INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Q.763
Addendum 1
(06/2000)

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

(Formerly CCITT Recommendation)

ITU-T Q-SERIES RECOMMENDATIONS

SWITCHING AND SIGNALLING

For further details, please refer to the list of ITU-T Recommendations.

ITU-T Recommendation Q.763

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

ADDENDUM 1

Summary

This addendum contains the modifications to ITU-T Q.763 (1999) in order to accommodate the needs of revised ITU-T Q.765 (2000).

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 Conference (WTSC), 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 WTSC 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.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

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.

ITU-T Recommendation Q.763

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

ADDENDUM 1

1) **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), 52/Q.763 (PRI)**

Modifiy Note 3 in Tables 21, 22, 23, 27 and 32; Note 1 in Table 51 and Note 2 in Table 52 as follows:

NOTE – Multiple application transport parameters (APP) can be sent in the same message, provided that they belong to different segmentation sequences.

2) **Subclause 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.

	8	7	6	5	4	3	2	1
1	ext.		Application context identifier					lsb
1a	ext.	msb						
2	ext.		spare				SNI	RCI
3	ext.	SI	APM segmentation indicator					
3a	ext.	Segmentation local reference						
4	APM-user information							
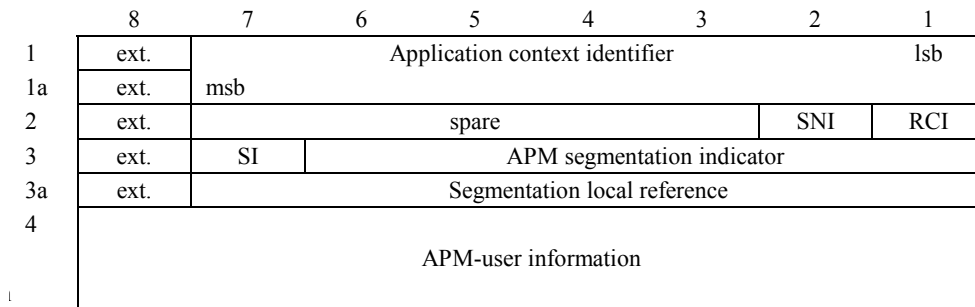
Figure 77/Q.763 – Application transport parameter field

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

a)   *Extension indicator (ext.):* as subclause 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 0   Unidentified Context and Error Handling (UCEH) ASE
   0 0 0 0 0 0 1   PSS1 ASE (VPN)
   0 0 0 0 0 1 0   spare
   0 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     Enhanced Unidentified Context and Error Handling ASE (EUCEH ASE)
0 0 0 0 1 1 1 ⎫
      to        ⎬  spare
0 1 1 1 1 1 1 ⎭
1 0 0 0 0 0 0 ⎫
      to        ⎬  reserved for non-standardized APM'98'-user applications
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 APM'2000'-user applications
      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 ⎫
                              ⎬
      to                      ⎬  spare
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 <u>1</u>   *Release call indicator (RCI)*
   0   do not release call
   1   release call

bit <u>2</u>   *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        ⎬  spare
1 1 1 1 1 1 ⎭
```

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*

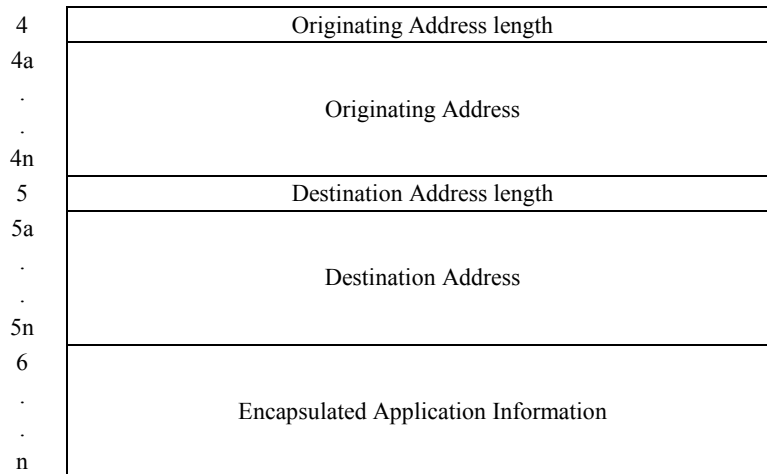The format and coding of this field depends on the Application Context Identifier.

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.

```
4
.
.
n
```
Encapsulated application information
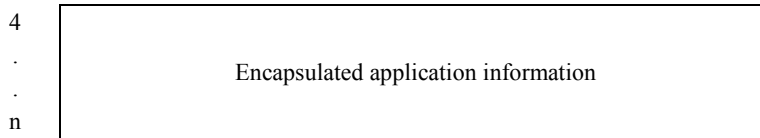
**Figure 77.1/Q.763 – Content of the APM-user information field
for APM'98'-user applications**

The content of this field is described in subclause 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:

```
4
4a
.
.
4n
5
5a
.
.
5n
6
.
.
n
```
Originating Address length
Originating Address
Destination Address length
Destination Address
Encapsulated Application Information

**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)				*n*th 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 subclause 3.9 a)

2) *Nature of address indicator*

0 0 0 0 0 0 0	spare
0 0 0 0 0 0 1	reserved for subscriber number
0 0 0 0 0 1 0	unknown (national use)
0 0 0 0 0 1 1	national (significant) number
0 0 0 0 1 0 0	international number
0 0 0 0 1 0 1	network-specific number (national use)
0 0 0 0 1 1 0	network routing number in national (significant) number format (national use)
0 0 0 0 1 1 1	network routing number in network specific number format (national use)
0 0 0 1 0 0 0	reserved for network routing number concatenated with directory number

0 0 0 1 0 0 1
    to   spare
1 1 0 1 1 1 1

1 1 1 0 0 0 0
    to   reserved for national use
1 1 1 1 1 1 0

1 1 1 1 1 1 1   spare

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 subclause 3.9 f)

g2.4)   *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.

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of 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
Series M	TMN and network maintenance: international transmission systems, telephone circuits, telegraphy, facsimile and leased circuits
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 Q	**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 and Internet protocol aspects
Series Z	Languages and general software aspects for telecommunication systems