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Service description

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Contents

Foreword

This European Telecommunication Standard (ETS) has been produced by the Network Aspects (NA) Technical Committee of the European Telecommunications Standards Institute (ETSI).

In accordance with CCITT Recommendation I.130 [1], 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 1 aspects (overall service description) for the Terminal Portability (TP) supplementary service. The stage 2 and stage 3 aspects are detailed in ETS 300 054 (1991) and ETS 300 055 (1991), respectively.

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1   Scope

This standard defines the stage one of the Terminal Portability (TP) supplementary services for the pan-European Integrated Services Digital Network (ISDN) as provided by European public telecommunications operators. Stage one is an overall service description from the user's point of view, but does not deal with the details of the human interface itself (see CCITT Recommendation I.130 [1].

This standard defines the interworking requirements of private ISDNs with the public ISDN.

In addition this standard specifies the base functionality where the service is provided to the user via a private ISDN.

This standard does not specify the additional requirements where the service is provided to the user via a telecommunications network that is not an ISDN but does include interworking requirements of other networks with the public ISDN.

Interactions with supplementary services not listed in clause 8 are outside the scope of this standard.

Charging principles are outside the scope of this standard.

The Terminal Portability (TP) supplementary service allows a user to move a 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 the 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 with the type of connection previously established.

This standard is applicable to the stage two and stage three standards for the ISDN TP supplementary service. The terms "stage two" and "stage three" are also defined in CCITT Recommendation I.130 [1]. Where the text indicates the status of a requirement (i.e. as strict command or prohibition, as authorisation leaving freedom, or as a capability or possibility), this shall be reflected in the text of the relevant stage two and stage three standards.

Furthermore, conformance to this standard is met by conforming to the stage three standards with the field of application appropriate to the equipment being implemented. Therefore no method of testing is provided for this standard.

2 Normative references

This standard 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 standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

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

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

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

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

3 Definitions

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

basic access: See CCITT Recommendation Q.9 [3], § 1, definition 1551.

Integrated Services Digital Network (ISDN): See CCITT Recommendation I.112 [2], § 2.3, definition 308.

service; telecommunications service: See CCITT Recommendation I.112 [2], § 2.2, definition 201.

supplementary service: See CCITT Recommendation I.210 [4], § 2.4.

4 Symbols and abbreviations

CCBS   Completion of Calls to Busy Subscriber

ISDN   Integrated Services Digital Network

PSTN   Public Switched Telephone Network

TP   Terminal Portability

5 Description

The TP supplementary service shall apply to the basic access.

A user engaged in an active call can adjourn communication by an appropriate signalling procedure and resume the call at a later time. This procedure applies independently to calling and called users.

The TP supplementary service shall allow a user during the active phase of a call:

-         to replace one terminal by another compatible terminal at the same socket;

-         to move from one terminal to another compatible terminal within a basic access;

-         to suspend the call and subsequently to resume it at the same terminal and the same socket;

-         to move a terminal from one socket to another one.

NOTE: In the cases involving physical disconnection and reconnection of terminals, or in moving from one terminal to another one, the user will be responsible for ensuring that compatibility with the suspended call is retained.

6 Procedures

6.1 Provision and withdrawal

This service shall be either provided by prior arrangement with the service provider or be available on a general basis.

Withdrawal shall be at the request of the customer or for administrative reasons.

6.2 Normal Procedures

6.2.1 Activation, deactivation and registration

Not applicable.

6.2.2 Erasure

Not applicable.

6.2.3 Invocation and operation

The TP supplementary service can only be invoked in the active phase of the call.

A user wishing to invoke the TP supplementary service shall suspend the call by sending an appropriate request. This request can contain a call identity limited to two characters. On receipt of this request, the network shall:

- store the call identity value if specified (if no call identity is specified the network shall allocate a null value);

- preserve the B-channel involved in the connection until the call is resumed or the time-out expires. This time-out shall be 3 minutes;

- preserve the connection; and

- send an acknowledgement to the controlling user and an indication to the remote user.

The terminal, upon receiving the acknowledgement, shall inform the user that the user can physically disconnect the terminal.

The user can resume the call within the time-out, by sending a request containing the call identity (if any) included in the suspension request. On receipt of the resumption request the network shall:

- re-establish the call;

- send an acknowledgement to the controlling user and an indication to the remote user.

