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International Telecommunication Union
Standardization Sector

Recommendation

ITU-T Q.763 (1999) Amd. 7 (12/2023)

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Signalling System No. 7 – ISDN User Part formats and codes

Amendment 7 – Extensions for the support for the calling line identification authentication

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Recommendation ITU-T Q.763

Signalling System No. 7 – ISDN User Part formats and codes

Amendment 7 – Extensions for the support for the calling line identification authentication

Summary

Amendment 7 to Recommendation ITU-T Q.763 was produced to meet the need for the implementation of calling line identification authentication (CIDA) as specified in ITU-T Q.3063 (2022). This amendment contains the modifications to Recommendation ITU-T Q.763 (1999) in order to accommodate these needs. This amendment should be read in connection with the related amendments to Recommendations ITU-T Q.761 and ITU-T Q.762.

History *

Edition	Recommendation	Approval	Study Group	Unique ID
1.0	ITU-T Q.763	1984-10-19		11.1002/1000/6655
2.0	ITU-T Q.763	1988-11-25		11.1002/1000/2234
3.0	ITU-T Q.763	1993-03-12	11	11.1002/1000/2235
4.0	ITU-T Q.763	1997-09-12	11	11.1002/1000/4265
4.1	ITU-T Q.763 (1997) Add. 1	1998-05-15	11	11.1002/1000/4655
5.0	ITU-T Q.763	1999-12-03	11	11.1002/1000/4788
5.1	ITU-T Q.763 (1999) Add. 1	2000-06-15	11	11.1002/1000/5119
5.2	ITU-T Q.763 (1999) Amd. 1	2001-03-01	11	11.1002/1000/5412
5.3	ITU-T Q.763 (1999) Cor. 1	2001-07-13	11	11.1002/1000/5491
5.4	ITU-T Q.763 (1999) Amd. 2	2002-12-29	11	11.1002/1000/6202
5.5	ITU-T Q.763 (1999) Amd. 3	2004-04-13	11	11.1002/1000/7262
5.6	ITU-T Q.763 (1999) Amd. 4	2006-01-27	11	11.1002/1000/8611
5.7	ITU-T Q.763 (1999) Amd. 5	2006-09-13	11	11.1002/1000/8904
5.8	ITU-T Q.763 (1999) Amd. 6	2009-10-29	11	11.1002/1000/10227
5.9	ITU-T Q.763 (1999) Amd. 7	2023-12-14	11	11.1002/1000/15750

* To access the Recommendation, type the URL https://handle.itu.int/ in the address field of your web browser, followed by the Recommendation's unique ID.

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Recommendation ITU-T Q.763

Signalling System No. 7 – ISDN User Part formats and codes

Amendment 7 – Extensions for the support for the calling line identification authentication

1 Scope

The amendment was produced to meet the need for the implementation of the calling line identification authentication. This amendment contains the modifications to Recommendation ITU-T Q.763 (1999) in order to accommodate these needs.

2 Formats and codes of ISUP

1) Clause 0.4 – Abbreviations

Add the following new abbreviations in alphabetical order:

IAM Initial Address Message

UTC Coordinated Universal Time

2) Table 5

Modify Table 5 in order to introduce the following new certificate (3.107), new signature (3.108) and new indicator (3.109):

Table 5/Q.763

Parameter name	Reference (subclause)	Code
Certificate	3.107	1001 0000
Signature	3.108	1001 0001
Calling line identification authentication indicator	3.109	1001 0010

3) Table 32

Modify Table 32 to include the certificate, signature and indicator parameters in the initial address message (IAM) message as follows:

Table 32/Q.763

Message Type: Initial address			
Parameter name	**Reference (subclause)**	**Type**	**Length (octets)**
Certificate	3.107	O	41-?
Signature	3.108	O	66-?
Calling line identification authentication indicator	3.109	O	3

4) New clause 3.107 – Certificate indicator

Add new clause 3.107 defining the certificate indicator parameter as follows:

3.107 Certificate indicator

The format of the certificate indicator parameter field is shown in Figure 100.

