CCS7-based software for both connection and connectionless services.	5					AQ1199	LIU7 Occupancy OMs (CCS7 Base)	This base feature introduces an operational measurement (OM) group for the LIU7 that allows craftspersons to access CPU OMs of the LIU7. OM monitoring is through the OM group NCMCPUST (Non-Compute Module Central Processor Unit Status) and implements seven registers for measuring accumulated call processing, scheduler, foreground, maintenance, background, idle scheduler class, and input/output interrupts. This feature is available for 8-megabyte LIU7s only.
	44	TEL00008	TEL CCS7 Base	This feature is required to support CCS7 traffic within the network and is developed in compliance to pertinent Bellcore TRs and enables providers to maximize the control, reliability, and capacity for the networks. This feature is the perequisite for all other CCS7-based software for both connection and connectionless services.	5						MTP/SCCP on LPP Based Platforms	This package provides a base CCS7 protocol capability for handling the Message Transfer Part (MTP) and Signaling Connection Control Part (SCCP) by the LPP and LIS platforms.
	44	TEL00008	TEL CCS7 Base	This feature is required to support CCS7 traffic within the network and is developed in compliance to pertinent Bellcore TRs and enables providers to maximize the control, reliability, and capacity for the networks. This feature is the prerequisite for all other CCS7-based software for both connection and connectionless services.	5					AC0442	MTP—BERT Capability for Service Switching Point	With this feature equipped in a DMS Service Switching Point (SSP), a craftsperson at the Maintenance and Administration Position (MAP) can execute, monitor, and analyze the bit error rate (BERT) of a CCS7 signaling link on the Link Peripheral Processor (LPP). Through loopback control, the craftsperson can test not only internal operation but also the CCS7 facilities external to the switch. This integrated BERT capability therefore eliminates the need for separate test equipment and procedures. Furthermore, this feature identifies hardware faults that might affect link performance before and after the link goes into service. The quality of CCS7 data transmission is ensured by the identification of bit errors before they affect link selection, routing addresses, and service and feature information types. To aid in detection of faults and in the identification of fault types, up to eight statistical reports are offered. Statistics can be queried manually at the MAP or automatically printed by the log system. An LIU7 card (NT9X78BA) is required for feature operation.

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	App	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
			TEL CCS7 Base	This feature is required to support CCS7 traffic within the network and is developed in compliance to pertinent Bellcore TRs and enables providers to maximize the control, reliability, and capacity for the networks. This feature is the prerequisite for all other CCS7-based software for both connection and connectionless services.	5						No Restart SWACT Support	This feature supports the no-restart SWACT procedure for CCS7. The no-restart SWACT procedure is the process of switching core activity without requiring the newly active core to perform a restart. This will allow for less downtime of the switch for software upgrades, feature additions, and certain office parameter changes and patch insertions.
	44	TEL00009	TEL C7 Network Integrity Items	This feature provides CCS7 Network Reliability Council (NRC) Items software to improve network performance by providing better error detection as well as reducing the impact of problems, particularly during failures and traffic congestion. CCS7 Base NRC Items contribute to the infrastructure required for future revenue- generating services such as those available through AIN.	5						Increased Traffic Capacity & More Balanced Load Sharing (SLS Field Code Expansion to 8- Bits; Item 1.10)	CCS7 Base NRC Items improve network performance by enhancing error detection as well as reducing the impact of problems, particularly during failures and traffic congestion. This enhancement reduces stress on the signaling network and contributes to the reliability and robustness of the CCS7 network as a whole. Additionally, CCS7 Base NRC Items contribute to the infrastructure required for future revenue-generating services such as those available through the Advanced Intelligent Network (AIN), including personal communications services (PCS).
	44	TEL00009	TEL C7 Network Integrity Items	This feature provides CCS7 Network Reliability Council (NRC) Items software to improve network performance by providing better error detection as well as reducing the impact of problems, particularly during failures and traffic congestion. CCS7 Base NRC Items contribute to the infrastructure required for future revenue- generating services such as those available through AIN.	5						Prevention of SCCP Circular Routes (Item 1.7)	CCS7 Base NRC Items improve network performance by enhancing error detection as well as reducing the impact of problems, particularly during failures and traffic congestion. This enhancement reduces stress on the signaling network and contributes to the reliability and robustness of the CCS7 network as a whole. Additionally, CCS7 Base NRC Items contribute to the infrastructure required for future revenue-generating services such as those available through the Advanced Intelligent Network (AIN), including personal communications services (PCS).
	44	TEL00009	TEL C7 Network Integrity Items	This feature provides CCS7 Network Reliability Council (NRC) Items software to improve network performance by providing better error detection as well as reducing the impact of problems, particularly during failures and traffic congestion. CCS7 Base NRC Items contribute to the infrastructure required for future revenue- generating services such as those available through AIN.	5						Procedures for Restarting MTP (Item 1.13)	CCS7 Base NRC Items improve network performance by enhancing error detection as well as reducing the impact of problems, particularly during failures and traffic congestion. Item 1.13 is also available as a software bridge, CCX99. This enhancement reduces stress on the signaling network and contributes to the reliability and robustness of the CCS7 network as a whole. Additionally, CCS7 Base NRC Items contribute to the infrastructure required for future revenue-generating services such as those available through the Advanced Intelligent Network (AIN), including personal communications services (PCS).
