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**Integrated Services Digital Network (ISDN);
User-to-User Signalling (UUS) supplementary service
Service description**

ETSI

European Telecommunications Standards Institute

ETSI Secretariat

Postal address: F-06921 Sophia Antipolis CEDEX - FRANCE

Office address: 650 Route des Lucioles - Sophia Antipolis - Valbonne - FRANCE

X.400: c=fr, a=atlas, p=etsi, s=secretariat - **Internet:** secretariat@etsi.fr

Tel.: +33 92 94 42 00 - Fax: +33 93 65 47 16

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Foreword

This final draft European Telecommunication Standard (ETS) has been produced by the Network Aspects (NA) Technical Committee of the European Telecommunications Standards Institute (ETSI), and is now submitted for the Voting phase of the ETSI standards approval procedure.

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 User-to-User Signalling (UUS) supplementary service. Stage 2 and stage 3 aspects are detailed in ETR 285 (1995) and ETS 300 286 (1995) respectively.

Proposed transposition dates	
Date of latest announcement of this ETS (doa):	3 months after ETSI publication
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	6 months after doa
Date of withdrawal of any conflicting National Standard (dow):	6 months after doa

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1 Scope

This final draft standard defines the stage one of the User-to-User Signalling (UUS) supplementary service 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 (see CCITT Recommendation I.130 [1]), but does not deal with the details of the human interface itself.

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.

Charging principles are outside the scope of this standard.

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

The UUS supplementary service enables a user to send/receive a limited amount of information to/from another user over the signalling channel in association with a call to the other user.

The UUS supplementary service is applicable to all circuit-switched telecommunications services.

This standard is applicable to the stage two and the stage three standards for the ISDN UUS 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 standard 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 telecommunication 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 I.210 (1988): "Principles of telecommunication services supported by an ISDN and the means to describe them".
- [4] CCITT Recommendation Q.9 (1988): "Vocabulary of switching and signalling terms".

3 Definitions

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

"UUS not required" request: a request where originating a call shall continue even if the request for the UUS supplementary service cannot be accepted.

"UUS required" request: a request where originating a call shall be rejected if the request for the UUS supplementary service cannot be accepted.

Basic access: see CCITT recommendation Q.9 [4], § 1, definition 1552.

Called user: the user who received an incoming call (originated by the calling user).

Calling user: the user who originates, or originated, the call.

Explicit request: the UUS supplementary service is considered as explicitly requested when a user requests the activation of the UUS supplementary service.

Implicit request: the UUS supplementary service is considered as implicitly requested when no explicit request for the UUS supplementary service is made and UUI is sent by the user when originating a call.

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

Point-to-multipoint configuration: a situation where multiple responses to an incoming call can occur.

Point-to-point configuration: a situation where multiple responses to an incoming call cannot occur.

Primary rate access: see CCITT recommendation Q.9 [4], § 1, definition 1552.

Remote user: the user who receives a request for activation of the UUS supplementary service.

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

Served user: the user to whom the UUS supplementary service is provided and who requests the activation of the UUS supplementary service.

Service 1: a form of the UUS supplementary service where UUI can be sent and received during the origination and termination of calls.

Service 2: a form of the UUS supplementary service where UUI can be sent and received after the calling user has received an indication that the called user is being informed of the call and prior to the establishment of the connection.

Service 3: a form of the UUS supplementary service where UUI can be sent and received only while the connection is established.

Supplementary service: see CCITT Recommendation I.210 [3], § 2.4.

User-to-User Information (UUI): the information transferred by using the UUS supplementary service.

4 Symbols and abbreviations

ISDN	Integrated Services Digital Network
ISUP	ISDN User Part
UUI	User-to-User Information
UUS	User-to-User Signalling

5 Description

The UUS supplementary service shall be available to users who are connected to a network via a basic access or a primary rate access.

The UUS supplementary service enables a user to send/receive a limited amount of information to/from another user over the signalling channel in association with a call to the other user. This information shall be passed transparently (i.e. without modification of contents) through the network. The network shall not interpret or act upon this information.

The user can transfer UUI in different phases of the call depending on the service(s) to which the user subscribes. These services are:

- **service 1:**

UUI can be sent and received during the origination and termination of calls.

