

TELECOMMUNICATION STANDARDIZATION SECTOR OF ITU

Q.763 Addendum 1 (05/98)

SERIES Q: SWITCHING AND SIGNALLING Specifications of Signalling System No. 7 – ISDN user part

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

Addendum 1

ITU-T Recommendation Q.763 - Addendum 1

(Previously CCITT Recommendation)

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# **ITU-T RECOMMENDATION Q.763**

## SIGNALLING SYSTEM No. 7 – ISDN USER PART FORMATS AND CODES

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## **Summary**

Publication of this addendum is a result of the approval process of Recommendations Q.765 (05/98) and Q.765.1 (05/98).

#### **Source**

Addendum 1 to ITU-T Recommendation Q.763 was prepared by ITU-T Study Group 11 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 15<sup>th</sup> of May 1998.

#### **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 term *recognized operating agency (ROA)* includes any individual, company, corporation or governmental organization that operates a public correspondence service. The terms *Administration, ROA* and *public correspondence* are defined in the *Constitution of the ITU (Geneva, 1992)*.

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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.763**

#### SIGNALLING SYSTEM No. 7 – ISDN USER PART FORMATS AND CODES

#### **ADDENDUM 1**

(Geneva, 1998)

NOTE – The definition of values 'xx' is for further study.

#### 1) PRI – Additions

# **Pre-release Information Message (PRI)**

- In Table 4/Q.763 under subclause 1.3/Q.763 "Message type code", insert the following row:

Pre-release information	XX	0100 0010
-------------------------	----	-----------

- In clause 4/Q.763 "ISDN user part messages and codes", add the following table:

# Table xx/Q.763 – Message Type: Pre-release information

Parameter	Reference (subclause)	Туре	Length (octets)
Message type	2.1	F	1
Optional forward call indicators (Note)	3.38	О	3
Optional backward call indicators (Note)	3.37	О	3
Parameter compatibility information	3.41	О	4-?
Message compatibility information	3.33	О	3-?
Application transport (new parameters as required)	3.xx	О	5-?
End of optional parameters	3.20	О	1

NOTE – These parameters are required to allow the message to be segmented using the ISUP Simple Segmentation mechanism. They should be mutually exclusive.

## 2) APM – Additions

# **Application Transport Message (APM)**

- In Table 4/Q.763 under subclause 1.3/Q.763 "Message type code", insert the following row:

Application transport	xx	0100 0001
-----------------------	----	-----------

In clause 4/Q.763 "ISDN user part messages and codes"; add the following table:

Table xx/Q.763 – Message Type: Application transport

Parameter	Reference (subclause)	Туре	Length (octets)
Message type	2.1	F	1
Message compatibility information	3.33	О	3-?
Parameter compatibility information	3.41	О	4-?
Application Transport	3.xx	О	5-?
End of optional parameters	3.20	О	1

# **Application Transport Parameter (APP)**

- In Table 5/Q.763 under subclause 3.1/Q.763 "Parameter names", insert the following row:

Application transport	3.xx	0111 1000	
-----------------------	------	-----------	--

Add the following new suclause to define the new parameter:

# 3.xx Application Transport Parameter (APP)

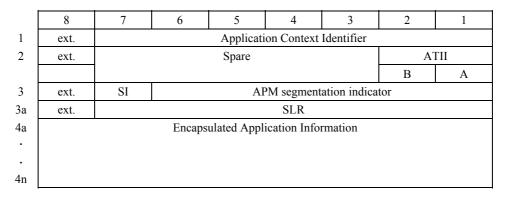


Figure xx/Q.763 – Application transport parameter

- a) Extension indicators
  - 0 further octet exists
  - 1 last octet

NOTE – Extensions to Octet 1 are for the expansion of the Application Context Identifier value range.

- b) Application Context Identifier (ACI) (Octet 1)
  - 0 Unidentified Context and Error Handling (UCEH) ASE
  - 1 PSS1 ASE (VPN)
  - 2-63 Spare
  - 64-127 Reserved for non-standardized applications

NOTE – The compatibility mechanism as defined in Recommendation Q.764 is not applicable to this field.

c) Application Transport Instruction Indicators (ATII) (Octet 2)

bit A: Release call indicator

0 do not release call

1 release call

bit B: Send notification indicator

0 do not send notification

1 send notification

d) *APM segmentation indicator (Octet 3)* 

0 final segment

1-9 indicates the number of following segments

10-255 spare

NOTE – The compatibility mechanism as defined in Recommendation Q.764 is not applicable to this field.

- e) Sequence indicator (SI) (Octet 3)
  - 0 Subsequent segment to first segment
  - 1 New sequence
- f) Segmentation Local Reference (SLR) (Octet 3a)
- g) 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 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.

- In Tables 21/Q.763 (ACM), 22/Q.763 (ANM), 23/Q.763 (CPG), 27/Q.763 (CON) and 32/Q.763 (IAM) as well as in the new Table xx/Q.763 (PRI) and Table xx/Q.763 (APM), insert the following row:

Application transport	3.xx	О	5-?
1 1			

and add the corresponding Note:

NOTE 3 – The message may contain one or more Application Transport parameters (APP) referring to different Application Context Identifiers.