Added	44	TEL00009	TEL C7 Network Integrity Items	This feature provides CCS7 Network Reliability Council (NRC) Items software to improve network performance by providing better error detection as well as reducing the impact of problems, particularly during failures and traffic congestion. CCS7 Base NRC Items contribute to the infrastructure required for future revenue- generating services such as those available through AIN.	5	10			2786	AU3082	Network Integrity Items	Before the DMS system sends Extended Unitdata/Extended Unitdata Service (XUDT/XUDTS) messages into the SS7 network, this software verifies that the remote point code is available to process this data. If the remote point code does not support XUDT/XUDTS, these messages are discarded. This NCS10 feature helps optimize SS7 network efficiency by helping to prevent extraneous XUDT/XUDTS messages from entering the signaling network. By checking remote processing, this feature reduces the likelihood of having to resend messages, thus reducing the amount of "wasted" bandwidth.
	22	UBFR0001	UBFR0 Flexible CDR	This feature provides carriers with the ability to define customized CDR formats.	6					AD8906, AD8907	Flexible CDR	This optional feature allows carriers to define customized Call Detail Recording (CDR) billing formats. Prior to this feature, the DMS-500 system provided a single CDR format. This format included all of the possible CDR fields and was generated for all calls irrespective of whether all of the fields were applicable to a given call. With the Flexible CDR feature network providers can customize the CDR record to include only those fields which they require for their downstream billing processes. Moreover, this feature also supports variable length CDR records allowing network providers to create customized CDR formats of varying lengths for specific types of calls.
Added	22	UBFR0003	UBFR0 Fraud Enhancements	This feature provides the capability for a DMS- 500 switch with nodal functionality to limit the number of active calls allowed per authcode up to 255. This feature provides an option in the authcode validation tables and in the FLEXFEAT tables specifying the number of calls limited to use an authcode at a given time up to 255.	10	1			13986	AX1017	Limited Calls per AuthCode	This feature provides the capability for a DMS-500 switch with nodal functionality to limit the number of active calls allowed per authcode up to 255. This feature provides an option in the authcode validation tables and in the FLEXFEAT tables specifying the number of calls limited to use an authcode at a given time up to 255. This feature enables an IXC to prevent fraud by controlling the number of callers using one particular authcode and enables IXCs to provide an option to their customers to choose the number of callers allowed to use a specific authcode.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID		Feature Name	Feature Description
Added	22	UBFR0003	UBFR0 Fraud Enhancements	This feature provides the capability for a DMS- 500 switch with nodal functionality to limit the number of active calls allowed per authcode up to 255. This feature provides an option in the authcode validation tables and in the FLEXFEAT tables specifying the number of calls limited to use an authcode at a given time up to 255.	10				13986	AX0980		This feature enhances existing Network Security (NETSEC) functionality by: • Expanding support on originations to PTS IMT, UCS Inter-IMT, Q.767 Global IMT, and ISUP92 Global IMT • Expanding NETSEC functionality to terminations on DAL, EANT, PRI, UCS Inter- IMT, PTS IMT, Q.767 Global IMT, and ISUP92 Global IMT • Allowing NETSEC to be provisioned on a trunk group based on origination, termination, or both • Generating NETS logs at the time a suspect call is released • Enhancing fraud screening criteria via new table (NETSPROF) to include time of day, day of week, nature of address, information digits, and country code • Expanding table World Zone One (WZONE) to allow provisioning of 6-digit (NPA- NXX) and 10-digit (NPA-NXX-XXXX) numbers; previous restriction was 3-digit (NPA) numbers • Expanding the existing Command Interpreter (CI) command to support new agencies, modifying the reporting facility to show all NETSEC calls in progress This feature allows customers to tighten their focus on the problem of fraud. This can result in direct savings through the reduction of fraud.
Added- Note this feature now has a different OrderCode than FPG.		UBFR0004	UBFR MCCS Fraud Enhancements	This feature allows the DMS-500 to perform ANI screening for Universal Access (UA) Mechanized Calling Card Services (MCCS) on Feature Group D (FGD) trunks. This feature also provides the option to route a call to an operator or apply treatment when an ANI failure occurs or when no ANI is received.	10				14959	AX0987	Calls	This feature allows the DMS-500 to perform ANI screening for Universal Access (UA) Mechanized Calling Card Services (MCCS) on Feature Group D (FGD) trunks. This feature also provides the option to route a call to an operator or apply treatment when an ANI failure occurs or when no ANI is received. This feature allows customers to offer additional services on Universal Access numbers.
Added	22	UBFR0005	UBFR Auto CDR Throttling	This feature provides a method for billing data collection and formatting on Intra-IMT originated calls to be temporarily and automatically suppressed (throttled). Throttling control is based on site-configurable thresholds of recording unit (RU) usage and call processing load.	10				14963	AX1321	Ŭ	This feature provides a method for billing data collection and formatting on Intra-IMT originated calls to be temporarily and automatically suppressed (throttled). Throttling control is based on site-configurable thresholds of recording unit (RU) usage and call processing load. It allows greater real time to be devoted to call processing during periods of high traffic conditions.
			UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5							This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.
Added	22	UCSB0001	UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX0959	Ŭ.	This feature increases the number of valid login user IDs from 360 to 1024. It also allows each user to have his own user ID, password, and other properties. Allows 664 more defined users per switch. Each of the 1024 users will have his/her own user ID, password and privileges. This enables tracking activities of individuals using the switch, as opposed to attempting to track individuals using a group ID and password.