In the case of a point-to-multipoint configuration at the called user, the following restrictions shall apply to the transfer of UUI:

- in the forward direction: UUI can be sent by the calling user only as part of the request for the origination of a call, or as part of the request to terminate the call. If the calling user terminates the call prior to the connection being established, UUI shall only be delivered to those terminals which have indicated that the user has been informed of the call;
- in the backward direction: UUI can be sent from the called user to the calling user with the indication that the called user is being informed of the call. It shall be the called user's responsibility to avoid contention. UUI can also be sent from the called user when answering the call;
- if the called user rejects the call and the network receives a single rejection from the called user, then the reason for rejection and the accompanying UUI (if any) shall be sent to the calling user.
- If the network receives multiple rejections from the called user, with the same or differing reasons for rejection, then the network shall select the first received, highest priority rejection (based upon the reason(s) for rejection). The reason for rejection and the accompanying UUI (if any) of the selected rejection shall be sent to the calling user.

- **service 2:**

UUI can be sent and received after the calling user has received an indication that the called user is being informed of the call and prior to the establishment of the connection. UUI sent by the calling user prior to receiving the acceptance of the call by the called user may, as a service provider option, be delivered to the called user after the call has been established.

Service 2 is only applicable if a point-to-point configuration exists at the called user's side;

- **service 3:**

UUI can be sent and received only while the connection is established.

Service 1, service 2 and service 3 shall allow the transmission of 128 octets per message.

NOTE: During an interim period of time, some service providers may support the transfer of only 32 octets of UUI on service 1.

Limitations are also placed on the number of messages per time unit for service 3. The flow control of each direction shall operate independently.

6 Procedures

6.1 Provision and withdrawal

The UUS supplementary service shall be provided to the user after prior arrangement with the service provider. No subscription is required for the remote user.

As a service provider option, one or any combination of the following can be provided:

- service 1 implicit request, or service 1 implicit request together with service 1 explicit request;
- service 2;
- service 3.

The UUS supplementary service shall be withdrawn by the service provider upon request of the subscriber or for service provider reasons.

As a service provider option, withdrawal can be done separately per service provided, or globally for all services provided to the served user.

6.2 Normal procedures

6.2.1 Activation, deactivation and registration

The UUS supplementary service is activated when:

- it is implicitly requested (for service 1); or
- it is explicitly requested (for service 1, service 2 and service 3) and accepted by the remote user.

Depending on the served user's subscription to the UUS supplementary service and the provision of the UUS supplementary service by the service provider, service 1 implicit, service 1 explicit, service 2 and service 3 can be activated individually or in combination. Service 1 implicit and service 1 explicit cannot be simultaneously active.

Once a service is activated (i.e. service 1 and/or service 2 and/or service 3) the network shall accept UUI from either user in the call, according to the service that has been activated.

The UUS supplementary service requires no registration.

6.2.1.1 Service 1

Service 1 shall be requested by the calling user when originating a call, if UUI transfer is desired in either direction.

Service 1 can be activated by means of an implicit request or an explicit request. Service 1 is implicitly requested when UUI is included when originating a call. The served user shall be given an explicit response (acceptance or rejection) to an explicit request. An explicit request can include UUI.

When service 1 is explicitly requested, the network shall inform the remote user of the request. The network shall interrogate for the availability of the UUS supplementary service of the remote user. No response from the remote user shall be taken by the network as a rejection of the request for the UUS supplementary service. The network shall explicitly indicate to the served user whether or not the requested service has been successfully activated.

When service 1 is explicitly requested, the remote user can include UUI when accepting the request for the UUS supplementary service.

When service 1 is implicitly requested, service 1 is active for the call, i.e. the remote user is not required to send a response to the implicit request. However, the remote user can include UUI in the call response (e.g. for user-to-user negotiation).

Service 1 is automatically deactivated when the call is terminated.

6.2.1.2 Service 2

Service 2 shall be requested by the calling user when originating a call, if UUI transfer is desired in either direction.

Service 2 shall be explicitly requested. The served user shall be given an explicit response (acceptance or rejection) to an explicit request.

For service 2 the network shall confirm the request for the UUS supplementary service. This confirmation shall be preceded by an end-to-end check by the network for service availability. The network shall interrogate for the availability of the UUS supplementary service of the remote user. No response from the remote user shall be taken by the network as a rejection of the request for the UUS supplementary service. The network shall explicitly indicate to the served user whether or not the requested service has been successfully activated.

