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Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Specification, functional model and information flows — Wireless Terminal Authentication supplementary services (WTAT and WTAN)

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Contents

Foreword ..... **iii**

Introduction ..... **iv**

1 Scope **1**

2 Conformance **1**

3 Normative references **1**

4 Definitions **2**
4.1 External definitions 2
4.2 Other definitions 2

5 List of acronyms **2**

6 SS-WTAT stage 1 specification **3**
6.1 Description 3
6.2 Procedure 3
6.3 Interaction with other supplementary services and ANFs 3
6.4 Interworking considerations 5
6.5 Overall SDL 6

7 SS-WTAN stage 1 specification **7**
7.1 Description 7
7.2 Procedure 7
7.3 Interaction with other supplementary services and ANFs 7
7.4 Interworking considerations 9
7.5 Overall SDL 9

8 SS-WTAT stage 2 specification **10**
8.1 Functional model 10
8.2 Information flows 11
8.3 Functional entity actions 15
8.4 Functional entity behaviour 16
8.5 Allocation of functional entities to physical equipment 23
8.6 Interworking considerations 23

9 SS-WTAN stage 2 specification **24**
9.1 Functional model 24
9.2 Information flows 24
9.3 Functional entity actions 28
9.4 Functional entity behaviour 29
9.5 Allocation of functional entities to physical equipment 33
9.6 Interworking considerations 33

Annex A (informative): User identifiers **34**

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC 1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 15432 was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 6, *Telecommunications and information exchange between systems*.

Annex A of this International Standard is for information only.

Introduction

This International Standard is one of a series of International Standards defining services and signalling protocols applicable to Private Integrated Services Networks (PISNs). The series uses ISDN concepts as developed by ITU-T and conforms to the framework of International Standards for Open Systems Interconnection as defined by ISO/IEC.

This particular International Standard specifies the WTAT and WTAN supplementary services.

Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Specification, functional model and information flows — Wireless Terminal Authentication supplementary services (WTAT and WTAN)

1 Scope

This International Standard specifies the Authentication supplementary services, which are applicable to various basic services supported by Private Integrated Services Networks (PISN). Basic services are specified in ISO/IEC 11574.

Authentication of a WTM user (SS-WTAT) is a supplementary service that enables a PISN, as a security measure, to validate the identity provided by the WTM user.

Authentication of the PISN (SS-WTAN) is a supplementary service that enables a served WTM user, as a security measure, to validate the identity of the PISN.

The mechanisms used in these supplementary services are based on the challenge and response method of authentication. Authentication algorithms to be used by these two supplementary services (SS-WTAT and SS-WTAN) are outside the scope of this International Standard. This International Standard provides the information flows to convey the security parameters.

Supplementary service specifications are produced in three stages, according to the method described in CCITT Recommendation I.130. This International Standard contains the stage 1 and stage 2 specifications of SS-WTAT and SS-WTAN. The stage 1 specification (clause 6 and 7) specifies the supplementary service as seen by users of PISNs. The stage 2 specification (clause 8 and 9) identifies the functional entities involved in the supplementary service and the information flows between them.

2 Conformance

In order to conform to this International Standard, a stage 3 International Standard shall specify signalling protocols and equipment behaviour that are capable of being used in a PISN which supports the supplementary service specified in this International Standard. This means that, to claim conformance, a stage 3 International Standard is required to be adequate for the support of those aspects of clause 6 and 7 (stage 1) and clause 8 and 9 (stage 2) which are relevant to the interface or equipment to which the stage 3 International Standard applies.

3 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO/IEC 11571:1994, *Information technology - Telecommunications and information exchange between systems - Numbering and sub-addressing in private integrated services networks.*

ISO/IEC 11574:1994, *Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Circuit-mode 64 kbit/s bearer services - Service description, functional capabilities and information flows.*

ISO/IEC 11579-1:1994, *Information technology - Telecommunications and information exchange between systems - Private integrated services network - Part 1: Reference configuration for PISN Exchanges (PINX).*

ITU-T Rec. I.112:1993, *Vocabulary of terms for ISDNs.*

CCITT Rec. I.130:1988, *Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN (Blue Book).*

ITU-T Rec. I.210:1993, *Principles of telecommunication services supported by an ISDN and the means to describe them.*

ITU-T Rec. Z.100:1993, *Specification and Description Language.*