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	Ap	p Order Cod	Order Code Name	Order Code Description	Ris		MD RIs		PCID	ACTID	Feature Name	Feature Description
Added			UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708		Multiple ANI Database Phase II	In NCS07, the Multiple ANI Database Phase 1 feature redesigned the Automatic Number Identification (ANI) database to improve memory usage and provide the framework for future support of multiple profiles per ANI. The new ANI database consists of two new tables: table ANIVAL (where ANIs are stored) and table UNIPROF (which contains a list of profiles). In NCS10, Phase II supplements NCS07 development by providing two new tools. A conversion tool, ANIMOVE, is created to aid in the transition from the ANISCUSP database to the new ANIVAL/UNIPROF database. Once the new ANI database. This feature also increases the number of tuples in table UNIPROF from 4K to 64K. Provides assistance in maintaining ANI database and minimizes customer operational and administrative activities. This feature provides in-switch method to convert to a new ANI database. Table UNIPROF is expanded to accommodate customers with a large number of acount codes and PINs.
Added	22	2 UCSB0001	UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX0204	NETSEC Activation Enhancements	The existing Network Security (NETSEC) feature provides a log at answer time for calls that terminate outside World Zone 1 (WZ1) or to selected NPAs within WZ1. This NCS10 feature creates a Command Interpreter (CI) command that allows the craftsperson to enable/disable the NETSEC functionality in table TRKGRP without entering the table. This new CI command also provides reporting capabilities that show NETSEC status based on CLLI, trunk group type, or office (e.g., LIST DAL creates a list of all DAL agencies with NETSEC active).
Added	00		UCSB UCS Base	This feature contains the basic software to	5	10			1709	A.X0205	Truck Cours NOA Februariate	This feature provides greater flexibility for NETSEC utilization to the craftsperson by: • faster activation/deactivation • reporting capabilities that allow fast determination of NETSEC status without table entry The original NETSEC functionality is enhanced without additional costs to the customer through development of the base software product.
Added	22	2 UCSB0001	UCSB UCS Base	Inis feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX0205	Trunk Group NOA Enhancements	This feature provides the ability to manipulate the Nature of Address (NOA) indicator for a terminating SS7 IMT Trunk for third party interaction. It also allows the network to utilize the network specific codes ($\#78 \cdot \#72$) of the NOA. Called Number NOA is changed in the outgoing IAM when the OUTNOA option is provisioned in table TRKGRP for IMT trunks. Called Number NOA remains the same in the outgoing IAM if the OUTNOA option is not provisioned in table TRKGRP.
												The utilization of the special NOA codes can provide vendor-to-vendor interworking of peripheral products.
Added	22	2 UCSB0001	UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX0202, AX0986	UCS CDR Management	This feature consolidates the Call Detail Record (CDR) changes required for the NCS10 development stream. This feature interacts with other NCS10 features, and provides the actual changes to the CDR. This feature also provides support for three new fields (PROJCODE, SLPID, and RTEINDEX) and support for modifications to existing field RTETAB. It removes the existing TERMLRN field from the FLEXCDR. It removes existing predefined FLEXCDR templates and creates a new predefined NCS10 CDR template. This feature provides additional call record details enabling IXCs to take advantage of
												new NCS10 revenue generating features.

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	App	Order Code	Order Code Name	Order Code Description	Ris		MD RIs		PCID	ACTID	Feature Name	Feature Description
Added			UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708		CLID Processing Enhancements	This feature provides enhancements to Calling Line Identification (CLID) processing and delivery in accordance with FCC regulations. It provides additional outpulsing options for PRI and DAL-TIE terminations to determine precedence when both a calling party number and a charge number are available. It enables the switch to screen the Presentation Indicator (PI) bit of incoming calling party number parameters to determine whether the calling party number should be outpulsed on PRI and DAL-TIE terminations. This feature also allows the DMS-500 to exempt called party billed calls from presentation screening. The calling party number will be outpulsed regardless of the setting of the PI bit for calls determined to be exempt. This feature allows the switch to send an ISUP Charge Number optional parameter containing a default CLID rather than a sending a CPN optional parameter (CPN) is not received.
Added	22	UCSB0001	UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX1122	CTRTE Selector Enhancements	Prior to NCS10, the long distance side of the DMS-500 switch routed international traffic, using universal translation, through both CTRTE and OFRX tables, in order to provide time-of-day (TOD) routing for international partitioned calls. This new feature provides support for provisioning the conditional (CND) selector in table CTRTE, which simplifies time-of-day routing translations for this call type. This feature provides simplified time-of-day routing translations for international partitioned calls.
Added	22	UCSB0001	UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX0954	DMS-250 NT6X50EC Datafill Maintenance	Prior to NCS10, tables TRKMEM, TRKSGRP (or TRKSIG), LTCPSINV, and CARRMTC were not checked for consistent echo canceller datafili before data provisioning. This feature provides the ability to block data provisioning in these tables when there is a discrepancy in datafili for the echo canceller cad NT6X50EC found in tables TRKSGRP (or TRKSIG), LTCPSINV, and CARRMTC. This feature ensures echo canceller datafill consistency which eliminates the requirement to examine in-switch echo canceller datafill for inconsistencies and aids in troubleshooting echo canceller provisioning in the switch.