Service 2 is automatically deactivated when the called user is no longer being informed of the call.

6.2.1.3 Service 3

The calling user can request the activation of service 3 when a call is originated or after the connection has been established. As a service provider option, the called user can request the activation of service 3 after the connection has been established. The calling user shall accept this request for the UUS supplementary service from the called user in order to activate the UUS supplementary service.

NOTE: Depending on the network connection selected when originating a call, the request for service 3 while the call is being originated or when the call has been established may fail.

Service 3 shall be explicitly requested. The served user shall be given an explicit response (acceptance or rejection) to an explicit request.

For service 3 the network shall confirm the request for the UUS supplementary service. This confirmation shall be preceded by an end-to-end check by the network for service availability. The network shall interrogate for the availability of the UUS supplementary service of the remote user. No response from the remote user shall be taken by the network as a rejection of the request for the UUS supplementary service. The network shall explicitly indicate to the served user whether or not the requested service has been successfully activated.

Service 3 is automatically deactivated when the call is no longer established.

6.2.1.4 "UUS required" request

When a call is originated, the calling user can specify whether the requested service(s) is(are) required for the call, i.e. if the call shall be completed or not, if UUI cannot be passed. If the "UUS required" request is given by the user, then the call shall not be completed if UUI cannot be passed to the remote user. If the "UUS not required" request is given by the user the call shall be completed even if UUI cannot be passed. If service 1 is implicitly requested or if service 3 is requested during the call, it cannot be requested as "UUS required".

6.2.2 Erasure

Not applicable.

6.2.3 Invocation and operation

The UUS supplementary service shall be invoked when UUI is sent by the user to the network.

When a user sends UUI the network shall not confirm its delivery to the user. The network shall not expect any confirmation from the destination of acceptance of UUI delivered to the user.

For service 2 and service 3, when sending a UUI message, the user can indicate that the user will send further UUI associated with this UUI message. This indication shall be given to the receiving user.

When sending a UUI message, the user shall indicate the use of a particular user protocol associated with the UUI message. This indication shall be given to the receiving user. The identification of, and the use of, user protocols is outside the scope of this standard.

6.2.3.1 Service 1

A user can transfer UUI when originating a call. When service 1 has been activated, either user can include UUI when accepting, rejecting and terminating a call.

NOTE: A calling user can request UUI transfer when originating a call and terminate the call before a connection is established.

6.2.3.2 Service 2

Any time between activation of service 2 and connection is established, a user can transfer up to 2 UUI messages in each direction to the other user involved in the call.

6.2.3.3 Service 3

After service 3 has been activated, a user can transfer UUI to the other user on the call after the connection has been established.

Network flow control mechanisms shall exist after the connection has been established in order to restrict the amount of UUI sent in each direction. A burst capability of sending N messages shall immediately be available to each user, where N initially equals the value of the burst parameter X. The value of N shall be decremented by one for every message sent by the user and incremented by Y at regular intervals of T (T = 10 seconds). The value of N shall be limited to a maximum of X.

The value of the burst parameter X shall be 16.

The value of the replenishment parameter Y shall be 8.

Network flow control shall be performed only by the sending user's network. The receiving user's network shall not perform flow control on UUI messages received from the sending user's network.

If UUI messages are received at a rate which exceeds the flow control limit set by the network, the network shall discard the UUI messages that cannot be handled and respond to the first discarded UUI message with a control indication.

When the flow control restrictions are removed, and a UUI message has been discarded due to that restriction, an indication that further UUI messages can be accepted shall be given. Otherwise no indication shall be given.

6.2.4 Interrogation

Not applicable.

6.3 Exceptional procedures

6.3.1 Activation, deactivation and registration

If the service provider cannot accept an implicit request for the activation of service 1, no notification shall be given to the user.

In all other cases, if the service provider cannot accept a request for the activation of the UUS supplementary service, the service provider shall reject the request. In addition, the service provider shall indicate which of service 1, service 2 and/or service 3 have been rejected. Possible reasons for rejection are:

- a) the UUS supplementary service not subscribed to;
- b) the remote user is not an ISDN user;
- c) the necessary signalling connectivity between sending and receiving users does not exist;
- d) user constraints prohibit activation of the UUS supplementary service between calling and called users (e.g. the closed user group supplementary service);
- e) network congestion.

