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SERIES G: TRANSMISSION SYSTEMS AND MEDIA,
DIGITAL SYSTEMS AND NETWORKS

Digital transmission systems – Terminal equipments –
General

Sub STM-0 network node interface for the synchronous digital hierarchy (SDH)

ITU-T Recommendation G.708

(Previously CCITT Recommendation)

ITU-T G-SERIES RECOMMENDATIONS

TRANSMISSION SYSTEMS AND MEDIA, DIGITAL SYSTEMS AND NETWORKS

INTERNATIONAL TELEPHONE CONNECTIONS AND CIRCUITS	G.100–G.199
INTERNATIONAL ANALOGUE CARRIER SYSTEM	
GENERAL CHARACTERISTICS COMMON TO ALL ANALOGUE CARRIER-TRANSMISSION SYSTEMS	G.200–G.299
INDIVIDUAL CHARACTERISTICS OF INTERNATIONAL CARRIER TELEPHONE SYSTEMS ON METALLIC LINES	G.300–G.399
GENERAL CHARACTERISTICS OF INTERNATIONAL CARRIER TELEPHONE SYSTEMS ON RADIO-RELAY OR SATELLITE LINKS AND INTERCONNECTION WITH METALLIC LINES	G.400–G.449
COORDINATION OF RADIOTELEPHONY AND LINE TELEPHONY	G.450–G.499
TESTING EQUIPMENTS	
TRANSMISSION MEDIA CHARACTERISTICS	G.600–G.699
DIGITAL TRANSMISSION SYSTEMS	
TERMINAL EQUIPMENTS	G.700–G.799
General	G.700–G.799
Coding of analogue signals by pulse code modulation	G.710–G.719
Coding of analogue signals by methods other than PCM	G.720–G.729
Principal characteristics of primary multiplex equipment	G.730–G.739
Principal characteristics of second order multiplex equipment	G.740–G.749
Principal characteristics of higher order multiplex equipment	G.750–G.759
Principal characteristics of transcoder and digital multiplication equipment	G.760–G.769
Operations, administration and maintenance features of transmission equipment	G.770–G.779
Principal characteristics of multiplexing equipment for the synchronous digital hierarchy	G.780–G.789
Other terminal equipment	G.790–G.799
DIGITAL NETWORKS	G.800–G.899
DIGITAL SECTIONS AND DIGITAL LINE SYSTEM	G.900–G.999

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

ITU-T RECOMMENDATION G.708**SUB STM-0 NETWORK NODE INTERFACE FOR THE
SYNCHRONOUS DIGITAL HIERARCHY (SDH)****Summary**

This Recommendation is an extension of Recommendation G.707. It provides the requirements for the sub STM-0 signals at the Network Node Interface of a synchronous digital network in terms of:

- bit rates;
- frames structures;
- formats for mapping and multiplexing elements;
- functionalities of the overheads.

Source

ITU-T Recommendation G.708 was prepared by ITU-T Study Group 15 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 22nd of June 1999.

FOREWORD

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NOTE

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CONTENTS

Page

1	Scope	1
2	References	1
3	Definitions	1
4	sSTM interface rates	2
5	Transport formats	3
5.1	Section overhead	3
5.2	Scrambling	4
5.3	Frame structure for the sSTM-2n interface	5
5.4	$n \times$ TUG-2 payloads	5
6	Overhead functions	5
6.1	Interface layers	5
6.1.1	Physical layer	5
6.1.2	Section layer	5
6.1.3	Path layer	5
6.2	sSTM section overhead	5
6.2.1	Regenerator section overhead	5
6.2.2	Multiplex section overhead	6
6.3	sSTM maintenance signals	8
6.3.1	VC-n Path layer maintenance signals	8
6.3.2	sSTM multiplex section remote defect indication (MS-RDI)	8
6.3.3	sSTM multiplex section alarm indication signal (MS-AIS)	8
7	sSTM-2n interface APS	8
8	Multiplexing and numbering structure	8
8.1	Multiplexing structure	8
8.2	Numbering structure	10
	Annex A – Structures for radio-relay applications	11
A.1	Scope	11
A.2	Interface rates	11
A.3	$k \times$ TU-12 payloads	11
A.4	Media-dependent overhead functions	11
A.5	Multiplexing and numbering structure	11
A.5.1	Multiplexing structure	11
A.5.2	Numbering structure	12

Page

Annex B – Frame format of a reduced functionality sSTM-11 for intra-station crossconnects of TU-12 using existing office wiring	13
Annex C – Numbering structure of TUs into sSTM frame formats	14
C.1 Numbering of TU-2s in a sSTM-2n	14
C.2 Numbering of TU-12s in a sSTM-2n	14
C.3 Numbering of TU-11s in a sSTM-2n	14
C.4 Numbering of TU-12s in a sSTM-1k	14

Recommendation G.708**SUB STM-0 NETWORK NODE INTERFACE FOR THE
SYNCHRONOUS DIGITAL HIERARCHY (SDH)***(Geneva, 1999)***1 Scope**

Network node interface (NNI) specifications are necessary to enable interconnection of synchronous digital hierarchy (SDH) network elements for the transport of payloads.

Therefore, this Recommendation specifies:

- the bit rates for sub STM-0 signals;
- the frame structures for sub STM-0 signals;
- the functionalities to be implemented in the different overheads of a sub STM-0 frame

at the NNI of a synchronous digital network.

Annex A specifies bit rates, frame structures and overhead functionalities to be used at radio interfaces to ensure consistent transport of SDH payloads and overhead functionalities when low/medium capacity (sub STM-0) radio systems are used.

2 References

The following UIT-T Recommendations and other references contain provisions which, through reference in this text, constitute provisions of this Recommendation. At the time of publication, the editions indicated were valid. All Recommendations and other references are subject to revision: all users of this Recommendation are therefore encouraged to investigate the possibility of applying the most recent edition of the Recommendations and other references listed below. A list of the currently valid ITU-T Recommendations is regularly published.

- ITU-T Recommendation G.707 (1996), *Network node interface for the synchronous digital hierarchy (SDH)*.
- ITU-T Recommendation G.861 (1996), *Principles and guidelines for the integration of satellite and radio systems in SDH transport networks*.

This Recommendation is an extension of Recommendation G.707 (1996), *Network node interface for the synchronous digital hierarchy (SDH)*. It must be used in conjunction with Recommendation G.707 and thus all the relevant references in Recommendation G.707 are also references of this Recommendation.

3 Definitions

This Recommendation defines the following terms:

3.1 tributary unit group-2: A 9-row by 12-column structure (108 bytes) that carries one or more TUs of the same size, as defined by Recommendation G.707.

3.2 sSTM-2n interface: A SDH transmission interface which transports one or more TU Group(s)-2, as defined by Recommendation G.707, with Section overhead (9 bytes per frame). sSTM-2n interfaces may be defined for optical, electrical or radio transport technologies.