Added	22	UCSB0001	UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX0960	Increased Switch ID	This feature increases the range of the switch identification numbers (SwitchID) on the switch from 0-127 to 0-999. Enhancements are made to increase SwitchID range and associated call processing for ISUP messages and to the CAIN routing tables and message parameters. Enhancements also include a new Charge and Rating Information Message (CRIM) format. This feature allows carriers to support up to 999 different switch identifications throughout their networks.
Added	22	UCSB0001	UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX0988	LNP RX Selector Robustness	Current LNP functionality does not support LNP after the RX route selector has been accessed. The RX route selector allows manipulation of the called party number. The new called party number may be a ported number and require support for LNP. This feature provides the ability to evaluate the Office Code trigger (LNP query) when the RX selector is used during call translations. This feature provides a direct cost savings to those customers who utilize the RX selector and rely on terminating LECs to perform the LNP query.
Added	22	UCSB0001	UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX0963	Reorigination Re-Architecture	This feature provides re-architecture of reorigination software on the long distance side of the DMS-500 switch to introduce a new level of fraud prevention in the treatment processing. Reorigination functionality and operation are not changed

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Added			Order Code Name UCSB UCS Base	Order Code Description This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	RIs 5	Ris 10	MD RIS	Code	PCID 1708	ACTID AX0958	Feature Name UCS GNCT Log Enhancements	Feature Description Every call that enters the long distance side of the DMS-500 has the potential of originating from a different Numbering Plan Area (NPA), from a private network, or over a common trunk group, which means the point of origin cannot be successfully or consistently determined from the trunk group data. This feature modifies the GNCT (General No Circuit Treatment) log to include the Serving Translation Scheme (STS) which provides information to derive the routing plan of the call receiving GNCT treatment. This feature provides a method to identify the location of failures in a network due to high traffic/congestion or hardware failures.
Added	22	UCSB0001	UCSB UCS Base	This feature contains the basic software to provide long distance services. Most of the items included in this service represent the basic implementations of fundamental long-distance carrier requirements, such as call processing treatments, screening, and more.	5	10			1708	AX0988	Variable Account Code Prompt Tones	This feature adds a new sub-field ACTONE to the ACPROMPT option in table TRKGRP and the ACPROMPT field in table TRKGRP1, according to the trunk type. The new field allows the account code prompt tone to be provisioned as either STANDARD (350/440 Hz) or CARRIER (400 Hz). It also allows the tone duration to be provisioned as either LONG (a continuous tone) or SHORT (a one second burst of tone). If the ACTONE field is enabled, it overrides the PIN/ADDR prompt for account code collection. Existing address and PIN collection capability remains unchanged. This feature enables IXCs to provide customized prompt tones on a trunk group basis, thus increasing parity or competitive edge.
	30	UDD00001	UDD Services	This feature provides basic end office international calling capability including country code screening, international routing translations, and multifrequency (MF) two-stage outpulsing to a toll office or gateway for direct dial (prefix 011) and operator assisted (prefix 01) calls. Also, this software's flexible ANI service transmits, in an Equal Access environment, the ANI information digit code as part of the ANI spill to an InterLATA carrier or Operator Service System.	5						United States Direct Distance Dialing Services	This feature provides basic end office international calling capability including country code screening, international routing translations, and multifrequency (MF) two-stage outpulsing to a toll office or gateway for direct dial (prefix 011) and operator assisted (prefix 01) calls. Also, this software's flexible ANI service transmits, in an Equal Access environment, the ANI information digit code as part of the ANI spill to an InterLATA carrier or Operator Service System.
	22	UDWS0001	UCS Dialable Wideband	This feature provides implementation of Dialable Wideband Services (DWS) which will allow carriers to offer bandwidth-on-demand services for bandwidth-intensive applications, such as videoconferencing, image transfer, and data transmission.	5						DWS FG-D ISUP	This feature provides bandwidth on demand services over SS7 FG-D trunk circuits.
	22	UDWS0001	UCS Dialable Wideband	This feature provides implementation of Dialable Wideband Services (DWS) which will allow carriers to offer bandwidth-on-demand services for bandwidth-intensive applications, such as videoconferencing, image transfer, and data transmission.	5						DWS IMT ISUP	This feature provides bandwidth on demand services via CCS7 ISDN User Part (ISUP) inter-machine trunk (IMT) circuits. This permits DWS traffic to traverse the service provider's DMS-500 network.
	22	UDWS0001	UCS Dialable Wideband	This feature provides implementation of Dialable Wideband Services (DWS) which will allow carriers to offer bandwidth-on-demand services for bandwidth-intensive applications, such as videoconferencing, image transfer, and data transmission.	5						DWS PRI	This feature enables the service provider to offer DWS service to subscribers who require direct PRI terminations. This is especially beneficial to those providers supporting direct termination service, since the DMS-500 system can terminate directly to subscriber customer premises equipment. This feature also supports interworking of ISUP DWS and PRI DWS for end-to-end connectivity.