NOTE: If UUI cannot be transferred for reasons b) or d) above, when originating a call, notification will not be provided until after the network has received a response to the origination of the call, since the network does not know in advance whether UUI can be transferred or not.

6.3.2 Erasure

Not applicable.

6.3.3 Invocation and operation

The user need not interpret incoming UUI. In such situations, the user can discard this UUI without disrupting normal call handling. The network shall not provide any indication to the sending user to indicate this occurrence.

NOTE 1: UUI sent near or at the end of a call may not reach its destination, e.g. if the called user initiates disconnection procedures prior to the arrival of the UUI.

Under circumstances of network congestion or failure the network can discard UUI associated with service 2 and service 3. If the amount of UUI exceeds the limit of the service, the network shall discard UUI associated with service 2 and service 3.

NOTE 2: Users desiring to have confirmed UUI delivery should employ their own end-to-end protocols (i.e. acknowledgements of receipt by another UUI).

In case of excessive UUI length, no truncation shall be performed by the network. UUI shall be discarded and, as a service provider option, the sending user shall be informed.

6.3.4 Interrogation

Not applicable.

7 Intercommunication considerations

Only those requests for service(s) supported on both the served user's network and the remote user's network shall be transferred to the other user. If a request for a service is received which cannot be transferred to the remote user, then that request shall be rejected by the requesting user's network.

NOTE: In the case of interworking between a network supporting ISDN User Part (ISUP) version 1 and a network supporting ISUP version 2, the above mentioned interworking requirement will not be met.

If an explicit request for service 1 with UUI, indicated as "UUS not required", is sent to an ISDN only supporting implicit requests, the UUI shall be transferred (i.e. as an implicit request) to the remote user. If the remote user replies with UUI then, as a service provider option, the served user's network shall generate an explicit acceptance. The explicit acceptance, with the UUI, shall be sent to the served user. If the remote user does not reply with UUI or if the service provider does not support the option above, then the served user's network shall send an explicit rejection to the served user.

For service 1, if UUI with a length exceeding 32 octets is received by a network supporting a maximum length of 32 octets, then the receiving network shall discard the UUI. No notification shall be given to the sending user.

The value of X and Y (see subclause 6.2.3.3) for international calls shall be $X = 16$ and $Y = 8$.

7.1 Interworking with non-ISDNs

UUI can be delivered only when a non-ISDN provides a means of conveying the UUI.

7.2 Interworking with private ISDNs

The UUS supplementary service can be provided to private ISDNs.

When the UUS supplementary service is activated on calls between users, one attached to a public ISDN, and one attached to a private ISDN, the public network shall consider its task complete once UUI is delivered to the private ISDN.

8 Interaction with other supplementary services

8.1 Advice of charge services

8.1.1 Charging information at call set-up time

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

8.1.2 Charging information during the call

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

8.1.3 Charging information at the end of the call

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

8.2 Call waiting

UUI (for the operation of service 1) included in the call request shall be delivered to the called user with the call waiting indication.

UUI (for the operation of service 2) sent from the calling user to the called user during the alerting phase can be sent when a point-to-point configuration exists at the called side.

There is no interaction with service 3 of the UUS supplementary service.

8.3 Call hold

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

8.4 Explicit call transfer

When calls are transferred as a result of invocation of the explicit call transfer supplementary service, the UUS supplementary service activated on either of the calls prior to the invocation of the explicit call transfer supplementary service shall be cancelled by the network.

No specific notification shall be sent to the users on the resulting call when the UUS supplementary service is no longer activated.

The users on the resulting call can request service 3 again, if required.

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

The network shall not store any information related to the UUS supplementary service provided by user A in the original call.

User A can request the activation of the UUS supplementary service and provide the UUI, as required, when accepting the completion of calls to busy subscriber recall. If the resulting completion of calls to busy subscriber call contains information related to the UUS supplementary service, this shall be handled as for the normal operation of the UUS supplementary service.

8.8 Conference services

8.8.1 Conference call add-on

For a conference, only service 3 shall be available.

NOTE 1: However, on calls which are set up to potential conferees outside the conference, service 1 and/or service 2 may be available.

In the following paragraphs, references to the UUS supplementary service refer only to service 3.

