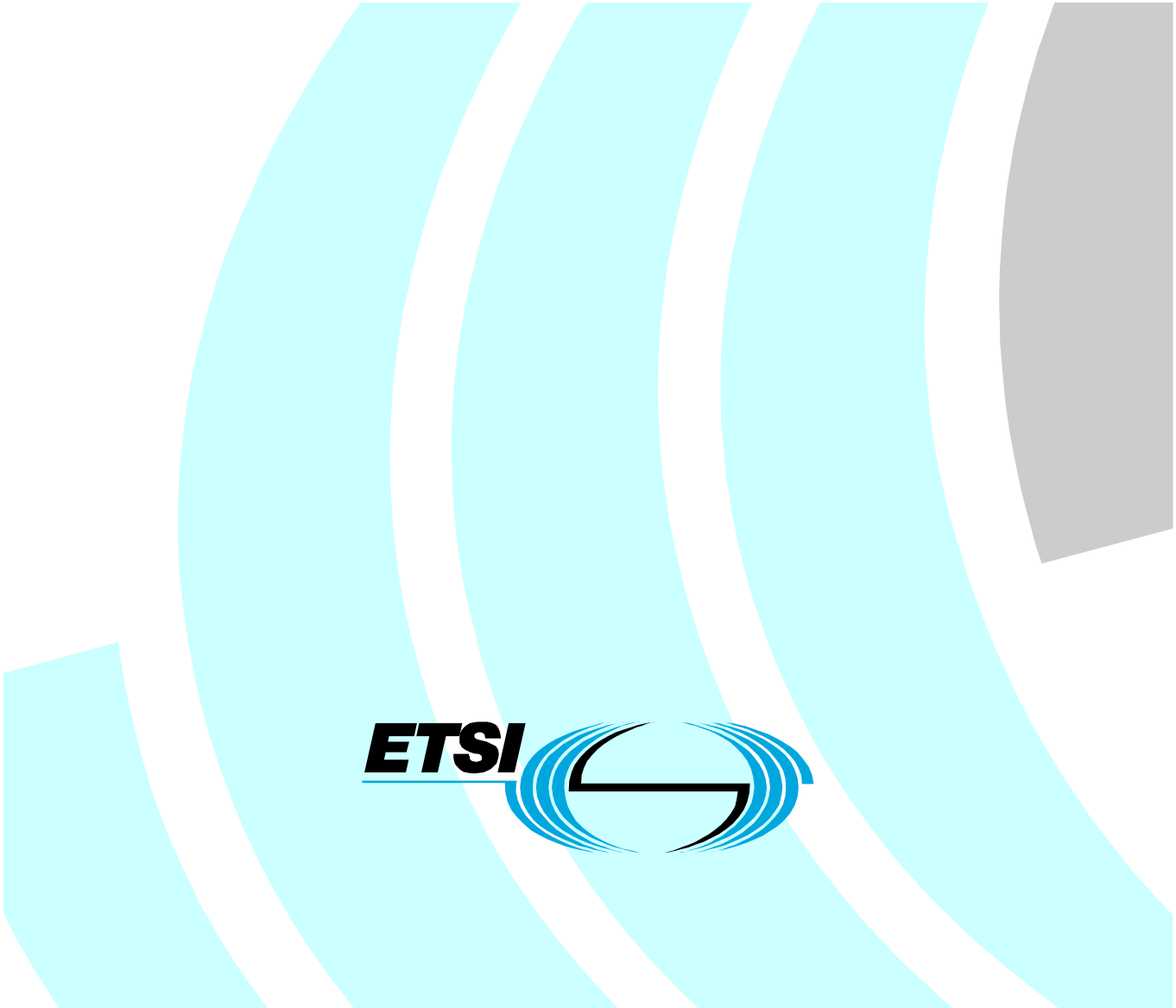
ETSI EN 300 356-22 V1.1.1 (2003-07)

European Standard (Telecommunications series)

Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP) version 4 for the international interface; Part 22: International Emergency Preference Scheme (IEPS) service

[ITU-T Amendments (2002) to Q.761 - Q.764 (1999) modified]