	30	UNBN0001	UNBN Unbundling	This feature allows billing Service Provider ID (SPID) information returned from a Line Information Database (LIDB) to be included in AMA records.	9					AF7133, AF7151	Billing Changes	This feature allows billing Service Provider ID (SPID) information returned from a Line Information Database (LIDB) to be included in AMA records. It adds Account Owner (AO) SPID and Billing Service Provider (BSP) SPID of the billing number to the LIDB protocol, and captures the information on its own automatic message accounting (AMA) records. In addition, this software adds SPID to the ACCSVER tool and Table ACCSDB

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID		Feature Name	Feature Description
	30	UNBN0001	UNBN Unbundling	This feature allows billing Service Provider ID (SPID) information returned from a Line Information Database (LIDB) to be included in AMA records.	9					AF7159	SPID Assignment	This feature replaces the SPID assignment functionality of ENSV0017 (TOPS Branding via SPID). In addition to Billing Changes and Support of No SPID, this feature also allows the originating party's Account Owner (AO) and Billing Service Provider's (BSP) SPIDs to be assigned to a call. There are several ways in which SPID can be obtained for assignment: a) by a service node using the Open Automated Protocol (OAP), b) by an operator using the Open Position Protocol (OPP), c) by an Originating Line Number Screening (OLNS) database query, d) from directory number-based switch data, and e) from the trunk group. Once SPID is assigned to a call, it can be used for screen displays on operator positions or recorded on AMA. It is also used by UNBN0005 for SPID branding.
	30	UNBN0002	UNBN queuing	This feature when used with TOPS Queue Management System (QMS), adds options for directing incoming calls based on SPID. It creates a new CT4Q table, adding SPID to the list of criteria that can be used to segregate traffic.	9					AF7160	Queuing	This feature when used with TOPS Queue Management System (QMS), adds options for directing incoming calls based on SPID. It creates a new CT4Q table, adding SPID to the list of criteria that can be used to segregate traffic. This feature allows SPID to be used as a call-routing criterion in QMS. This software modifies two CT4Q tools, QCALL and QVIEW, to support the new SPID CT4Q table. This feature permits network providers to segregate traffic SPID and send all traffic for a particular service provider to a specific set of operators or service nodes. With this software, the system can also use SPID to send various service providers' traffic to specific queues during high-traffic times and combine them during periods of light traffic.
	30	UNBN0003	UNBN Trans & Routing	This feature delivers Phase I of SPID translations and screening capabilities. It enables a TOPS office to support both combined and dedicated service provider traffic for incoming and outgoing trunks. This introduces a limited capability for translating and screening of calls based upon SPID. The identity of the service provider is only considered in translations to determine the route from TOPS. This feature also introduces screening based upon trunk group and SPID.	9					AF7164	Translations and Routing	This feature delivers Phase I of SPID translations and screening capabilities. It enables a TOPS office to support both combined and dedicated service provider traffic for incoming and outgoing trunks. This introduces a limited capability for translating and screening of calls based upon SPID. The identity of the service provider is only considered in translations to determine the route from TOPS. This feature also introduces screening based upon trunk group and SPID.
	30	UNBN0004	UNBN Stats	This feature allows service providers to track QMS MIS statistics based on SPID. It updates the QMS MIS Protocol (NIS Q220-1: TOPS QMS MIS Protocol) to include the calling Account Owner (AO) SPID in all QMS MIS Call Queue and Position Event messages. Therefore, it allows the external MIS to break out TOPS queuing and operator statistics by service provider, and adds protocol enhancements to allow further breakout of the statistics regarding interactions between service providers and interLATA carriers.	9						Statistics	This feature allows service providers to track QMS MIS statistics based on SPID. It updates the QMS MIS Protocol (NIS 0220-1: TOPS QMS MIS Protocol) to include the calling Account Owner (AO) SPID in all QMS MIS Call Queue and Position Event messages. Therefore, it allows the external MIS to break out TOPS queuing and operator statistics by service provider, and adds protocol enhancements to allow further breakout of the statistics regarding interactions between service providers and interLATA carriers.
	30	UNBN0005	UNBN TOPS SPID Branding	This feature replaces the branding portion of ENSV0017 and permits front-end branding per the originating party's Account Owner (AO) SPID using switch-based Enhanced Digital Recorded Announcement Machines (EDRAMs). It also adds ACTS back-end branding based on the originating party's AO SPID.	9					AF6711	TOPS SPID Branding	This feature replaces the branding portion of ENSV0017 and permits front-end branding per the originating party's Account Owner (AO) SPID using switch-based Enhanced Digital Recorded Announcement Machines (EDRAMs). It also adds ACTS back-end branding based on the originating party's AO SPID.
Added	22	UOAM0001	UOAM EADAS I/F DC	This feature provides protocol conversion and data link capabilities enabling OMs stored in the switch (long distance side) to be used by EADAS- compliant operations support systems.	7		1		10941		UCS EADAS Data Collection Interface-Phase I	This feature provides protocol conversion and data link capabilities enabling OMs stored in the switch (long distance side) to be used by EADAS-compliant operations support systems.
Added	22	UOAM0001	UOAM EADAS I/F DC	This feature provides protocol conversion and data link capabilities enabling OMs stored in the switch (long distance side) to be used by EADAS- compliant operations support systems.	7	10			10941		DMS-250 EADAS Standard OM Set Support	The EADAS Data Collection Interface feature provides protocol conversion and data link capabilities enabling OMs stored in the switch (long distance side) to be issued by EADAS-compliant operations support systems. This enhancement supports the DMS- 250 EADAS Standard OM set and Bellcore 740 compliance.