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

6.2.4 Interrogation

Not applicable.

6.3 Exceptional procedures

6.3.1 Activation, deactivation and registration

Not applicable.

6.3.2 Erasure

Not applicable.

6.3.3 Invocation and operation

If the network cannot satisfy the user's request to suspend or resume the call, the network shall reject the request and shall send an appropriate indication to the user.

If the controlling user does not resume within the time-out, the network shall release the call. The network shall reject a subsequent resume request with an appropriate indication.

If the remote user releases the call while suspended, the network shall reject a subsequent resume request from the controlling user with an appropriate indication.

6.3.4 Interrogation

Not applicable.

7 Intercommunication considerations

7.1 Interworking with non-ISDNs

The operation of this supplementary service shall not be affected by the nature (i.e. ISDN or non-ISDN) of the far end of the connection.

However, in some interworking situations, the time-out for the release of the suspended call may be shorter than three minutes.

> NOTE: If the distant user is a PSTN user, the notifications about the suspend request or the resume request of the call to that user may not be supported.

7.2 Interworking with private ISDNs

When a remote user is on a different network from the served user (e.g., one user on a private ISDN and the other user on a public ISDN), indications to the remote user shall be sent to the remote user's network for forwarding to the remote user.

8 Interaction with other supplementary services

8.1 Advice of charge services

While a call is suspended charging information shall not be sent to the user.

8.1.1 Charging information at call setup time

If the charging rate changes when a call is in the suspended state, the new charging rate shall be given when the call is resumed.

8.1.2 Charging information during the call

At call suspension request, as a network option, the cumulative information (i.e. total charge incurred up to the moment when the call is suspended) can be given.

On resumption of the call, the sending of charging information shall start again and as a network option, the updated cumulative charging information can be given.

If the call is cleared while the call is suspended at the calling user's access, and if the calling user attempts to resume the call within the timer, then, as a network option, advice of charge information can be given to that user at the time of the resume attempt.

8.1.3 Charging information at the end of the call

If the call is cleared while the call is suspended at the calling user's access, and if the calling user attempts to resume the call within the timer, then, as a network option, advice of charge information can be given to the user at the time of the resume attempt.

8.2 Call waiting

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

> NOTE: A waiting call is not an active call and therefore cannot be suspended.

8.3 Call hold

A terminal cannot suspend an active call when a call is held at that terminal.

A held call shall not be suspended.

8.4 Call transfer services

8.4.1 Explicit call transfer

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.4.2 Single step call transfer

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.5 Number identification services

8.5.1 Calling line identification presentation

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.5.2 Calling line identification restriction

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.5.3   Connected line identification presentation

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.5.4   Connected line identification restriction

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.6   Closed user group

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.7   Completion of calls to busy subscriber

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

> NOTE: In the case of disconnected terminals, Completion of Calls to Busy Subscriber (CCBS) recalls shall be treated as not accepted upon expiry of the CCBS recall timer.

8.8   Conference services

8.8.1   Conference call, add-on

When a terminal manages an add-on conference, the TP supplementary service shall not be available.

8.8.2   Meet me conference

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.9   Direct dialling in

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.10   Diversion services

8.10.1   Call forwarding unconditional

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.10.2   Call forwarding busy

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.10.3   Call forwarding no reply

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.10.4 Call deflection

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.11 Freephone

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.12 Malicious call identification

The called user cannot invoke the malicious call identification supplementary service for a call which is suspended by the called user.

If the calling user clears while the call has been suspended by the called user, the called user cannot resume the call and hence cannot invoke the malicious call identification supplementary service for that call.

8.13 Multiple subscriber number

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.14 Subaddressing

No impact, i.e. neither supplementary service shall affect the operation of the other supplementary service.

8.15 Terminal portability

The TP supplementary service can be in operation at both the calling and called interfaces of a call.

8.16 Three party

The network shall prevent the served user of the three party supplementary service from invoking the TP supplementary service

8.17 User-user signalling

Not compatible, i.e. while a call is suspended user-user information cannot be transferred between the two users.

> NOTE: The network shall not store any user to user information while the call is suspended.

History

Document history	
October 1991	First Edition
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