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Foreword

This European Telecommunication Standard (ETS) has been produced by the Signalling Protocols and Switching (SPS) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This ETS is part 1 of a multi-part standard covering the Digital Subscriber Signalling System No. one (DSS1) protocol specification for the Integrated Services Digital Network (ISDN) Terminal Portability (TP) supplementary service, as described below:

Part 1: "Protocol specification";

Part 2: "Protocol Implementation Conformance Statement (PICS) proforma specification";

This ETS contains no parts related directly to conformance testing. All procedures related to the TP supplementary service are contained within basic call control and consequently all conformance testing requirements are specified within the basic call control test specifications. The optional call rearrangement procedures within the basic call control become mandatory for the TP supplementary service and the support, or otherwise, of these procedures is the determining factor in assessing an implementation's conformance to this ETS.

In accordance with CCITT Recommendation I.130, the following three level structure is used to describe the supplementary telecommunications services as provided by European public telecommunications operators under the pan-European Integrated Services Digital Network (ISDN):

- Stage 1: is an overall service description, from the user's standpoint;

- Stage 2: identifies the functional capabilities and information flows needed to support the service described in stage 1; and

- Stage 3: defines the signalling system protocols and switching functions needed to implement the service described in stage 1.

This ETS details the stage 3 aspects (signalling system protocols and switching functions) needed to support the Terminal Portability (TP) supplementary service. The stage 1 and stage 2 aspects are detailed in ETS 300 053 (1991) and ETS 300 054 (1991), respectively.

This reprint includes all previous Corrigenda as shown in the History box at the last page.

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1 Scope

This first part of ETS 300 055 specifies the stage three of the Terminal Portability (TP) supplementary service for the pan-European Integrated Services Digital Network (ISDN) as provided by European public telecommunications operators at the T reference point or coincident S and T reference point (as defined in CCITT recommendation I.411 [1]) by means of the Digital Subscriber Signalling System No. one (DSS1). Stage three identifies the protocol procedures and switching functions needed to support a telecommunications service (see CCITT Recommendation I.130 [2]).

In addition, this standard specifies the protocol requirements at the T reference point where the service is provided to the user via a private ISDN.

This standard does not specify the additional protocol requirements where the service is provided to the user via a telecommunications network that is not an ISDN.

The TP supplementary service allows a user to move one terminal from one socket to another within one given basic access during the active state of a call. It also allows a user to move a call from one terminal to another terminal within one given basic access during the active phase of a call.

The portability of a terminal during the idle state is part of the basic access capabilities and does not require any procedure.

The portability of a terminal in the call establishment and in the call clearing phases is not possible.

The TP supplementary service applies to some interactive circuit-switched telecommunication services requiring the attendance of a human being, such as telephony, videotelephony, etc.

The TP supplementary service does not apply to non-interactive services such as facsimile, teletex, mixed-mode, computer communication, etc. However, the network will not take any action to restrict its applicability.

It is a user's responsibility to resume the call with a terminal which is compatible both with the remote terminal and the type of connection previously established.

Further parts of this standard specify the method of testing required to identify conformance to this standard.

This standard is applicable to equipment supporting the TP supplementary service to be attached at either side of a T reference point or coincident S and T reference point when used as an access to the public ISDN.

2 Normative references

This ETS incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to, or revisions of any of these publications apply to this ETS only when incorporated into it by amendment or revision. for undated references the latest edition of the publication referred to applies.

[1] CCITT Recommendation I.411 (1988): "ISDN user-network interfaces - Reference configurations".

[2] CCITT Recommendation I.130 (1988): "Method for the characterisation of telecommunication services supported by an ISDN and network capabilities of an ISDN".

[3] ETS 300 053: "Integrated Services Digital Network (ISDN); Terminal Portability (TP) supplementary service; Service description".

[4] ETS 300 102-1 (1990): "Integrated Services Digital Network (ISDN); User-network interface layer 3; Specifications for basic call control".

[5] CCITT Recommendation T.50 (1988): "International Alphabet No. 5".

[6] ETS 300 195-1: "Integrated Services Digital Network (ISDN); Supplementary service interactions; Digital Subscriber Signalling System No. one (DSS1) protocol; Part 1: Protocol specification".

[7] ETS 300 102-2 (1990): "Integrated Services Digital Network (ISDN); User-network interface layer 3; Specifications for basic call control; Specification Description Language (SDL) diagrams".

[8] CCITT Recommendation Q.9 (1988): "Vocabulary of switching and signalling terms".

[9] CCITT Recommendation I.210 (1988): "Principles of telecommunication services supported by an ISDN and the means to describe them".

[10] CCITT Recommendation I.112 (1988): "Vocabulary of terms for ISDNs".

3 Definitions

For the purposes of this standard, the following definitions apply:

Basic access: see CCITT Recommendation Q.9 [8], § 1, definition 1551.

Integrated Services Digital Network (ISDN): see CCITT Recommendation I.112 [10], § 2.3, definition 308.

Service; telecommunications service: see CCITT Recommendation I.112 [10], § 2.2, definition 201.

