



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.763

Amendment 1
(03/2001)

SERIES Q: SWITCHING AND SIGNALLING

Specifications of Signalling System No. 7 – ISDN user part

Signalling System No. 7 – ISDN user part formats
and codes

**Amendment 1: Coding of the application
transport parameter**

ITU-T Recommendation Q.763 – Amendment 1

(Formerly CCITT Recommendation)

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ITU-T Recommendation Q.763

Signalling System No. 7 – ISDN user part formats and codes

AMENDMENT 1

Coding of the application transport parameter

Summary

This Amendment supersedes Addendum 1 (06/2000) to ITU-T Q.763. It contains updated information with regard to the application transport parameter (APP).

Source

Amendment 1 to ITU-T Recommendation Q.763 was prepared by ITU-T Study Group 11 (2001-2004) and approved under the WTSA Resolution 1 procedure on 1 March 2001.

FOREWORD

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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.

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ITU-T Recommendation Q.763

Signalling System No. 7 – ISDN user part formats and codes

AMENDMENT 1

Coding of the application transport parameter

Introduction

This amendment contains the full text of ITU-T Q.763 Addendum 1 (06/2000) with two additional modifications incorporated, allowing the amendment to supersede Addendum 1. The revision marks that were shown in Addendum 1 have been preserved. The two modifications are shown in bold, underlined italics.

1) Tables 21/Q.763, 22/Q.763, 23/Q.763, 27/Q.763, 32/Q.763, 51/Q.763 and 52/Q.763

Modify the Note in Tables 21/Q.763 (ACM), 22/Q.763 (ANM), 23/Q.763 (CPG), 27/Q.763 (CON), 32/Q.763 (IAM), 51/Q.763 (APM) and 52/Q.763 (PRI):

NOTE – The message may contain one or more Application transport parameters (APP) referring to different Application Context Identifiers. Multiple application transport parameters (APP) can be sent in the same message, provided that they belong to different segmentation sequences.

2) Clause 3.82

Modify the coding of the APP as follows:

3.82 Application transport parameter (APP)

The format of the application transport parameter field is shown in Figure 77.

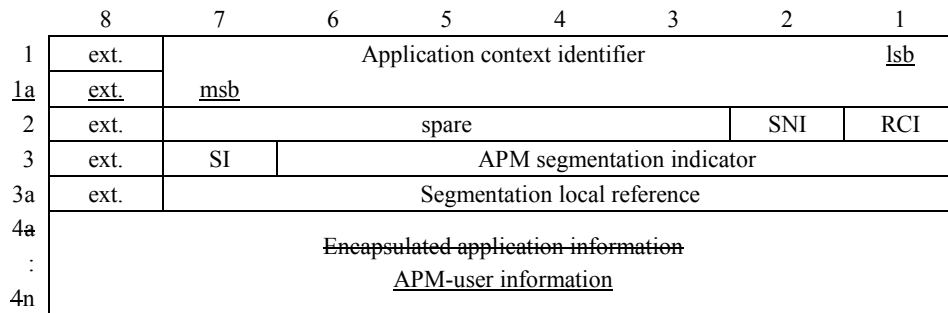


Figure 77/Q.763 – Application transport parameter field

The following codes are used in the application transport parameter field:

a) *Extension indicator (ext.):* as in 3.25 a)

b) *Application context identifier (ACI) (Octet 1 and Octet 1a)*

b1) If the extension bit is set to 1 in Octet 1, Octet 1a is absent. The value contained in Octet 1 bits 1-7 shall be interpreted as follows:

0 0 0 0 0 0	Unidentified Context and Error Handling (UCEH) ASE
0 0 0 0 0 1	PSS1 ASE (VPN)
0 0 0 0 1 0	spare
0 0 0 0 1 1	Charging ASE

The preceding values are used by APM'98'-user applications.