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Issue 2	4	Order Code	Order Cada Nama	Order Code Description	NCS	Enh		Repl Ord			Facture Name	Facture Description
Added			Order Code Name UOAM EADAS I/F Ntwk Mgmt	Order Code Description This feature provides traffic management OM data to the EADAS/Network Management (NM) Center and processes audit and control messages received from the EADAS/NM Center.	Ris 7	KIS	MDRI	s Code	PCID 10942	ACTID	Feature Name UCS EADAS Network Management Interface-Phase I	Feature Description This feature provides traffic management OM data to the EADAS/Network Management (NM) Center and processes audit and control messages received from the EADAS/NM Center.
Added	22	UOAM0002	UOAM EADAS I/F Ntwk Mgmt	This feature provides traffic management OM data to the EADAS/Network Management (NM) Center and processes audit and control messages received from the EADAS/NM Center.	7	10			10942	AX0361	UCS EADAS NM Interface -TR- 746 Enhancements	This features provides traffic management OM data to the EADAS/Network Management (NM) Center and processes audit and control messages received from an EADAS/NM Center. This enhancement supports Bellcore TR-746 compliant header and byte order transmission. This feature continues to transmit traffic measurement data for up to 250 trunk groups.
Added	22	UOAM0003	UOAM Enhanced NW Mgmt	This feature provides an enhanced network management interface based on Bellcore's proprietary SR-3942 specification. This interface can transmit traffic measurement OMs for up to 1024 trunk groups to be processed by network management processing systems.	10				10943	AX0361	Enhanced Network Management (ENWM)	This feature enables the DMS-500 to transmit traffic measurements for up to 1024 trunk groups. This is an increase from the previous limit of only 250 trunk groups. This feature provides support for network management of up to 1024 trunks groups.
Added	22	UOAM0005	UOAM EADAS/DC Buffer Ext	This feature increases the size of EADAS data collection buffer for 30 minutes, 60 minutes, and 24 hour data collection (DC) buffers. The word size is increased from 32K to 256K words.	10				12712	AX0362	DMS-500 EADAS/DC Buffer Size Expansion	This feature increases the size of EADAS data collection buffer for 30 minutes, 60 minutes and 24 hour data collection (DC) buffers. The word size is increased from 32K words to 256K words. This feature resolves buffer overflow and data loss problems and eliminates the need for restarts when changing the size of EADAS/DC buffers from a non-zero value.
	22	UPSN0001	UPSN0 Prog Service Node	This feature provides an integrated programmable switching matrix.	9						Programmable Service Node	This feature provides an integrated programmable switching matrix on the long distance side. The Programmable Service Node (PSN) is controlled by an external Service Control Unit (SCU). NetworkBuilder triggers are used to send calls from the normal call processing environment, to the PSN environment. In this environment, calls are fully controlled by the SCU which contains the service logic for enhanced services such as debit card, or international call back. PSN is ideally suited for those enhanced applications which require on-going control of the call. Using the programmable switching matrix, customers are able to cost-effectively implement enhanced services that would otherwise require external "dumb" programmable
	22	URLT0001	URLT0 SS7 RLT Base	This feature allows long distance carriers to provide various network services for their customer bases. These services can be combined in such a way as to allow the carrier to differentiate themselves in the market.	6						SS7 RLT Base	switches. This feature allows long distance carriers to provide various network services for their customer bases. These services can be combined in such a way as to allow the carrier to differentiate themselves in the market.
	22	URLT0002	URLT0 SS7 RLT Enh Reorig	This feature enhances the Enhanced Tandem Services reorigination capability.	6						Boomerang Reorigination to Direct Access Operators	This feature enhances the Enhanced Tandem Services reorigination capability.
Added	22	URLT0002	URLT0 SS7 RLT Enh Reorig	This feature enhances the Enhanced Tandem Services reorigination capability.	6	10	1		9120	AX0209	UCS SS7 RLT Enhancement Reorigination	This feature provides for the exchange of call-specific information between a Service Platform (Enhanced Services Platform [ESP] or DMS TOPS Node) and the DMS-500 switch. The Services Platform can send a call context block to the long distance side of the DMS-500 containing information such as: BILLNUM, PINDIGS, ACCTCD, BILLID, language preference, and other user-specific information. When the call is sent back to the Services Platform upon reorigination, the call context block is passed "blindly" back to the Services Platform when requested. This feature increases information known by the Operator Platform during "boomerang" reorigination and enhances SS7 RLT Interworking with a DMS TOPS Switch
	22	URLT0003	URLT0 Nonzero SS7 RLT	This feature provides Release Link Trunk feature for non-0+/0- calls.	6						Nonzero SS7 RLT	This feature provides Release Link Trunk feature for non-0+/0- calls.

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			Order Code Name	Order Code Description	RIs	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
	22	URLT0004	URLTO SS7 RLT Billing Enhancements	This feature provides carriers with increased billing flexibility for enhanced services.	6						SS7 RLT Billing Enhancements	This optional feature enables the following capabilities for Enhanced Services Platforms (ESPs) connected to the DMS-500 system via CCS7 Release Link Trunking (RLT): • ESPs are able to control o a per-call basis whether the billing duration for a redirected RLT call will be calculated based on the time the first Answer Message (ANM) is received or from the last ANM • ESPs are able to populate the contents of the Billing Number (BILLNUM), Universe Access (UNIVACC), PIN Digits (PINDIGS) and Account Code (ACCTCD) fields of the DMS-500 CDR record generated for an RLT call. These enhancements provide carriers with greater flexibility for generating billing information for enhanced services calls which use RLT trunks.