Reference
DEN/SPAN-130304

Keywords
emergency, endorsement, ISDN, ISUP, service, SS7

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Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

The present document is part 22 of a multi-part deliverable covering the ISDN User Part (ISUP) version 4 for the international interface, as identified below:

Part 1: "Basic services [ITU-T Recommendations Q.761 to Q.764 (1999) modified]";

Part 2: "ISDN supplementary service [ITU-T Recommendation Q.730 (1999) modified]";

Part 3: "Calling Line Identification Presentation (CLIP) supplementary service [ITU-T Recommendation Q.731, clause 3 (1993) modified]";

Part 4: "Calling Line Identification Restriction (CLIR) supplementary service [ITU-T Recommendation Q.731, clause 4 (1993) modified]";

Part 5: "Connected Line Identification Presentation (COLP) supplementary service [ITU-T Recommendation Q.731, clause 5 (1993) modified]";

Part 6: "Connected Line Identification Restriction (COLR) supplementary service [ITU-T Recommendation Q.731, clause 6 (1993) modified]";

Part 7: "Terminal Portability (TP) supplementary service [ITU-T Recommendation Q.733, clause 4 (1993) modified]";

Part 8: "User-to-User Signalling (UUS) supplementary service [ITU-T Recommendation Q.737, clause 1 (1997) modified]";

Part 9: "Closed User Group (CUG) supplementary service [ITU-T Recommendation Q.735, clause 1 (1993) modified]";

Part 10: "Subaddressing (SUB) supplementary service [ITU-T Recommendation Q.731, clause 8 (1992) modified]";

Part 11: "Malicious Call Identification (MCID) supplementary service [ITU-T Recommendation Q.731, clause 7 (1997) modified]";

Part 12: "Conference call, add-on (CONF) supplementary service [ITU-T Recommendation Q.734, clause 1 (1993) and implementors guide (1998) modified]";

Part 14: "Explicit Call Transfer (ECT) supplementary service [ITU-T Recommendation Q.732, clause 7 (1996) and implementors guide (1998) modified]";

Part 15: "Diversion supplementary service [ITU-T Recommendation Q.732, clauses 2 to 5 (1999) modified]";

Part 16: "Call Hold (HOLD) supplementary service [ITU-T Recommendation Q.733, clause 2 (1993) modified]";

Part 17: "Call Waiting (CW) supplementary service [ITU-T Recommendation Q.733, clause 1 (1992) modified]";

Part 18: "Completion of Calls to Busy Subscriber (CCBS) supplementary service [ITU-T Recommendation Q.733, clause 3 (1997) modified]";

Part 19: "Three-Party (3PTY) supplementary service [ITU-T Recommendation Q.734, clause 2 (1996) and implementors guide (1998) modified]";

Part 20: "Completion of Calls on No Reply (CCNR) supplementary service [ITU-T recommendation Q.733, clause 5 (1999) modified]";

Part 21: "Anonymous Call Rejection (ACR) supplementary service [ITU-T Recommendation Q.731, clause 4 (1993)]";

Part 22: "International Emergency Preference Scheme (IEPS) service [ITU-T Amendments (2002) to Q.761 - Q.764 (1999) modified]";

Part 31: "Protocol Implementation Conformance Statement (PICS) proforma specification for basic services";

Part 32: "Test Suite Structure and Test Purposes (TSS&TP) specification for basic services";

Part 33: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for basic services";

Part 34: "Protocol Implementation Conformance Statement (PICS) proforma specification for supplementary services";

Part 35: "Test Suite Structure and Test Purposes (TSS&TP) specification for supplementary services";

Part 36: "Abstract Test Suite (ATS) and partial Protocol Implementation eXtra Information for Testing (PIXIT) proforma specification for supplementary services".

The present document details the stage three aspects (signalling system protocols and switching functions) needed to support the International Emergency Preference Scheme (IEPS) service. The stage 1 aspects are detailed in ITU-T Recommendation E.106 [1].