0 0 0 0 1 0 0	GAT
0 0 0 0 1 0 1	BAT ASE
0 0 0 0 1 1 0	<u>Enhanced Unidentified Context and Error Handling ASE (EUCEH ASE)</u>

0 0 0 0 1 0 1 1	} Spare <i>for international use</i>
to	

0 1 1 1 1 1 1	} reserved for non-standardized <u>APM'98'-user applications</u>
1 0 0 0 0 0 0	
to	
1 1 1 1 1 1 1	

b2) If the extension bit is set to 0 in Octet 1, Octet 1a is present. In that case, the ACI is a 14-bit field:

Octet 1a	Octet 1	
Bits 1-7	Bits 1-7	
0 0 0 0 0 0 1	0 0 0 0 0 0 0	} reserved for non-standardized <u>APM'2000'-user applications</u>
to		
0 0 0 0 0 0 1	1 1 1 1 1 1 1	
0 0 0 0 0 1 0	0 0 0 0 0 0 0	} <i>Spare for national use</i>
to		
1 1 1 1 1 1 1	1 1 1 1 1 1 1	

NOTE 1 – The compatibility mechanism as defined in ITU-T Q.764 is not applicable to this field.

c) *Application transport instruction indicators*

bit 1	Release call indicator (RCI)
0	do not release call
1	release call

bit 2	Send notification indicator (SNI)
0	do not send notification
1	Send notification

d) *APM segmentation indicator*

0 0 0 0 0 0	}	final segment
0 0 0 0 0 1		
to	}	indicates the number of following segments
0 0 1 0 0 1		
0 0 1 0 1 0		
to		
1 1 1 1 1 1	}	spare

NOTE 2 – The compatibility mechanism as defined in ITU-T Q.764 is not applicable to this field.

e) *Sequence indicator (SI)*

0 subsequent segment to first segment
 1 new sequence

f) *Segmentation local reference (SLR)*

g) *APM-user information field*

The format and coding of this field depends on the Application Context Identifier.

g1) If the ACI corresponds to an APM'98'-user application, then the format of the APM-user information field is shown in Figure 77.1.

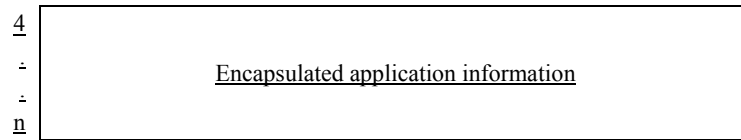


Figure 77.1/Q.763 – Content of the APM-user information field for APM'98'-user applications

The content of this field is described in g2.4).

g2) If the ACI corresponds to an APM'2000'-user application, then the format of the APM-user information field is shown in Figure 77.2:

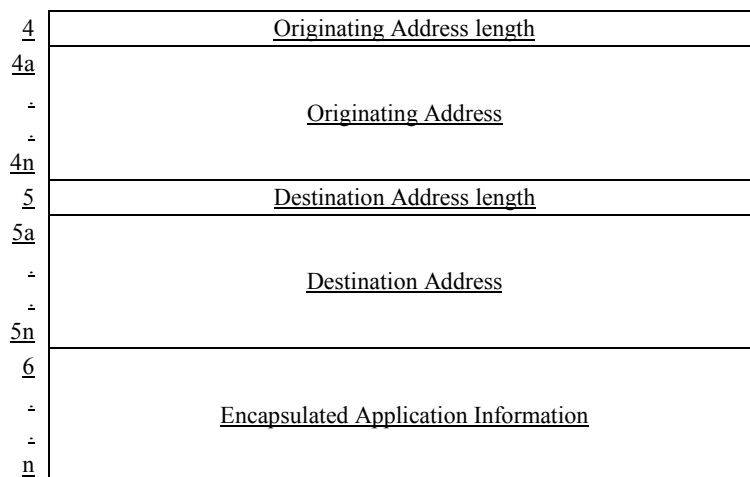


Figure 77.2/Q.763 – Content of the APM-user information field for APM'2000'-user applications

The coding of the APM-user information field is as follows:

g2.1) Originating address length

The values are 0, 3-20.

g2.2) Destination address length

The values are 0, 3-20.

g2.3) Originating address/Destination address

The originating address (destination address) field is not present if the originating address length (destination address length) is set to zero.

