

Contents

[Telcordia SR-3681 - Documentation Information](#)

1. Introduction	1-1
1.1 National ISDN	1-1
1.2 NI Enhancements Process	1-2
1.3 Organization of Document	1-3
1.4 Reason for Reissue	1-4
2. Summary Tables	2-1
3. Paragraph Descriptions	3-1
3.1 Intelligent Peripheral (IP) Services	3-1
3.1.1 Call Deflection Feature – Full [21]	3-1
3.1.2 PRI Two B-Channel Transfer (TBCT) – Subset [22]	3-1
3.1.3 PRI Two B-Channel Transfer (TBCT) – Full [23]	3-2
3.1.4 Billing Number Selection (BNS) – Subset [24]	3-2
3.1.5 Billing Number Selection – Full [25]	3-3
3.1.6 Delivery of User Provided Not Screened Calling Party Numbers (CPNs) [26]	3-3
3.1.7 PRI Redirecting Number and Reason Transfer and Delivery [96]	3-4
3.1.8 PRI Hold [97]	3-4
3.1.9 PRI One B-Channel Conference Calling [99]	3-4
3.1.10 PRI Multi-B-Channel Conference Calling [100]	3-5
3.2 Calling Number	3-5
3.2.1 Allow Number Privacy Change To Be Generally Available to All Users Without Subscription [29]	3-5
3.2.2 Calling Number Privacy - Privacy Change Allowed [108]	3-5
3.3 Flexible Calling	3-6
3.3.1 Allow FC Controller to be Simultaneously Assigned Access to Conference Sizes of 3 and 6 [30]	3-6
3.3.2 Limitations and Restrictions for 911 Calls [31]	3-7
3.3.3 Deactivate Conference When Only Two Parties Remain on a Conference [59]	3-7
3.3.4 Support of Multiple Simultaneous Conferences from a Single TEI [105]	3-7
3.4 ISDN Electronic Key Telephone Service (EKTS)	3-8
3.4.1 Automatic Bridged Call Exclusion Feature Indicator to All Terminals and Feature Identifier Status [33]	3-8
3.4.2 Allow Non-ISDN Call Waiting Assigned to Analog User to Operate Both at the Analog Line and the EKTS Terminal(s) [34]	3-9
3.4.3 Allow EKTS DN or Call Appearances to be Restricted to Originating or Terminating Only [35]	3-9
3.4.4 Allow EKTS DN or Call Appearances to be Restricted to Originating and Priority Incoming Only [36]	3-9
3.4.5 Sustained Hold With NOTIFY [66]	3-10

3.5	Downloading	3-10
3.5.1	Download Additional Data for Virtual Key and Define Extensibility Rules [38]	3-10
3.5.2	Download Additional Data for Softkey Operations [89] . . .	3-10
3.5.3	Automatic NISDN BRI Identification [110]	3-11
3.6	Operations	3-11
3.6.1	SWF-DS1 108 Terminating Test Line/Test Call Origination [39]	3-11
3.6.2	Digital Testing Capabilities for Packet Handler Functions [40]	3-12
3.6.3	Packet Handler Loopback Test Line [41]	3-12
3.6.4	D-Channel Message Performance Monitoring and Control [42]	3-12
3.6.5	Operations Interface States [43]	3-13
3.6.6	PRI B-Channel Availability Signaling Procedures [63]	3-13
3.6.7	Assignment of PRI [111]	3-14
3.6.8	Automatic Moves of Centrex Customer Premise Equipment [126]	3-14
3.7	Message Service	3-14
3.7.1	Message Service Uniformity at Provider Interface, Phase I [44]	3-15
3.7.2	Message Service Uniformity at Provider Interface, Phase 2 [62]	3-15
3.7.3	Message Service Interswitch Signaling for Central Message Center [45]	3-16
3.7.4	Message Service Additional Uniformity at Client Interface [51]	3-16
3.8	Call Control Supplement	3-17
3.8.1	B-Channel Restriction for Basic Rate [46]	3-17
3.8.2	Call Clearing Tones and Announcements [61]	3-17
3.8.3	Support of 2 Simultaneous Voice Calls on Different B-Channels from a Single TEI [104]	3-17
3.8.4	Dual PIC [107]	3-18
3.9	Inspect Revision	3-18
3.9.1	Allow Inspection of Reserved Call Appearances [47]	3-18
3.10	Call Park	3-19
3.10.1	Call Park [48]	3-19
3.11	Smart Attendant Service	3-19
3.11.1	Smart Attendant Service (SAS) [49]	3-19
3.12	Public Network PRI	3-20
3.12.1	Interswitch Automatic Call Back and Recall for PRI [17] . .	3-20
3.12.2	Hotel Motel and Selective Class of Call Screening for Circuit Mode Data [52]	3-21
3.12.3	Association of a Bearer Capability(ies) with Each SFG [54]	3-21
3.12.4	Called Number Digit Deletion and Prefix [56]	3-21
3.12.5	Calling Number Delivery for 911 Calls [57]	3-21
3.12.6	Banded OUTWATS Enhancement [58]	3-22