Supplementary service: see CCITT Recommendation I.210 [9], § 2.4.

Network: the DSS1 protocol entity at the network side of the user-network interface.

User: the DSS1 protocol entity at the user side of the user-network interface.

International Alphabet Number five (IA5) characters: see CCITT Recommendation T.50 [5].

4 Symbols and abbreviations

DSS1	Digital Subscriber Signalling System No. one
ISDN	Integrated Services Digital Network
TP	Terminal Portability
IA5	International Alphabet No. five
NT2	Network Termination two

5 Description

The general description of the TP supplementary service is specified in ETS 300 053 [3], Clause 5.

These procedures shall make use of the suspend and resume functions as described in ETS 300 102-1 [4].

6 Operational requirements

6.1 Provision and withdrawal

This service may be provided by a prior arrangement with the service provider or may be generally available. Withdrawal shall be at the request of the customer or for administrative reasons.

6.2 Requirements on the originating network side

The procedures according to ETS 300 102-1 [4], subclause 5.6, shall apply.

6.3 Requirements on the destination network side

The procedures according to ETS 300 102-1 [4], subclause 5.6, shall apply.

7 Coding requirements

All parameters or parameter values required for the TP supplementary service are specified in ETS 300 102-1 [4]. If the user provides IA5 characters in the Call identity information element, these shall be encoded with bit eight of octet three set to "0".

8 State definitions

The states associated with basic call control according to ETS 300 102-1 [4] shall apply.

9 Signalling procedures at the coincident S and T reference point

The procedures for the TP supplementary service are described in ETS 300 102-1 [4], subclause 5.6.

NOTE: During an interim period of time some networks may not support the sending of notifications to the remote user.

9.1 Activation, deactivation and registration

Not applicable.

9.2 Invocation and operation

9.2.1 Normal operation

For call suspension ETS 300 102-1 [4], subclauses 5.6.1 and 5.6.2, shall apply.

For call re-establishment ETS 300 102-1 [4], subclause 5.6.4, shall apply.

9.2.2 Exceptional procedures

In addition to the situations listed below, the normal error handling procedures according to ETS 300 102-1 [4], subclause 5.8, shall apply:

- for call suspend error, ETS 300 102-1 [4], subclause 5.6.3, shall apply;

- for call resume error, ETS 300 102-1 [4], subclause 5.6.5, shall apply;

- for double suspension, ETS 300 102-1 [4], subclause 5.6.6, shall apply;

10 Procedures for interworking with private ISDNs

The procedures of ETS 300 102-1 [4], subclause 5.6.7, shall apply.

11 Interactions with other networks

No impact on the protocol.

12 Interactions with other supplementary services

The interactions of the TP supplementary service with other supplementary services shall be as specified in ETS 300 195-1 [6].

13 Parameter values (timers)

The following timers as specified in ETS 300 102-1 [4], Clause 9, shall be relevant in the context of the TP supplementary service:

- user timer T319,

- network timer T307,

- user timer T318.

14 Dynamic description (SDLs)

ETS 300 102-2 [7] shall apply.

Annex A (Informative): Signalling flows

The signalling flows for normal procedures are shown in figure A.1.

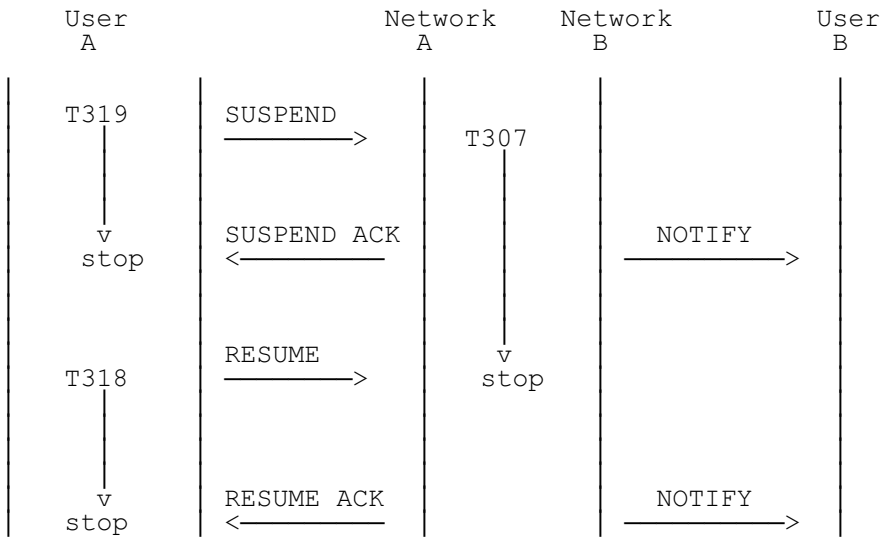

Figure A.1: Successful invocation and completion of the TP supplementary service

History

Document history	
October 1991	First Edition
April 1994	Corrigendum to First Edition: change to part 1 of a multi-part standard
January 1996	Corrigendum to First Edition
March 1996	Converted into Adobe Acrobat Portable Document Format (PDF) and incorporation of all prior Corrigenda