The format of the Originating and Destination address fields is shown in Figure 77.3.

	8	7	6	5	4	3	2	1
1	O/E		Nature of address indicator					
2	INN Ind.		Numbering plan Ind.			Spare		
3	2nd address signal				1st address signal			
⋮								
⋮								
m	Filler (if necessary)				nth address signal			

Figure 77.3/Q.763 – Content of the Originating address (Destination address) field

The following codes are used in the Originating address and the Destination address fields:

1) Odd/even indicator (O/E): as in 3.9 a)

2) Nature of address indicator

<u>0 0 0 0 0 0</u>	<u>spare</u>
<u>0 0 0 0 0 1</u>	<u>reserved for subscriber number</u>
<u>0 0 0 0 1 0</u>	<u>unknown (national use)</u>
<u>0 0 0 0 1 1</u>	<u>national (significant) number</u>
<u>0 0 0 1 0 0</u>	<u>international number</u>
<u>0 0 0 1 0 1</u>	<u>network-specific number (national use)</u>
<u>0 0 0 1 1 0</u>	<u>network routing number in national (significant) number format (national use)</u>
<u>0 0 0 1 1 1</u>	<u>network routing number in network-specific number format (national use)</u>
<u>0 0 0 1 0 0 0</u>	<u>reserved for network routing number concatenated with directory number</u>
<u>0 0 0 1 0 0 1</u>	} <u>spare</u>
<u>to</u>	
<u>1 1 0 1 1 1 1</u>	} <u>reserved for national use</u>
<u>1 1 1 0 0 0 0</u>	
<u>to</u>	
<u>1 1 1 1 1 1 0</u>	
<u>1 1 1 1 1 1 1</u>	<u>spare</u>

3) Internal network number indicator (INN ind.)

0 routing to internal network number allowed

1 routing to internal network number not allowed

4) Numbering plan indicator

0 0 0 spare

0 0 1 ISDN (Telephony) numbering plan (ITU-T E.164)

0 1 0 spare

0 1 1 reserved for data numbering plan (ITU-T X.121)

1 0 0 reserved for telex numbering plan (ITU-T F.69)

1 0 1 reserved for national use

1 1 0 reserved for national use

1 1 1 spare

5) Address signal

0 0 0 0 digit 0

0 0 0 1 digit 1

0 0 1 0 digit 2

0 0 1 1 digit 3

0 1 0 0 digit 4

0 1 0 1 digit 5

0 1 1 0 digit 6

0 1 1 1 digit 7

1 0 0 0 digit 8

1 0 0 1 digit 9

1 0 1 0 spare

1 0 1 1 code 11

1 1 0 0 code 12

1 1 0 1 spare

1 1 1 0 spare

1 1 1 1 spare

The most significant address signal is sent first. Subsequent address signals are sent in successive 4-bit fields.

6) Filler: as in 3.9 f)

Gg2.4) Encapsulated application information:

Contains the application-specific information.

The format and coding of this field is dependent upon the APM-user application and defined in the appropriate Recommendation. For APM-user applications that wish to provide a service of transparent transport of information (e.g. the case where existing information elements are defined for the transport of certain information) as well as having the ability of passing additional network-related information within the public network, then the following guideline is provided:

It is suggested that this field be structured such that the first octet (i.e. first octet of first segment for long APM-user information) is a pointer to information to be transported transparently. The pointer value (in binary) gives the number of octets between the pointer itself (included) and the first octet (not included) of transparent data. The pointer value "all zeros" is used to indicate that no transparent data is present. The range of octets between the pointer octet and the first octet of transparent data (to which the pointer octet points) contains the network-related information to be passed between the applications residing within the public network. The format and coding of both the transparent information and the network-related information is application-specific and defined in the appropriate Recommendation.

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