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ITU-T

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STANDARDIZATION SECTOR
OF ITU

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SERIES Q: SWITCHING AND SIGNALLING

Clauses applicable to ITU-T standard systems – Abnormal conditions

Abnormal conditions – Special release arrangements

ITU-T Recommendation Q.118

(Previously CCITT Recommendation)

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ITU-T RECOMMENDATION Q.118

ABNORMAL CONDITIONS – SPECIAL RELEASE ARRANGEMENTS

Summary

This Recommendation describes arrangements for releasing connections resulting from abnormal conditions such as calling or called party clearing.

Source

ITU-T Recommendation Q.118 was revised by ITU-T Study Group 11 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 12th of September 1997.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the ITU. The 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 Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 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.

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As of the date of approval of this Recommendation, the 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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Recommendation Q.118

ABNORMAL CONDITIONS – SPECIAL RELEASE ARRANGEMENTS

(revised in 1997)

1 Answer signal not received by an outgoing exchange after receiving a number-received signal or number-received information (Systems No. 4 and R2) or after receiving an address complete signal (Systems No. 6 and No. 7) or after transmitting the ST signal (System No. 5)

It is recommended that arrangements should be made, either in the national network of the outgoing country or at the outgoing international exchange, for the connection to be released if an answer signal is not received within a delay period of 1.5 to 3 minutes as soon as it is known, or can be assumed, that the called subscriber's line has been reached. In addition, Administrations with ability to discriminate call answers may adopt a shorter interval which may be as low as 1 minute. However, this will require bilateral agreement.

This represents an improvement from earlier values of 2 to 4 minutes. Application of this 1.5- to 3-minute values is left to Administrations.

If an Administration adopts a shorter delay period for this forced release condition, there will be a risk that the international connection will be released prematurely on calls not returning an answer signal. If the maximum delay of 3 minutes is exceeded, it will of course involve an unnecessary occupation of international circuits.

2 Delay in clearing by the calling subscriber in automatic service (arrangements made in the outgoing country)

In automatic working, arrangements must be made to clear the international connection and stop the charging if, between 10-60 seconds, with a preferred value of 30 seconds after receipt of the clear-back signal, the calling subscriber has not cleared. Clearing of the international connection should preferably be controlled from the point where the charging of the calling subscriber is carried out.

Such timed supervision may also be applied in semi-automatic service.

During the establishment of a connection to a PABX extension, it is not appropriate to send a clear-back signal. However, if a PABX returns a clear-back condition, the duration must be less than 10 seconds, so that it would not unintentionally clear the connection, especially on calls from networks with short time-out.¹

¹ For a call where the charging is applied to called party (e.g. free phone service), the time-out may be reduced. The value to be chosen is for further study.

3 Clear-forward signal not received by the incoming exchange after sending a clear-back signal²

The incoming circuits at the incoming international exchange should include an arrangement for releasing the national part of the connection if, after sending a clear-back signal, a clear-forward signal is not received within 2 to 3 minutes (provided that a similar arrangement is not already made in the national network of the incoming country). This arrangement avoids indefinite blocking of the national circuits of the country of destination or of the subscriber's line in the case of interruptions of the line or of equipment faults.

Since the call may be a semi-automatic call not including the time-out of clause 2 at the outgoing end, the expiry of the 2 to 3 minute time-out should not cause any alarm or blocking actions on the international circuit.

² These release arrangements may not be used within some regional networks.

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