

ISO/IEC 13870:2003-04 (E)

Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Inter-exchange signalling protocol — Call Completion supplementary services

Contents

Foreword	v
Introduction	vi
1 Scope	1
2 Conformance	1
3 Normative references	1
4 Definitions	2
4.1 External definitions	2
4.2 Other definitions	2
4.2.1 CC Call	2
4.2.2 CC Request	2
4.2.3 Connection release	2
4.2.4 Connection retention	3
4.2.5 Path reservation	3
4.2.6 Service retention	3
5 Acronyms	3
6 Signalling protocol for the support of SS-CCBS and SS-CCNR	3
6.1 SS-CCBS/CCNR description	3
6.2 SS-CC operational requirements	3
6.2.1 Requirements on the Originating PINX	3
6.2.2 Requirements on the Terminating PINX	4
6.2.3 Requirements on a Transit PINX	4
6.3 SS-CC coding requirements	5
6.3.1 Operations	5
6.3.2 Information elements	9
6.3.3 Messages	9
6.4 SS-CC State definitions	9
6.4.1 States at the Originating PINX	9
6.4.2 States at the Terminating PINX	10
6.5 SS-CC signalling procedures	10
6.5.1 Major options	10
6.5.2 Actions at the Originating PINX	11
6.5.3 Actions at the Terminating PINX	16
6.5.4 Actions at the Transit PINX	19
6.6 Impact of interworking with public ISDNs	19
6.6.1 Incoming Gateway PINX procedures: SS-CCBS request from a public ISDN	20
6.6.2 Outgoing Gateway PINX procedures: SS-CCBS request to a public ISDN	20
6.7 Impact of interworking with non-ISDNs	21
6.7.1 Incoming Gateway PINX procedures	21
6.7.2 Outgoing Gateway PINX procedures	21
6.8 Protocol interaction between SS-CCBS and Other Supplementary Services and ANFs	21

6.8.1	Calling Name Identification Presentation (SS-CNIP)	21
6.8.2	Connected Name Identification Presentation (SS-CONP)	21
6.8.3	Completion of Calls on No Reply (SS-CCNR)	22
6.8.4	Call Transfer	22
6.8.5	Call Forwarding Unconditional (SS-CFU)	22
6.8.6	Call Forwarding Busy (SS-CFB)	22
6.8.7	Call Forwarding No Reply (SS-CFNR)	22
6.8.8	Call Deflection (SS-CD)	22
6.8.9	Path Replacement (ANF-PR)	22
6.9	Protocol interaction between SS-CCNR and other supplementary Services and ANFs	22
6.9.1	Calling Name Identification Presentation (SS-CNIP)	23
6.9.2	Connected Name Identification Presentation (SS-CONP)	23
6.9.3	Completion of Calls to Busy Subscribers (SS-CCBS)	23
6.9.4	Call Transfer	23
6.9.5	Call Forwarding Unconditional (SS-CFU)	23
6.9.6	Call Forwarding Busy (SS-CFB)	23
6.9.7	Call Forwarding No Reply (SS-CFNR)	23
6.9.8	Call Deflection (SS-CD)	24
6.9.9	Path Replacement (ANF-PR)	24
6.10	Parameter values (timers)	24
6.10.1	Timers at the Originating PINX	24
6.10.2	Timers at the Terminating PINX	24
Annexes		
A	Protocol Implementation Conformance Statement (PICS) proforma	25
B	Imported ASN.1 definitions	36
C	Examples of messages sequences	37
D	Specification and Description Language (SDL) Representation of Procedures	46
E	Bibliography	64
F	ASN.1 definitions according to ITU-T Recs. X.208 / X.209	65