	22	UTRS0001	CIC Routing	This feature routes incoming calls using the received Carrier Identification Code (CIC) digits. This allows the service provider to quickly route certain types of calls based upon the CIC, without respect to the received address digits.	5					AD8154	Carrier ID Code Routing	This feature routes incoming calls using the received Carrier Identification Code (CIC) digits. This allows the service provider to quickly route certain types of calls based upon the CIC, without respect to the received address digits.
	22	UTRS0001	CIC Routing	This feature routes incoming calls using the received Carrier Identification Code (CIC) digits. This allows the service provider to quickly route certain types of calls based upon the CIC, without respect to the received address digits.	6					AD8154	Network Operator Routing Enhancement	This feature routes operator calls, based on authcode, ANI, CIC, or trunk group across a DMS-500 system network to a particular operator services provider. This offers new revenue potential and efficiency into the network.
Added	22	UTRS0001	CIC Routing	This feature routes incoming calls using the received Carrier Identification Code (CIC) digits. This allows the service provider to quickly route certain types of calls based upon the CIC, without respect to the received address digits.	6	10			7717	AX0212	CIC Routing Enhancements	This feature enhances the existing Carrier Identification Code (CIC) routing capabilit of the DMS-500 to allow different carriers to have unique translations and routing based on the CIC and the Carrier Selection Indicator (CSI). This feature also introduces the capability for CIC based routing and translations to override the routin and translations specified on an ANI basis. This feature provides IXCs the ability to offer overall control of routing based on the carrier, rather than ANI. This allows an IXC to resell its services to other carriers witt minimal provisioning changes.
Added	22	UTRS0001	CIC Routing	This feature routes incoming calls using the received Carrier Identification Code (CIC) digits. This allows the service provider to quickly route certain types of calls based upon the CIC, without respect to the received address digits.	6	10			7717	AX0213	Default CIC Assignment on TRKGRP	This feature enhances the Carrier Identification Code (CIC) Routing functionality by providing the ability to optionally datafill a default CIC value of up to 4 digits on a trunk group basis to be used for CDR and routing. This feature provides a CIC for a trunk group that does not support the receipt of a CIC or a LEC that does not provide a CIC.
	22	UTRS0003	Routing Enhancements I	This feature provides carriers with enhanced routing capabilities.	6						Answer CDR Generation	This optional feature allows carriers to specify that a CDR record be generated upor receipt of Answer indication from the far end on a terminating route basis. Normally, a CDR record is generated when a call is completed (that is, disconnected). When the Answer CDR capability is enabled for a specified terminating route, CDR record: are generated for all upon the call being answered as well as when the call is disconnected. The Answer CDR capability is very useful for fraud prevention purposes.
	22	UTRS0003	Routing Enhancements I	This feature provides carriers with enhanced	6						Cause Mapping Enhancements	Prevents involving the interexchange carrier in the routing of local calls.
	22	UTRS0003	Routing Enhancements I	routing capabilities. This feature provides carriers with enhanced routing capabilities.	6						Ongoing Parameter Modification	This optional feature allows carriers to control the delivery of the following optional SS7 parameters on a terminating route basis: Calling Party Number (CPN), Charge Number (CGN), Transit Network Selector (TNS), Carrier Identification Parameter (CIP), Generic Digits Parameter and the Generic Address Parameter. Using Table datafil carriers can specify which of these optional parameter are to be included or excluded from the outgoing SS7 messages. In addition, carriers will be able to speci if the Called Party Number is to be replaced with the Dialed Number.
	22	UTRS0003	Routing Enhancements I	This feature provides carriers with enhanced routing capabilities.	6	10			9099		Information Digits in PRI Setup Message	This feature enhances the Outgoing Parameter Modification feature to provide the functionality for delivering the OLI or II digits collected from the originating agent to th PRI terminator in the SETUP message via datafill in table RTEATTR.

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<u> </u>				Order Code Name	Order Code Description	Ris	RIs	MD RIs	Code	PCID	ACTID	Feature Name	Feature Description
					This feature provides carriers with the ability to offer call screening capabilities.	6					AD8955, AD8789, AD8788	Class of Service Screening Treatment Granularity	The DMS-500 system provides a Class of Service Screening capability that can restrict call completion based upon the calling subscriber, the call type (DDD, IDDD, ON_NET, 0+, and 0-), the dialed digits and the date, time of day and day of the week via the Time of Day Restriction Screening tables. There are 18 different reasons that a call could fail DMS-500 Class of Service Screening (such as 0- Call Disallowed, IDDD Day and Time Restricted/Blocked, DDD Destination Digits Screening Failed). Currently, the DMS-500 switch routes calls that fail Class of Service Screening due to IDDD calls being Disallowed and Time of Day Restriction Screening to unique treatments. All other Class of Service Screening Failures route to a generic treatment. This optional feature enhances the DMS-500 Class of Service Screening capability by: • Providing a unique treatment for each of the 18 reasons a call can fail Class of Service Screening. • Allowing the customer to indicate via datafill for each failure reason whether calls that fail Class of Service Screening for that reason are routed to treatment, an annour
					This feature provides carriers with the ability to offer call screening capabilities.	6						Time of Day Restriction Table Expansion	The DMS-500 system provides a Time of Day Screening capability that can restrict call completion based upon the calling subscriber, the date, the time of day, the day of the week, and the call type (DDD, IDDD, ON, NET, 0+, and 0-). The current DMS- 500 Time of Day Screening capability allows a maximum of four time of day restriction profiles to be defined per switch. Each restriction profile defines up to a maximum of five specific time periods during the day when calls are not allowed. This optional feature enhances the DMS-500 Time of Day Screening capability by: • Increasing the maximum number of time of day restriction profiles from four to 255. • Increasing the maximum number of time of day restriction time periods from five to eight per profile. Using this capability carriers will be able to offer their customers much more flexible time of day screening options.
