

ISO/IEC 13874:2003-04 (E)

Information technology — Telecommunications and information exchange between systems —
Private Integrated Services Network — Inter-exchange signalling protocol —
Path Replacement additional network feature

Contents

| | | |
|--------------|---|----|
| Foreword | v | |
| Introduction | vi | |
| 1 | Scope | 1 |
| 2 | Conformance | 1 |
| 3 | Normative references | 1 |
| 4 | Terms and definitions | 2 |
| 4.1 | External definitions | 2 |
| 4.2 | Other definitions | 2 |
| 4.2.1 | Branching PINX | 2 |
| 4.2.2 | Cooperating PINX | 3 |
| 4.2.3 | End PINX | 3 |
| 4.2.4 | Preceding PINX | 3 |
| 4.2.5 | Replaced connection | 3 |
| 4.2.6 | Requesting PINX | 3 |
| 4.2.7 | Retained connection | 3 |
| 4.2.8 | Subsequent PINX | 3 |
| 4.2.9 | Inviting PINX | 3 |
| 5 | List of acronyms | 3 |
| 6 | Signalling protocol for the support of ANF-PR | 3 |
| 6.1 | ANF-PR description | 3 |
| 6.2 | ANF-PR operational requirements | 4 |
| 6.2.1 | Requirements on the Cooperating PINX | 4 |
| 6.2.2 | Requirements on the Requesting PINX | 4 |
| 6.2.3 | Requirements on a Transit PINX | 4 |
| 6.2.4 | Requirements on the Inviting PINX | 5 |
| 6.3 | ANF-PR coding requirements | 6 |
| 6.3.1 | Operations | 6 |
| 6.3.2 | Information elements | 9 |
| 6.3.3 | Messages | 10 |
| 6.4 | ANF-PR state definitions | 10 |
| 6.4.1 | States at the Requesting PINX | 10 |
| 6.4.2 | States at the Cooperating PINX | 10 |
| 6.4.3 | States at a Transit PINX on the retained path, including the branching PINX | 11 |
| 6.4.4 | States at the Inviting PINX | 11 |
| 6.5 | ANF-PR signalling procedures | 11 |
| 6.5.1 | Actions at the Requesting PINX | 11 |
| 6.5.2 | Actions at the Cooperating PINX | 12 |
| 6.5.3 | Actions at a Cooperating/Requesting PINX in the case of a trombone connection | 13 |
| 6.5.4 | Actions at a Transit PINX | 13 |
| 6.5.5 | Actions at Inviting PINX | 13 |
| 6.6 | ANF-PR optional signalling procedures for retention of part of the old connection | 14 |
| 6.6.1 | Actions at the Requesting PINX | 14 |

| | | |
|----------------|--|-----------|
| 6.6.2 | Actions at the Cooperating PINX | 14 |
| 6.6.3 | Actions at a Transit PINX on the retained connection | 14 |
| 6.6.4 | Actions at a Transit PINX on the new connection or replaced connection | 16 |
| 6.6.5 | Actions at Inviting PINX on the retained connection | 16 |
| 6.7 | ANF-PR impact of interworking with public ISDNs | 16 |
| 6.8 | ANF-PR impact of interworking with non-ISDNs | 16 |
| 6.9 | Protocol interactions between ANF-PR and other supplementary services and ANFs | 16 |
| 6.9.1 | Interaction with Calling Name Identification Presentation (SS-CNIP) | 16 |
| 6.9.2 | Interaction with Connected Name Identification Presentation (SS-CONP) | 16 |
| 6.9.3 | Interaction with Completion of Calls to Busy Subscriber (SS-CCBS) | 17 |
| 6.9.4 | Interaction with Completion of Calls on No Reply (SS-CCNR) | 17 |
| 6.9.5 | Interaction with Call Transfer (SS-CT) | 17 |
| 6.9.6 | Interaction with Call Forwarding Unconditional (SS-CFU) | 18 |
| 6.9.7 | Interaction with Call Forwarding Busy (SS-CFB) | 18 |
| 6.9.8 | Interaction with Call Forwarding No Reply (SS-CFNR) | 18 |
| 6.9.9 | Interaction with Call Deflection (SS-CD) | 18 |
| 6.10 | ANF-PR parameter values (timers) | 18 |
| 6.10.1 | Timer T1 | 18 |
| 6.10.2 | Timer T2 | 18 |
| 6.10.3 | Timer T3 | 18 |
| 6.10.4 | Timer T4 | 19 |
| Annexes | | |
| A | - Protocol Implementation Conformance Statement (PICS) proforma | 20 |
| B | - Imported ASN.1 definitions | 27 |
| C | - Examples of message sequences | 28 |
| D | - Specification and Description Language (SDL) representation of procedures | 36 |
| E | - ASN.1 definitions according to ITU-T Recs. X.208 / X.209 | 42 |