



Uppgjord - prepared Telefoni RB,AHE	Faktaansvarig - Subject responsible	Nr - No 8211-A335			
Dokumentansvarig/Godkänd - Document responsible/Approved Telefoni Bengt Estmalm	Datum - Date 98-06-15	Rev C	File/Tillhör	S-klass Ö	

ISDN-ISDN SIGNALLING INTERFACE FOR SWEDEN

SCOPE

This specification defines an interface between two public networks based on the ISDN standard. This specification is based on ITU-T Q.767 Application of the ISDN User Part of CCITT Signalling System number 7 for international ISDN interconnections. This specification consists of comments, additions or deletions to the ITU-T Rec. The paragraph numbers refer to the paragraph numbers in the ITU-T Rec. Q.767.

INTRODUCTION

Since Q.767 does not cover all requirements, some additional parameters and procedures are added. The addition of call diversion services shall be based on ETS 300 356-15. Since that is not published yet, the coding have been described according to ITU-T Rec. Q.732 (to which the ETSI document is an exceptions document) and ITU-T Rec. Q.763 The procedure for location number is covered in ITU-T Rec. Q.764.

In Annex 1 the coding of additional parameters are given. This is given for illustrative purpose. If there is a deviation between it and ITU-T Rec. Q.763 the ITU-T Rec. Q.763 shall be applied with the exception for the parameter compatibility information parameter.

REVISION HISTORY

Revision	Remarks
Revision B	95-05-31 The inclusion of over-lap signalling
Revision C	98-06-15 Refinement of the text related to the echo control procedure The inclusion of a new code point (0000010) in the nature of address indicator in the called party number in the IAM. The addition of the nature of address value 0000011 (national significant number) for the connected number.



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Revision C	Clarification of which type of numbers that are applicable for the calling party number.
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EXCEPTIONS AND CLARIFICATIONS TO ITU-T REC.Q.767

Paragraph number	Comments, additions or deletions
1 Introduction	An annex 1/ 8211 A-335 is added to describe additional coding requirements.
2 Services supported	2.3 Supplementary services Each supplementary service to be introduced between the networks requires bilateral agreements between the operators. However, a transit network may support the transport of supplementary service information in spite of that there is no bilateral agreement between the operators to provide the service. See figure 1.
	The interface has the possibility for the following additional supplementary services: <ul style="list-style-type: none">- Call forwarding unconditional (CFU);- Call forwarding busy (CFB);- Call forwarding no reply (CFNR);- Call deflection (CD)
	<p>Figure 1</p> <p>Network 3 can work as a transit network for a service between network 1 and 2 without having bilateral agreement for the service with operator 1.</p>



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Paragraph number	Comments, additions or deletions
3 Exceptions and clarifications to the blue book ISUP recommendation	Applicable, with the comments, additions and deletions mentioned for each section below.
3.1 General	Applicable
3.2 Exceptions and clarifications to Rec.Q.761	Applicable
General comments to Rec.Q.762	<p>An additional parameter is added to provide the identification of the location of the calling subscriber and the identity of the calling network.</p> <p>Some additional parameters are provided to support the call diversion services.</p> <p>Parameter compatibility information parameter is added to align with 1992 years ISUP recommendation and the later addition of bits G and F in that parameter.</p> <p>See Annex 1 to 8211-A335 for the details.</p>



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Paragraph number	Comments, additions or deletions
3.3 Exceptions and clarifications to Rec.Q.762	<p style="text-align: center;">TABLE 2/Q.767</p> <p>1.21 Continuity check request message Not used</p> <p>1.26 Forward transfer message Not used.</p> <p>1.37. Subsequent address message See comments to Rec.Q.764 section 2.1.2.</p> <p>2.4 Automatic congestion level Automatic congestion control is not used.</p> <p>2.5 Call forwarding may occur indicator It is replaced by the ISUP 1992 definition.</p> <p>2.30 Continuity check indicator See comments to table 4/Q.767, section 3.16.</p> <p>2.44 Internal network number indicator See comments to table 4/Q.767, section 3.7.</p>
	<ul style="list-style-type: none">- The following ISUP-1992 parameters are added:- 2.7 Call diversion information- 2.8 Call diversion may occur indicator.- 2.53 Generic notification- 2.76 Location number- 2.100 Original called number- 2.105 Parameter compatibility information- 2.117 Redirecting number- 2.121 Redirection information- 2.122 Redirection number- 2.123 Redirection number restriction <p>All definitions to information elements contained in the above listed parameters are also added.</p>



