International Telecommunication Union

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.764

Amendment 4

(01/2006)

SERIES Q: SWITCHING AND SIGNALLING

Specifications of Signalling System No. 7 – ISDN user part

Signalling System No. 7 – ISDN User Part signalling procedures

Amendment 4: Support for the International Emergency Preference Scheme

ITU-T Recommendation Q.764 (1999) – Amendment 4

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ITU-T Recommendation Q.764

Signalling System No. 7 – ISDN User Part signalling procedures

Amendment 4

Support for the International Emergency Preference Scheme

Summary

This amendment was produced to meet the need for the implementation of the International Emergency Preference Scheme (IEPS) for disaster recovery operations as specified in ITU-T Rec. E.106. It contains the modifications to ITU-T Rec. Q.764 (1999) in order to accommodate these needs. This amendment should be read in conjunction with Amendment 3 to ITU-T Rec. Q.761, Amendment 3 to ITU-T Rec. Q.762, and Amendment 4 to ITU-T Rec. Q.763. This amendment incorporates Amendment 2 to ITU-T Rec. Q.764 and provides enhancements.

Source

Amendment 4 to ITU-T Recommendation Q.764 (1999) was approved on 27 January 2006 by ITU-T Study Group 11 (2005-2008) under the WTSA Resolution 1 procedure.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this Recommendation is voluntary. However, the Recommendation may contain certain mandatory provisions (to ensure e.g. interoperability or applicability) and compliance with the Recommendation is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the Recommendation is required of any party.

INTELLECTUAL PROPERTY RIGHTS

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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ITU-T Recommendation Q.764

Signalling System No. 7 – ISDN User Part signalling procedures

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Support for the International Emergency Preference Scheme

1) Clause 1.2 – References

Insert the following new reference:

[28] ITU-T Recommendation E.106 (2003), *International Emergency Preference Scheme (IEPS) for disaster relief operations.*

2) Clause 1.4 – Abbreviations

Add the following new abbreviations alphabetically:

CPC Calling Party's Category

IEPS International Emergency Preference Scheme

3) Clause 2.1.1.3 – Actions required at an outgoing international exchange

Add 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 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 routing procedures fail to find an outgoing circuit, the call is queued and shall take precedence over any other normal call attempts.

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 returned to the originating exchange. 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.

4) Clause 2.1.1.4 – Actions required at an intermediate international exchange

Add the following:

e) *International Emergency Preference Scheme*

If an intermediate international exchange receives a call with CPC set to IEPS, the call 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 routing procedures fail to find an outgoing circuit, the call is queued and shall take precedence over any other normal call attempts.

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 returned to the originating exchange. 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.

5) Clause 2.1.1.5 – Actions required at an incoming international exchange

Add the following:

e) *International Emergency Preference Scheme*

If an incoming international exchange receives a call with CPC set to IEPS, the call 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 routing procedures fail to find an outgoing circuit, the call is queued and shall take precedence over any other normal call attempts.

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 returned to the originating exchange. 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.

6) Clause 2.1.2.3 – Actions required at an outgoing international exchange

Add 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 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 routing procedures fail to find an outgoing circuit, the call is queued and shall take precedence over any other normal call attempts.

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 returned to the originating exchange. 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.

7) Clause 2.1.2.4 – Actions required at an intermediate international exchange

Add the following:

e) *International Emergency Preference Scheme*

If an intermediate international exchange receives a call with CPC set to IEPS, the call 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 routing procedures fail to find an outgoing circuit, the call is queued and shall take precedence over any other normal call attempts.

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 returned to the originating exchange. 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.

8) Clause 2.1.2.5 – Actions required at an incoming international exchange

Add the following:

e) *International Emergency Preference Scheme*

If an incoming international exchange receives a call with CPC set to IEPS, the call 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 routing procedures fail to find an outgoing circuit, the call is queued and shall take precedence over any other normal call attempts.

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 returned to the originating exchange. 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.

9) New clause 2.28

Add the following new clause:

2.28 IEPS call information

2.28.1 Actions required at an outgoing international gateway exchange

Where the exchange logic determines that an IEPS call (as set out in 2.1.1.3 e and 2.1.2.3 e) requires IEPS information to be transported in the forward direction and based on bilateral agreement between administrations, the exchange shall include the IEPS call information parameter in the outgoing IAM. This parameter will contain the identity of the entity (the country or international network) originating the IEPS call, and the national priority level of the call. The priority level in the IEPS call information parameter will be the national priority level of the call in the entity originating the call. The priority level in the IEPS call information parameter is signalled in inverse order of the numerical value, i.e., the lower the numerical value is, the higher the priority. For example, numerical value 0 indicates the highest priority possible.

2.28.2 Actions required at an intermediate international exchange

If an intermediate international exchange receives a call with CPC set to IEPS, the call establishment proceeds with priority. The call is established with the CPC set as IEPS in the outgoing IAM. The IEPS call information parameter shall be passed on transparently. The exchange shall not provide IEPS priority treatment if the CPC value is not IEPS, even if the optional IEPS call information parameter is present.

2.28.3 Actions required at an incoming international gateway exchange

If an incoming international gateway exchange receives a call with CPC set to IEPS, the call establishment proceeds with priority. On receipt of the IEPS call information parameter, the incoming international gateway exchange may provide enhanced service features by analysing the contents of this parameter. The exchange may provide a mapping of the IEPS priority level received from the entity (the country or international network) originating the IEPS call to that of the entity (the country or international network) of call destination. In case mapping is not implemented, the IEPS call information parameter may be discarded, however, the call shall continue to be treated as a priority call. The call is established with the CPC set as IEPS or national specific information for IEPS call treatment in the outgoing IAM.

If the IEPS call information parameter is expected (due to bilateral agreements) but is not received for an IEPS call (i.e., CPC is set to IEPS), the call establishment proceeds with priority. If the IEPS call information parameter is received containing a value (country/international network code and/or priority level), which has not been bilaterally agreed for an IEPS call (i.e., CPC is set to IEPS), the call establishment proceeds with priority. The call is established with the CPC set as IEPS or national specific information for IEPS call treatment in the outgoing IAM. A default priority value will be used for the call in the entity of call destination. The exchange shall not provide IEPS priority treatment if the CPC value is not IEPS, even if the optional IEPS call information parameter is present.

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Printed in Switzerland
Geneva, 2006