The UUS supplementary service cannot be activated by the conference controller, nor by a conferee, for communication between the participants in the conference.

When a user is added to the conference and the UUS supplementary service has been activated on the call between the conference controller and that user, the UUS supplementary service shall remain activated for communication between the conference controller and that conferee.

If the UUS supplementary service has been activated for communication between the conference controller and a conferee, then when a private communication is created with that party, the UUS supplementary service shall remain activated for the private communication.

NOTE 2: Once this private communication is created, it is considered as a separate call and therefore the normal procedures for the UUS supplementary service apply.

UUI can be sent by the conference controller to conferees individually, or broadcast to all conferees. UUI can be received by the conference controller from any of the conferees. The network shall identify the conferee sending the UUI to the conference controller.

The same limitations on the amount of UUI which can be transferred between two users shall apply to communications between the conference controller and the conference.

Conferees can send UUI to, and receive UUI from the conference controller. UUI shall not be transferred between the conferees in association with the conference.

8.8.2 Meet-me conference

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

NOTE: The conference resource cannot accept UUI. According to the procedures of the UUS supplementary service, UUI may be discarded, or the call to the conference rejected.

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

Any UUI or request for the UUS supplementary service shall be forwarded with the call.

NOTE: As a service provider option, this may be restricted to forwarding users who subscribe to the relevant parts of the UUS supplementary service.

After forwarding, the UUS supplementary service can be requested after the connection has been established.

8.10.2 Call forwarding busy

Any UUI or request for the UUS supplementary service shall be forwarded with the call.

NOTE: As a service provider option, this may be restricted to forwarding users who subscribe to the relevant parts of the UUS supplementary service.

After forwarding, the UUS supplementary service can be requested after the communication has been established.

8.10.3 Call forwarding no reply

Annex A gives an overview of the interaction between the UUS supplementary service and the call deflection (after alerting) and the call forwarding no reply supplementary services.

NOTE 1: As a service provider option, the forwarding of UUI, or requests for the UUS supplementary service may be restricted to forwarding users who subscribe to the relevant parts of the UUS supplementary service.

Service 1:

If the calling user requests service 1 implicit, then the call forwarding no reply supplementary service can be invoked. The request for service 1 shall be forwarded with the call.

If the calling user requests service 1 and indicates that it is required for the call to proceed, then the call forwarding no reply supplementary service shall be rejected and the call shall not be forwarded.

If the calling user requests service 1 and indicates that it is not required on the call, then:

- if the called user has explicitly accepted the request, then as a service provider option:
 - the request for the call forwarding no reply supplementary service will be rejected and the call shall not be forwarded; or
 - the request for the call forwarding no reply supplementary service can be accepted. In this case the call shall be forwarded and the request for service 1, together with any UUI, shall be forwarded with the call.

NOTE 2: In this case, the indication that the forwarded-to user is being informed of the call will not be sent to the calling user and any UUI included in this indication will be discarded.

NOTE 3: Also in this case, if the forwarded-to user rejects the request for service 1 when the connection is established, then this rejection may be given to the calling user.

- if the called user has rejected, or has ignored, the request, the call forwarding no reply supplementary service can be invoked. The call shall be forwarded without the request for service 1.

Service 2:

If the calling user requests service 2 and indicates that it is required for the call to proceed, then the call forwarding no reply supplementary service shall be overridden and the call shall not be forwarded.

If the calling user requests service 2 and indicates that it is not required on the call, then:

- if the called user has accepted the request for service 2, the invocation of the call forwarding no reply supplementary service shall be overridden and the call shall not be forwarded;
- if the called user has rejected or ignored the request for service 2, the call forwarding no reply supplementary service shall be invoked and the call shall be forwarded without the request for service 2.

NOTE 4: In this case, if the calling user sends UUI after the call has been forwarded, then this UUI will be discarded.

Service 3:

If the calling user requests service 3 when originating the call, then the call forwarding no reply supplementary service can be invoked. The request for service 3 shall be forwarded with the call.

After forwarding, the UUS service can be requested after the communication has been established.

8.10.4 Call deflection

Annex A gives an overview of the interaction between the UUS supplementary service and the call deflection (after alerting) and the call forwarding no reply supplementary services.

NOTE: As a service provider option, the forwarding of UUI, or requests for the UUS supplementary service may be restricted to deflecting users who subscribe to the relevant parts of the UUS supplementary service.