Ac	ded	22	UTRS0005	UTRS Ans Supv on UA	This feature provides an early answer indicator to the originator for Universal Access (UA) calls before sending tone and receiving address digits. Specifically, this feature sends an Answer Message (ANM) immediately after the Address Complete Message (ACM) in order for intermediate switches to cut-through voice path and enable the collection of DTMF digits from the subscriber	10				12909	AX0300	Early Answer Supervision for UA Numbers	This feature provides an early answer indicator to the originator for Universal Access (UA) calls before sending tone and receiving address digits. Specifically, this feature sends an Answer Message (ANM) immediately after the Address Complete Message (ACM) in order for intermediate switches to cut-through voice path and enable the collection of DTMF digits from the subscriber. This feature provides a solution for Universal Access call types when the carrier cannot establish its traffic unless an early answer message is provided.
Ac	ided	22	UTRS0200	UTRS Mult Prof ANI by CIC	This feature provides the ability to assign ANI profiles based on the ANI and CIC combination. Facilities-based DMS-500 system carriers can offer other carriers and resellers unique routing and other services at the individual (ANI) level.	10				12939	AX0210	Multiple ANI Profiles by CIC	This feature provides the ability to assign ANI profiles based on the ANI and CIC combination. Facilities-based DMS-500 system carriers can offer other carriers and resellers unique routing and other services at the individual (ANI) level. Applications include: subscriber has not paid bill and carrier wants to disallow for their CIC only, carrier has specific routing, international access is disallowed by ANI-CIC combination, etc.
Ac	ded	22	UTRS0201	UTRS Mult ANI Prof by Jurisdiction	This feature enables interexchange carriers to provide unique ANI profiles based on ANI, carrier identification code (CIC), and jurisdiction for SS7 Feature Group D (FG-D) originations. Jurisdictions are defined as IntraLATA, InterLATA, and International.	10				14943	AX0999	Multiple ANI Profile by Jurisdiction	This feature enables IXCs to provide unique ANI profiles based on ANI, Carrier Identification Code (CIC) and jurisdiction for SST Feature Group D (FGD) originations. Jurisdictions are defined as IntraLATA, InterLATA and International. This feature also allows IXCs to process IntraLATA toll traffic in addition to InterLATA toll traffic. This feature provides a new revenue source for customers who enter the new IntraLATA market and increases flexibility by enabling call screening and routing to be based on the LATA in addition to the CIC and ANI.

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	App	Order Code	Order Code Name	Order Code Description	Ris	Ris	MD RIs		PCID	ACTID	Feature Name	Feature Description
			WLC Enhanced	This feature enhances the World Line Card Base capabilities which is included in the DMS SuperNode Platform software by providing safety enhancements and new service versatility through customized software templates. It monitors and reports hazardous voltages on the subscriber line. Overvoltage reporting software allows service providers to monitor their networks for the occurrence of power crosses and respond in a timely fashion to restore subscriber service.	5						World Line Card Enhanced	This feature enhances the World Line Card Base capabilities which is included in the DMS SuperNode Platform software by providing safety enhancements and new service versatility through customized software templates. It monitors and reports hazardous voltages on the subscriber line. Overvoltage reporting software allows service providers to monitor their networks for the occurrence of power crosses and respond in a timely fashion to restore subscriber service. This feature provides software reporting of the presence of hazardous voltages upon subscriber loop and the triggering appropriate system alarms and support of 900-ohm + 2.16 microfarad circuits for special connections at a central office for both Type A and Type B WLCs. Individual software templates can be created for unique network implementations.
	44	WLC00002	WLC Line Admin	This feature provides the capability to perform automatic off-hook testing of subscriber loops, including telephone equipment and optimizes the transmission performance of World Line Cards to match each loop's unique characteristics. This feature scans the open loop and determines the appropriate balance network configuration: loaded, nonloaded, or 900 ohm+2.16 microfarads.	5						World Line Card Line Administration	This feature provides the capability to perform automatic off-hook testing of subscriber loops, including telephone equipment and optimizes the transmission performance of World Line Cards to match each loop's unique characteristics. This feature scans the open loop and determines the appropriate balance network configuration: loaded, nonloaded, or 900 ohm+2.16 microfarads.
	44	WLC00004	WLC 40mA current limit	With the standard World Line Card software provided by the DMS SuperNode platform, the World Line Card automatically maintains a loop current under 75 milliamps to limit power consumption. This feature supports a software template that monitors and maintains a loop current for Type A World Line Cards to a maximum of 40 milliamps.	5						40 Milliamp Current Limit	With the standard World Line Card software provided by the DMS SuperNode platform, the World Line Card automatically maintains a loop current under 75 milliamps to limit power consumption. This feature supports a software template that monitors and maintains a loop current for Type A World Line Cards to a maximum of 40 milliamps.