National transposition dates	
Date of adoption of this EN:	27 June 2003
Date of latest announcement of this EN (doa):	30 September 2003
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	31 March 2004
Date of withdrawal of any conflicting National Standard (dow):	31 March 2004

Endorsement notice

The elements of ITU-T Amendment 2 to Q.761, Amendment 1 to Q.762, Amendment 2 to 763 and Amendment 2 to Q.764 apply with the following modifications.

Global modifications to ITU-T Amendments to Q.761 - Q.764

Insert the following two clauses (Scope and References).

Scope

The present document specifies the signalling protocol and switching aspects of the International Emergency Preference Scheme (IEPS) service for the pan-European Integrated Services Digital Network (ISDN) as provided by the European public telecommunications operators by means of the Signalling System No.7 protocol for the ISDN User Part (ISUP).

The present document 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 present document does not specify the additional protocol requirements for the national signalling interface.

NOTE 1: If the implementation of a signalling system in a national network conflicts with measures described here the international gateway of the network is expected to provide the interworking between the two.

Although the present document applies only to the international interconnection, the specification of functions, formats and codes of messages and signals, and actions performed at originating and destination local exchanges are retained.

Formats, codes and procedures marked for national use are included for informative purposes for the international interface specification. If these items so marked are supported within a national network and operator's network, then it is proposed that they shall be supported in this manner.

NOTE 2: In the case where a national signalling system behaves differently, the international gateway exchange is to support both the concerned national and international network.

The IEPS service provides the calling party with preferential treatment during call and connection setup.

The IEPS service is applicable to all international circuit switched telecommunication services.

References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies.

Referenced documents which are not found to be publicly available in the expected location might be found at http://docbox.etsi.org/Reference.

[1] ITU-T Recommendation E.106 (2000) "Description of an international emergency preference scheme (IEPS)"

[2] ETSI ETS 300 121 (Edition 1): "Integrated Services Digital Network (ISDN); Application of the ISDN User Part (ISUP) of CCITT Signalling System No.7 for international ISDN interconnections (ISUP version 1)".

[3] ETSI EN 300 356-1: "Integrated Services Digital Network (ISDN); Signalling System No.7 (SS7); ISDN User Part (ISUP) version 4 for the international interface; Part 1: Basic services [ITU-T Recommendations Q.761 to Q.764 (1999) modified]".

Specific modifications to ITU-T Amendments to Q.761 - Q.764 (12/99)

Amendment 2 to ITU-T Recommendation Q.761 is endorsed without any modifications.

Amendment 1 to ITU-T Recommendation Q.762 is endorsed without any modifications.

Amendment 2 to ITU-T Recommendation Q.763 is endorsed without any modifications.

Amendment 2 to ITU-T Recommendation Q.764 is endorsed with the following modifications.

In all chapters on Actions required at an outgoing, intermediate or incoming international exchange:

- in the first sentence the phrase "call establishment proceeds with priority" is improved to read "call and connection establishment proceeds with priority";
- in the second paragraph the phrase "the call is queued and shall take precedence over any other normal call attempts" is replaced by "then the call is placed at the top of the call handling queue in the exchange. The priority calls queued shall take priority over any other call handling for the next free trunk from that exchange. For that purpose the exchange continually tries to find a suitable outgoing trunk until call establishment is discontinued. The calls in the queue are handled in the order of "first come, first served". The size of the queue is configurable according to traffic management";
- in the first sentence of the third paragraph the first word "Optionally" is deleted and the words "may be" are replaced by the word "is";
- the first sentence of the third paragraph is continued with the words "indicating that the call request has been put into a waiting queue for priority call setup";
- after the first sentence of the third paragraph the following sentence is inserted: "The parameter may be used at the originating exchange to play tones and/or announcements to the calling subscriber.";
- at the end of the third paragraph the following sentence is attached: "If call and connection establishment does not succeed they are released on expiry of T9 (answer supervision timer)."

The resulting modifications to the Amendment 2 of ITU-T Recommendation Q.764 are as follows:

NOTE: Underlining and/or strike-out are used to highlight detailed modifications.