#### 3) Modifications to subclause 3.26/Q.763

Modify subclause 3.26/Q.763 as follows (Deleted text is struckthrough; new or changed text is double-underlined):

#### Generic number 3.26

The following codes are used in the generic number parameter field:

Number qualifier indicator a)

```
0000 0000
              reserved (dialled digits) (national use)
0000 0001
              additional called number (national use)
0000 0010
              reserved (supplemental user provided calling number - failed network
              screening) (national use)
0000 0011
              reserved (supplemental user provided calling number – not screened)
              (national use)
0000 0100
              reserved (redirecting terminating number) (national use)
0000 0101
              additional connected number
0000 0110
              additional calling party number
0000 0111
              reserved for additional original called number
0000 1000
              reserved for additional redirecting number
0000 1001
              reserved for additional redirection number
0000 1010
              reserved (used in 1992 version)
0000 1010
    to
              spare
0111 1111
1000 0000
    to
              reserved for national use
1111 1110
```

1111 1111 reserved for expansion

- Odd/even indicator: see 3.9 a) b)
- c) Nature of address indicator

```
000 0000
            spare
            subscriber number (national use)
000 0001
000 0010
            unknown (national use)
000 0011
            national (significant) number
000 0100
            international number
```

#### PISN specific number (national use) 000 0101

$$\frac{000\ 0110}{\text{to}}$$
 spare

spare

reserved for national use

111 1111 spare

NOTE - For each supplementary service the relevant codes and possible default settings are described in the supplementary service Recommendations (Recommendation Q.73x).

- d) Number incomplete indicator
  - 0 number complete
  - 1 number incomplete
- e) Numbering plan indicator
  - 000 spareunknown (national use)
  - 001 ISDN (telephony) numbering plan (Recommendation E.164)
  - 010 spare
  - 011 data numbering plan (Recommendation X.121) (national use)
  - 100 telex numbering plan (Recommendation F.69) (national use)
  - 101 private numbering plan (national use)
  - 110 reserved for national use
  - 111 spare

NOTE – For supplementary service the relevant codes and possible default settings are described in the supplementary service Recommendations (Recommendation Q.73x).

- f) Address presentation restricted indicator
  - 00 presentation allowed
  - 01 presentation restricted
  - 10 address not available
  - 11 spare

NOTE – For each supplementary service the relevant codes and possible default settings are described in the supplementary service Recommendations (Recommendation Q.73x). When the address presentation restricted indicator indicates address not available, the subfields in items b), c), d), and e) are coded with 0's, and the screening indicator is set to 11 (network provided).

Screening indicator g)

> Only used if the number qualifier indicator is coded 0000 0101 (additional connected number) or 0000 0110 (additional calling party number) this indicator is coded as follows:

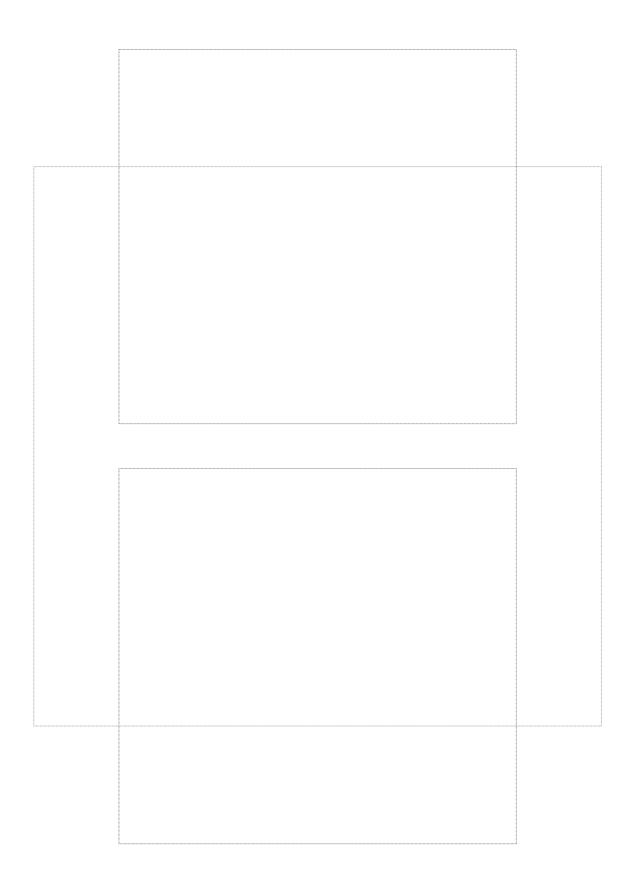
- 00 user provided, not verified
- 01 user provided, verified and passed
- 10 user provided, verified and failed
- 11 network provided

NOTE – For each supplementary service the relevant codes and possible default settings are described in the supplementary service Recommendations (Recommendation Q.73x).

# h) Address signal

```
digit 0
0000
        digit 1
0001
        digit 2
0010
0011
        digit 3
0100
        digit 4
        digit 5
0101
        digit 6
0110
        digit 7
0111
1000
        digit 8
        digit 9
1001
1010
 to
        spare
1111
```

i) Filler: see 3.9 f)



## ITU-T RECOMMENDATIONS SERIES Series A Organization of the work of the ITU-T Series B Means of expression: definitions, symbols, classification Series C General telecommunication statistics Series D General tariff principles Series E Overall network operation, telephone service, service operation and human factors Series F Non-telephone telecommunication services Series G Transmission systems and media, digital systems and networks Series H Audiovisual and multimedia systems Series I Integrated services digital network Series J Transmission of television, sound programme and other multimedia signals Series K Protection against interference Series L Construction, installation and protection of cables and other elements of outside plant TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits Series M Series N Maintenance: international sound programme and television transmission circuits Series O Specifications of measuring equipment Series P Telephone transmission quality, telephone installations, local line networks **Series O** Switching and signalling Series R Telegraph transmission Series S Telegraph services terminal equipment Series T Terminals for telematic services Series U Telegraph switching Series V Data communication over the telephone network Series X Data networks and open system communications Series Y Global information infrastructure Series Z Programming languages