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Paragraph number	Comments, additions or deletions
	Table 3/Q.767 (mandatory and optional parameters, Q.762) The parameters listed as additions to table 2/Q.767 are all optional parameters except the location number that is mandatory. See also comments to tables in table 4/Q.763 to see in which messages the new parameters are carried.
3.4 Exceptions and clarifications to Rec.Q.763	TABLE 4/Q.767 2.1 Message type codes Table 3/Q.763 The following message types are not used: - Continuity check request message - Forward transfer message - Subsequent address (see comments to Rec.Q.764, section 2.1.2). 3.1 Parameter names Table 4/Q.763 The following parameters are not used: - Automatic congestion level The parameters according to annex 1 to 8211-A335 (this document) shall be added.



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	<p style="text-align: center;">TABLE 4/Q.767</p> <p>3.4 Backward call indicators For the echo control device indicator see comments to table 5/Q.767, section 2.8.</p> <p>3.7 Called party number The internal network number indicator is always set to 1 "routing to internal network number not allowed". The nature of address indicator code point 0000010 is added. The use of the code point requires bilateral agreement.</p> <p>3.10 Calling party number Both the nature of address value 000 0100 (international) and 000 0011 (national significant number) are applicable.</p> <p>3.16 Connected number Both the nature of address value 000 0100 (international) and 000 0011 (national significant number) are applicable.</p> <p>3.23 Nature of connection indicators In the continuity check indicator only the values 00 "continuity check not required" and 10 "continuity check performed on a previous circuit" are used. For the echo control device indicator see comments to table 5/Q.767 section 2.8.</p>
	Additional ISUP92 parameters are described in annex 1 (to 8211-A335)

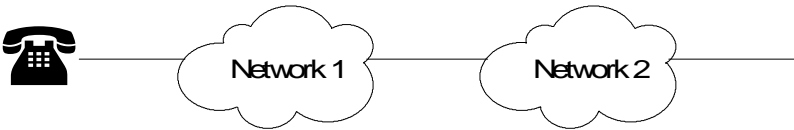


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3.5 Exceptions and clarifications to Rec.Q.764	<p style="text-align: center;">Q.763 TABLES in TABLE 4/Q767</p> <p>TABLE 5 Address complete message shall be enhanced with:</p> <ul style="list-style-type: none">Generic notification indicatorsRedirection numberRedirection number restriction indicatorCall diversion information <p>TABLE 6 Answer message shall be enhanced with:</p> <ul style="list-style-type: none">Redirection number restriction indicator <p>TABLE 7 Call progress message shall be enhanced with:</p> <ul style="list-style-type: none">Generic notification indicatorCall diversion informationRedirection numberRedirection number restriction indicator <p>TABLE 11 Connect message shall be enhanced with:</p> <ul style="list-style-type: none">Redirection number restriction indicator <p>TABLE 16 Initial address message shall be enhanced with:</p> <ul style="list-style-type: none">Redirecting numberRedirection informationOriginal called numberLocation number <p>TABLE 17 Release message</p> <p>Automatic congestion level shall be deleted.</p>



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	<p align="center">TABLE 5/Q 767 (exceptions to Q.764)</p> <p>2.1.1/2.1.2 Forward address signalling En bloc operation/Overlap operation Whether en bloc or overlap operation shall be applied is agreed between the operators. Default method is en bloc, i.e. SAMs are not used.</p> <p>For calling party address both international 000 0100 and national significant number 000 0011 are applicable.</p> <p>2.1.8 Continuity check Continuity check is not applied at the interface: This means that the value 01 Continuity check required is not applied. However , the value 10 continuity check performed on previous circuit must be understood and reacted on in appropriate way.This also include the reception of the continuity message.</p> <p>2.1.12 Forward transfer Forward transfer is not applicable at the interface.</p>
	<p>2.8 Echo control procedures</p>  <p>Telia network does not include any echo device for incoming or outgoing calls via another Swedish operator. In the picture network 2 has to provide echo control device for the call..</p>
	<p>2.12 Automatic congestion control Automatic congestion control is not applicable at the interface.</p>



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	Internal network number The coding of the bit is agreed between the operators. User service information No screening is made by the fixed network on the received values of User service information field.
3.6 Exceptions and clarifications to Rec.Q.730	NOTE: Each supplementary service requires bilateral agreement between the concerned operators.



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MESSAGE TRANSFER PART (MTP)

The MTP protocol shall conform with 8211-A304.

The NI value 3 is used between the networks. It is up to each network to decide which value to be used inside the network.