2.1.1.3 Actions required at an outgoing international exchange

Amend the following

e) International Emergency Preference Scheme

If an outgoing international exchange receives information from the national network that the call is to be treated as an IEPS call (e.g. CPC value of IEPS), call and connection establishment proceeds with priority. The call is established with the CPC set as IEPS call marking in the outgoing IAM. Restrictive network management controls (e.g. Automatic Call Gapping, ISUP Signalling Congestion Control, Automatic Congestion Control, Hard-to-Reach procedure) are not applied to this call.

If routeing procedures fail to find an outgoing circuit, ~~the call is queued and shall take precedence over any other normal call attempts.~~ then the call is placed at the top of the call handling queue in the exchange. The priority calls queued shall take priority over any other call handling for the next free trunk from that exchange. For that purpose the exchange continually tries to find a suitable outgoing trunk until call establishment is discontinued. The calls in the queue are handled in the order of "first come, first served". The size of the queue is configurable according to traffic management.

~~Optionally,~~If queuing occurs, an early ACM (called party status set to "no indication") with the inclusion of the generic notification parameter set to "call completion delay" ~~may be~~ is returned to the originating exchange indicating that the call request has been put into a waiting queue for priority call setup. The parameter may be used at the originating exchange to play tones and/or announcements to the calling subscriber. However if the incoming IAM had requested continuity check (either on this circuit or a previous circuit), the early ACM (no indication) shall not be sent until a successful continuity indication has been received. If call and connection establishment does not succeed they are released on expiry of T9 (answer supervision timer).

2.1.1.3 Actions required at an intermediate international exchange

Amend the following

e) International Emergency Preference Scheme

If an intermediate international exchange receives a call with CPC set to IEPS, the call and connection establishment proceeds with priority. The call is established with the CPC set as IEPS call marking in the outgoing IAM. Restrictive network management controls (e.g. Automatic Call Gapping, ISUP Signalling Congestion Control, Automatic Congestion Control, Hard-to-Reach procedure) are not applied to this call.

If routeing procedures fail to find an outgoing circuit, ~~the call is queued and shall take precedence over any other normal call attempts.~~ then the call is placed at the top of the call handling queue in the exchange. The priority calls queued shall take priority over any other call handling for the next free trunk from that exchange. For that purpose the exchange continually tries to find a suitable outgoing trunk until call establishment is discontinued. The calls in the queue are handled in the order of "first come, first served". The size of the queue is configurable according to traffic management.

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2.1.1.3 Actions required at an incoming international exchange

Amend the following

e) International Emergency Preference Scheme

If an incoming international exchange receives a call with CPC set to IEPS, the call and connection establishment proceeds with priority. The call is established with the CPC set as IEPS call marking or national specific information for IEPS call treatment in the outgoing IAM. Restrictive network management controls (e.g. Automatic Call Gapping, ISUP Signalling Congestion Control, Automatic Congestion Control, Hard-to-Reach procedure) are not applied to this call.

If routeing procedures fail to find an outgoing circuit, ~~the call is queued and shall take precedence over any other normal call attempts.~~ then the call is placed at the top of the call handling queue in the exchange. The priority calls queued shall take priority over any other call handling for the next free trunk from that exchange. For that purpose the exchange continually tries to find a suitable outgoing trunk until call establishment is discontinued. The calls in the queue are handled in the order of "first come, first served". The size of the queue is configurable according to traffic management.

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2.1.2.3 Actions required at an outgoing international exchange

Amend the following

e) International Emergency Preference Scheme

If an outgoing international exchange receives information from the national network that the call is to be treated as an IEPS call (e.g. CPC value of IEPS), call and connection establishment proceeds with priority. The call is established with the CPC set as IEPS call marking in the outgoing IAM. Restrictive network management controls (e.g. Automatic Call Gapping, ISUP Signalling Congestion Control, Automatic Congestion Control, Hard-to-Reach procedure) are not applied to this call.

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Amend the following

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History

Document history			
V1.1.1	February 2003	One-step Approval Procedure	OAP 20030627: 2003-02-26 to 2003-06-27
V1.1.1	July 2003	Publication	