
**Information technology —
Telecommunications and information
exchange between systems — Private
Integrated Services Network —
Specification, functional model and
information flows — Simple dialog
supplementary service**

*Technologies de l'information — Télécommunications et échange
d'information entre systèmes — Réseaux privés à intégration de
services — Spécifications, modèle fonctionnel et flux d'informations —
Service supplémentaire de dialogue simple*

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO/IEC 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

Foreword	v
Introduction	vi
1 Scope	1
2 Conformance	1
3 Normative references	1
4 Definitions	1
4.1 External definitions	1
4.2 Other definitions	2
4.2.1 Client User	2
4.2.2 Display information	2
4.2.3 Keypad information	2
4.2.4 Server User	2
5 List of acronyms	2
6 SS-SD stage 1 specification	2
6.1 Description	2
6.1.1 General description	2
6.1.2 Qualifications on applicability to telecommunication services	2
6.2 Procedures	2
6.2.1 Provision / withdrawal	2
6.2.2 Normal procedures	3
6.2.3 Exceptional procedures	3
6.3 Interactions with other Supplementary Services / Additional Network Features	3
6.3.1 Calling Line Identification Presentation (SS-CLIP)	3
6.3.2 Connected Line Identification Presentation (SS-COLP)	3
6.3.3 Calling/Connected Line Identification Restriction (SS-CLIR)	3
6.3.4 Calling Name Identification Presentation (SS-CNIP)	3
6.3.5 Calling Name Identification Presentation (SS-CNIR)	3
6.3.6 Connected Name Identification Presentation (SS-CONP)	3
6.3.7 Completion of Call to Busy Subscriber (SS-CCBS)	3
6.3.8 Completion of Call on No Reply (SS-CCNR)	4
6.3.9 Call Transfer (SS-CT)	4
6.3.10 Call Forwarding Unconditional (SS-CFU)	4
6.3.11 Call Forwarding Busy (SS-CFB)	4
6.3.12 Call Forwarding No Reply (SS-CFNR)	4
6.3.13 Call Deflection (SS-CD)	4
6.3.14 Path Replacement (ANF-PR)	4
6.3.15 Call Offer (SS-CO)	4
6.3.16 Call Intrusion (SS-CI)	4
6.3.17 Do not Disturb (SS-DND)	4
6.3.18 Do not Disturb Override (SS-DNDO)	4
6.3.19 Advice of Charge (SS-AOC)	4
6.3.20 Recall (SS-RE)	4
6.3.21 Call Interception (ANF-CINT)	4
6.3.22 Transit Counter (ANF-TC)	4
6.3.23 Route Restriction Class (ANF-RRC)	4

6.3.24	Message Waiting Indication (SS-MWI)	4
6.3.25	Wireless Terminal Location Registration (SS-WTLR)	4
6.3.26	Wireless Terminal Incoming Call (ANF-WTMI)	4
6.3.27	Wireless Terminal Outgoing Call (ANF-WTMO)	4
6.3.28	Wireless Terminal Authentication of a CTM User (SS-WTAT)	4
6.3.29	Wireless Terminal Authentication of the PISN (SS-WTAN)	5
6.3.30	Private User Mobility Incoming Call (ANF-PUMI)	5
6.3.31	Private User Mobility Outgoing Call (ANF-PUMO)	5
6.3.32	Private User Mobility Registration (SS-PUMR)	5
6.3.33	Common Information (ANF-CMN)	5
6.3.34	Call Priority Interruption (Protection) (SS-CPI(P))	5
6.3.35	Single Step Call Transfer (SS-SSCT)	5
6.4	Interworking considerations	5
6.5	Overall SDL	5
7	SS-SD stage 2 specification	7
7.1	Functional model	7
7.1.1	Functional model description	7
7.1.2	Description of Functional Entities	7
7.1.3	Relationship of functional model to Basic Call functional model	8
7.2	Information flows	8
7.2.1	Definition of information flows	8
7.2.2	Relationship of information flows to Basic Call information flows	10
7.2.3	Examples of information flow sequences	10
7.3	Functional Entity actions	11
7.3.1	Functional Entity actions of FE1	11
7.3.2	Functional Entity actions of FE2	11
7.3.3	Functional Entity actions of FE3	11
7.3.4	Functional Entity actions of FE4	11
7.4	Functional Entity behaviour	11
7.4.1	Behaviour of FE1	11
7.4.2	Behaviour of FE2	13
7.4.3	Behaviour of FE3	14
7.4.4	Behaviour of FE4	15
7.5	Allocation of Functional Entities to physical equipment	16
7.6	Interworking considerations	16

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.

Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights.

International Standard ISO/IEC 21407 was prepared by ECMA (as ECMA-310) and was adopted, under a special “fast-track procedure”, by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

Introduction

This International Standard is one of a series of Standards defining services and signalling procedures 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 International Standard specifies the Simple Dialog (SD) supplementary service.

This International Standard is based upon the practical experience of ECMA member companies and the results of their active and continuous participation in the work of ISO/IEC JTC 1, ITU-T, ETSI and other international and national standardization bodies. It represents a pragmatic and widely based consensus. There is currently no equivalent service specified by ITU-T or ETSI for public ISDN.

Information technology — Telecommunications and information exchange between systems — Private Integrated Services Network — Specification, functional model and information flows — Simple dialog supplementary service

1 Scope

This International Standard specifies the supplementary service Simple Dialog (SS-SD), which is applicable to various basic services supported by Private Integrated Services Networks (PISNs). Basic services are specified in ISO/IEC 11574.

Supplementary service SD enables a user to communicate with another user or application by the exchange of keypad and display information transparently over a PISN.

Service specifications are produced in three stages, according to the method described in ETS 300 387. This International Standard contains the stage 1 and stage 2 specifications of SS-SD. The stage 1 specification (clause 6) specifies the supplementary service as seen by users of PISNs. The stage 2 specification (clause 7) specifies 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 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 standard is required to be adequate for the support of those aspects of clause 6 (stage 1) and clause 7 (stage 2) which are relevant to the interface or equipment to which the stage 3 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 11574:2000, *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)*

ETS 300 387:1994, *Private Telecommunication Network (PTN); Method for the specification of basic and supplementary services*

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

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

ITU-T Rec. Z.100:1999, *Specification and description language (SDL)*