# ISO/IEC 11582 :2002-07 (E)

**Information technology_- Telecommunications and information exchange between systems_- Private Integrated Services Network; Generic functional protocol for the support of supplementary services; Inter-exchange signalling procedures and protocol**

## Contents


Page

Foreword **vi**

Introduction **vii**

**1** Scope **1**

**2** Conformance **1**

**3** Normative references **1**

**4** Definitions **2**

**4.1** External definitions **2**
**4.2** ACSE APDU **2**
**4.3** Additional Network Feature (ANF) **2**
**4.4** Adjacent PINX **2**
**4.5** Application Protocol Data Unit (APDU) **2**
**4.6** Call, Basic call **2**
**4.7** Call independent signalling connection **2**
**4.8** Call independent **3**
**4.9** Call related **3**
**4.10** Connection oriented **3**
**4.11** Connectionless **3**
**4.12** Coordination Function **3**
**4.13** Destination PINX **3**
**4.14** DSE APDU **3**
**4.15** Dialogue Service Element (DSE) **3**
**4.16** End PINX **3**
**4.17** Gateway PINX **3**
**4.18** Generic Functional Transport Control (GFT-Control) entity **3**
**4.19** Incoming side **3**
**4.20** Interpretation APDU **3**
**4.21** Inter-PINX link **3**
**4.22** Invocation **3**
**4.23** Link significance **4**
**4.24** Mistyped **4**
**4.25** Network significance **4**
**4.26** Next PINX **4**
**4.27** Notification **4**
**4.28** Originating PINX **4**
**4.29** Outgoing side **4**
**4.30** PINX address **4**
**4.31** Preceding PINX **4**
**4.32** Private Signalling System No.1 **4**
**4.33** Protocol Control **4**
**4.34** ROSE APDU **4**
**4.35** Side **4**
**4.36** Signalling Carriage Mechanism (SCM) **4**
**4.37** Source PINX **4**
**4.38** Subsequent PINX **5**
**4.39** Supplementary service **5**
**4.40** Supplementary Services Control (SS-Control) entity **5**
**4.41** Terminating PINX **5**
**4.42** Terminal, Terminal Equipment **5**
**4.43** Transit PINX **5**
**4.44** Unrecognised **5**

**5** List of acronyms **5**

**6** General principles **6**

**6.1** Application Association **6**
**6.2** Protocol Model **6**
**6.3** Application of the protocol model to communication between SS-Control entities in non-Adjacent PINXs **8**
**6.4** Services provided by ROSE **9**
**6.5** Services provided by ACSE **9**
**6.6** Services provided by DSE **9**
**6.7** Services provided by GFT-Control **10**

**6.7.1** Connection oriented services **10**
**6.7.2** Connectionless transport services **11**
**6.7.3** Notification services **11**

**6.8** Services provided by Protocol Control to GFT-Control **11**

**6.8.1** Connection oriented transport services **11**
**6.8.2** Connectionless transport service **12**
**6.8.3** Notification services **12**

**6.9** Services required of the Signalling Carriage Mechanism **12**

**7** Protocol Control and GFT-Control Requirements **12**

**7.1** Call related Procedures for the transport of APDUs **12**

**7.1.1** Protocol Control requirements **12**
**7.1.2** GFT-Control requirements **13**

**7.2** Connectionless APDU Transport Mechanism **20**

**7.2.1** Protocol Control requirements **20**
**7.2.2** Control requirements **20**

**7.3** Connection oriented call independent APDU transport mechanism **21**

**7.3.1** Protocol Control requirements **21**
**7.3.2** Dynamic Description (SDL) of Connection oriented Protocol Control procedures **25**
**7.3.3** Generic Functional Transport Control requirements **31**

**7.4** Call related procedures for the transport of Notifications **34**

**7.4.1** Categories of notifications **34**
**7.4.2** Protocol Control requirements **34**
**7.4.3** GFT-Control requirements **34**

**8** Application layer requirements **35**

**8.1** Coordination Function requirements **35**

**8.1.1** Inclusion of an Interpretation APDU at a Source PINX **35**
**8.1.2** Handling of APDUs at a Destination PINX **35**

**8.2** ROSE requirements **35**
**8.3** ACSE requirements **36**
**8.4** DSE requirements **36**

**8.4.1** Actions at the PINX which initiates the dialogue (PINX A) **36**
**8.4.2** Actions at the PINX which terminates the dialogue (PINX B) **37**
**8.4.3** Dialogue Continuation in the Active State **37**
**8.4.4** Dialogue Protocol Timers **37**
**8.4.5** Error procedures relating to dialogue control **38**
**8.4.6** Example of a dialogue **38**
**8.4.7** Dynamic Description (SDL) of Dialogue Identification Protocol Procedures **38**

**8.5** SS-Control requirements **43**

**9** Manufacturer Specific Information **43**

**9.1** Manufacturer specific operations **43**
**9.2** Manufacturer specific additions to standardised operations **43**
**9.3** Manufacturer specific notifications **44**

**10** Message functional definitions and contents **45**

**10.1** ALERTING **45**
**10.2** CALL PROCEEDING **45**
**10.3** CONNECT **46**
**10.4** SETUP **46**
**10.5** DISCONNECT **46**
**10.6** RELEASE **46**
**10.7** RELEASE COMPLETE **47**
**10.8** FACILITY **47**
**10.9** NOTIFY **48**
**10.10** PROGRESS **48**

**11** General message format and information element coding **48**

**11.1** Message Type **48**
**11.2** Call reference **49**
**11.3** Other information elements **49**

**11.3.1** Bearer capability **49**
**11.3.2** Channel identification **50**
**11.3.3** Facility **50**
**11.3.4** Notification indicator **58**

**11.4** Encoding of information described using ASN.1 **60**

**Annexes**

**A** - Protocol Implementation Conformance Statement (PICS) for ISO/IEC 11582 **61**

**B** - ASN.1 definitions of generic parameters **70**

**C** - Application of the functional protocol **75**

**D** - Remote operations protocol and application association control **82**

**E** - Formal ROSE Definitions **83**

**F** - Examples of the use of Manufacturer specific information **84**

**G** - Problem code definitions **91**

**H** - Bibliography **92**

**I** - Object identifiers defined in ISO/IEC 11582 **93**

**J** - “Recipe” for migration of X.208 / X.209 based QSIG ASN.1 modules to X.680 / X.690 ASN.1 **95**

**K** - ASN.1 definitions according to ITU-T Recs. X.208 / X.209 **100**

**L -** Technical changes since third edition of ECMA-165 **112**