8.10.4.1 Request for the call deflection supplementary service in response to the offered call

Any user-to-user information or request for the UUS supplementary service shall be deflected with the call.

8.10.4.2 Request for the call deflection supplementary service during the period that the user is being informed of the incoming call

Service 1:

If the calling user requests service 1 implicit, then the call deflection supplementary service can be invoked. The request for service 1 shall be deflected with the call.

If the calling user requests service 1 and indicates that it is required for the call to proceed, then the call deflection supplementary service shall be rejected and the call shall not be deflected.

If the calling user requests service 1 and indicates that it is not required on the call, then:

- if the called user has explicitly accepted the request, then as a service provider option:
 - the request for the call deflection supplementary service will be rejected and the call shall not be deflected; or
 - the request for the call deflection supplementary service can be accepted. In this case the call shall be deflected and the request for service 1, together with any UUI, shall be deflected with the call.

NOTE 1: In this case, the indication that the deflected-to user is being informed of the call will not be sent to the calling user and any UUI included in this indication will be discarded.

NOTE 2: Also in this case, if the deflected-to user rejects the request for service 1 when the connection is established, then this rejection may be given to the calling user.

- if the called user has rejected, or has ignored, the request, the call deflection supplementary service can be invoked. The call shall be deflected without the request for service 1.

Service 2:

If the calling user requests service 2 and indicates that it is required for the call to proceed, then the call deflection supplementary service shall be overridden and the call shall not be deflected.

If the calling user requests service 2 and indicates that it is not required on the call, then:

- if the called user has accepted the request for service 2, then any request for the call deflection supplementary service shall be rejected and the call shall not be deflected;
- if the called user has rejected or ignored the request for service 2, then the call deflection supplementary service can be invoked and the call shall be deflected without the request for service 2.

NOTE 3: In this case, if the calling user sends UUI after the call has been deflected, then this information will be discarded.

Service 3:

If the calling user requests service 3 when originating the call, then the call deflection supplementary service can be invoked. The request for service 3 shall be deflected with the call.

8.10.4.3 After deflection

After deflection, the UUS service can be requested after the communication has been established.

8.11 Freephone

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

8.12 Malicious call identification

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

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

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

NOTE: The network shall not store any UUI while the call is suspended.

8.16 Three party

During the three-way conversation, the served user of the three party supplementary service can send UUI separately to each remote party of the three party supplementary service and the served user of the three party supplementary service can receive UUI separately from each remote party of the three party supplementary service. UUI shall not be transferred between the remote parties of the three party supplementary service.

8.17 User-to-user signalling

Not applicable.

Annex A (informative): Interaction between the UUS supplementary service and the call deflection (after alerting) and the call forwarding no reply supplementary services

Table A.1: Interaction between the UUS supplementary service and the call deflection (after alerting) and the call forwarding no reply supplementary services

Calling user		Forwarding user/deflecting user		
UUS service	Type of request	UUS request and/or UUI given to forwarding or deflecting user	Call is forwarded or deflected	UUS request and/or UUI forwarded or deflected
1	Implicit	Yes	Yes	Yes
1	Explicit, required	Yes (acceptance) Yes (no response) Yes (rejection)	No No Not applicable (rejection)	Not applicable Not applicable Not applicable
1	Explicit, not required	Yes (acceptance) Yes (no response) Yes (rejection)	(note) Yes Yes	(note) No No
2	Explicit, required	Yes (acceptance) Yes (rejection)	No (maintain) Not applicable (rejection)	No Not applicable
2	Explicit, not required	Yes (acceptance) Yes (no response) Yes (rejection)	No Yes Yes	Not applicable No No
3	Explicit, required, requested in call set-up	Yes	Yes	Yes
3	Explicit, not required, requested in call set-up	Yes	Yes	Yes
3	Explicit, not required requested while the call is established	No impact	No impact	No impact
<p>NOTE: As a service provider option:</p> <ul style="list-style-type: none"> - the request for the call forwarding no reply or the call deflection supplementary service will be rejected and the call will not be forwarded or deflected; or - the request for the call forwarding no reply or the call deflection supplementary service can be accepted. In this case, the call will be forwarded or deflected and the request for service 1, together with any UUI, will be forwarded or deflected with the call. 				

History

Document history			
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