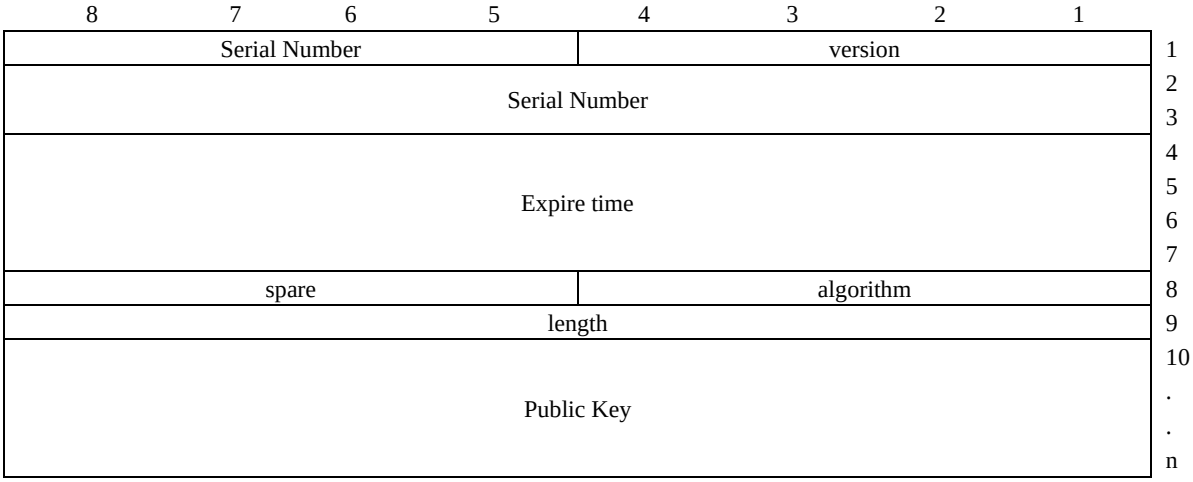

Figure 100/Q.763 – Certificate parameter field

The following codes are used in the certificate parameter field:

a) Version

The version shall hold the version of the encoded public-key certificate.

0000 spare

0001 version 1

0010 version 2

0011 version 3

b) Serial Number

Serial Number is a pure binary representation of the integer assigned to the certificate.

c) Expire time

A number represents the seconds passed since 1970-01-01 00:00:00(UTC) that the certificate will be not valid after this time. This is generated by the CA.

d) algorithm

The code of the algorithm which this public key is an instance of:

0000	RSAEncryption
0001	dhpublicnumber
0010	id-dsa
0011	id-ecPublicKey
0100	
…	reserve
1111	

e) length

The length indicates length of public key

f) Public key

The **Public Key** shall hold the public key being certified.

5) New clause 3.108 – signature indicator

Add new clause 3.108 defining the signature indicator parameter as follows:

3.108 Signature indicator

The format of the signature indicator parameter field is shown in Figure 101.

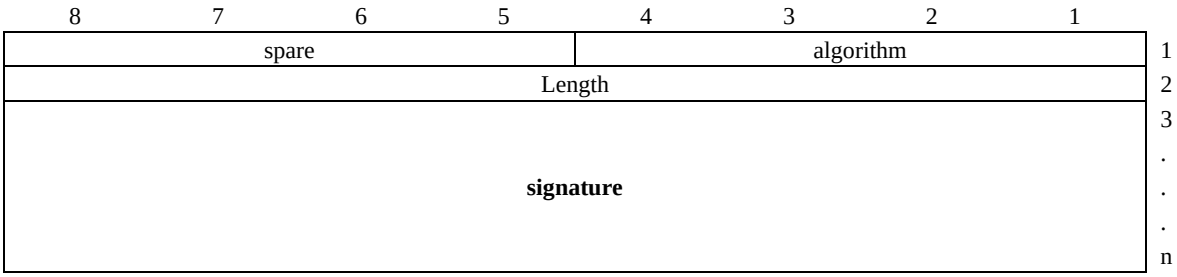

Figure 101/Q.763 – Signature parameter field

The following codes are used in the signature parameter field:

a) Algorithm

0000	sha256WithRSAEncryption
0001	sha384WithRSAEncryption
0010	dsa-with-sha256
0011	ecdsa-with-SHA256
0100	
…	reserve
1111	

b) length

The length indicates length of public key.

c) signature

The **signature** shall hold the signature being signed.

6) New clause 3.109 – calling line identification authentication indicator

Add new clause 3.109 defining the calling line identification authentication indicator parameter as follows:

3.109 Calling line identification authentication indicator

The format of the calling line identification authentication indicator parameter field is shown in Figure 102.

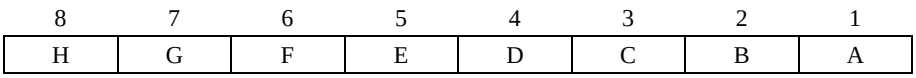

Figure 102/Q.763 – Calling line identification authentication indicator parameter field

The following codes are used in the calling line identification authentication indicator parameter field:

bit	A	*calling line identification authentication indicator*
	0	successful authentication
	1	unsuccessful authentication

bits H-B *Spare*

3 Bibliography

Add a Bibliography with the following entries:

[b-ITU-T Q.761] Recommendation ITU-T Q.761 (1999), *Signalling System No. 7 – ISDN User Part functional description*.

[b-ITU-T Q.762] Recommendation ITU-T Q.762 (1992), *Signalling System No. 7 – ISDN User Part general functions of messages and signals*.

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