3.12.7	PRI 1+ or 0+ Dialing [113]	3-22
3.12.8	Link PRI Calling Name Presentation Status to Calling Number [119]	3-22
3.12.9	PRI Services for E9-1-1 PSAPs [124]	3-22
3.13	Private Networking	3-24
3.13.1	PRI as Member of a Business Group [2]	3-24
3.13.2	PRI Between Business Group Switches [7]	3-24
3.13.3	Access to IEC Services via SS7 [86]	3-24
3.13.4	Business Group Access to IEC Services using National ISDN PRI [115]	3-24
3.14	BRI Special Applications	3-25
3.14.1	BRI Trunk [64]	3-25
3.14.2	Automatic Call Distribution [122]	3-25
3.14.3	BRI Services for E9-1-1 PSAPs [123]	3-26
3.15	NI-3 BRI Circuit-Mode Call Control	3-27
3.15.1	Uniform Cause Values Subset [114]	3-27
3.16	NI-3 Uniform Interface Configurations	3-28
3.16.1	DN Sharing Over Multiple Terminals [70]	3-28
3.16.2	DN Sharing Over Multiple Terminals w/ Contention [71]	3-28
3.16.3	Uniform Assignment of Features on a DN/CT Basis [72]	3-28
3.16.4	Uniform Assignment of Features on a TSP Basis [73]	3-29
3.17	NI-2 Flexible Calling	3-30
3.17.1	Explicit Transfer [74]	3-30
3.18	NI-3 Hold	3-31
3.18.1	Music on Hold [75]	3-31
3.19	NI-3 Inspect	3-31
3.19.1	Call Appearance Inspect [76]	3-31
3.19.2	Feature Key Inspect [77]	3-31
3.20	NI-3 PRI Circuit-Mode Call Control	3-31
3.20.1	PRI Calling/Called Subaddress Information Transfer [79]	3-31
3.20.2	Uniform Cause Values Subset [114]	3-32
3.21	NI-2 D-Channel Backup	3-32
3.21.1	D-Channel Backup [80]	3-32
3.22	NI-2 SWF-DS1	3-32
3.22.1	SWF-DS1 [81]	3-32
3.23	NI-2 PRI Calling Number	3-33
3.23.1	PRI Delivery of Redirecting Number [82]	3-33
3.23.2	PRI Privacy of Redirecting Number [83]	3-33
3.23.3	Delivery of Redirecting Reason [84]	3-33
3.24	NI-3 PRI Calling Name	3-33
3.24.1	ISDN Calling Name Identification Services for PRI [85]	3-33
3.25	NI-3 Public Network PRI	3-34
3.25.1	Access to IEC Services via SS7 [86]	3-34
3.25.2	Hotel/Motel Selection Class of Call Screening (Circuit Mode Voice) [87]	3-34
3.25.3	Enhanced Billing for Hotel/Motel and SCOCS [117]	3-34
3.26	NI-3 ICAN	3-34

- 3.26.1 ICAN [88] 3-34
- 3.27 Loop Outage Detection 3-35
 - 3.27.1 ISDN Loop Outage Detection [90] 3-35
- 3.28 SPID Simplification 3-35
 - 3.28.1 Assignment of Feature Keys to Default TSP
(Non-Initializing Terminals) [91] 3-35
 - 3.28.2 Automated SPID Selection [92] 3-36
- 3.29 Packet 3-36
 - 3.29.1 Support for Expanded Address Formats in Time T [95] . . . 3-36
 - 3.29.2 X.25 Multicasting [116] 3-37
- 3.30 Call Forwarding 3-37
 - 3.30.1 BRI - Call Forwarding on User Busy [102] 3-37
 - 3.30.2 PRI - Call Forwarding Interface Busy [121] 3-37
- 3.31 BRI Calling Name 3-38
 - 3.31.1 Link BRI Calling Name Presentation Status to
Calling Number [120] 3-38
 - 3.31.2 Intra-Group Calling Name Display [125] 3-38
- 4. Archive 4-1
- 5. Contacts 5-1
- Appendix A: NI Enhancements Process Flowcharts A-1
- References References-1
- Acronyms Glossary-1

List of Figures

Figure A-1.	NI Enhancements Process: Beginning to Candidate List	A-1
Figure A-2.	NI Enhancement Process: Candidate List to End	A-2

List of Tables

Table 2-1.	Column Title Definitions for Table 2-2	2-1
Table 2-2.	Summary of Features in NI Enhancements Process	2-2
Table 3-1.	Summary of Billing Number Selection Subset Capabilities . . .	3-2
Table 3-2.	Summary of Billing Number Selection Full Set Capabilities . .	3-3
Table 4-1.	Column Title Definitions for Table 4-2	4-1
Table 4-2.	Archived Features	4-2
Table 5-1.	National ISDN Council Contact List	5-1
Table 5-2.	National ISDN Participating Switch Suppliers	5-1