

I n t e r n a t i o n a l T e l e c o m m u n i c a t i o n U n i o n

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

Series H

Supplement 4
(06/2016)

SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

Repository of generic parameters for ITU-T H.460.x sub-series Recommendations

ITU-T H-series Recommendations – Supplement 4

ITU-T H-SERIES RECOMMENDATIONS
AUDIOVISUAL AND MULTIMEDIA SYSTEMS

CHARACTERISTICS OF VISUAL TELEPHONE SYSTEMS	H.100–H.199
INFRASTRUCTURE OF AUDIOVISUAL SERVICES	
General	H.200–H.219
Transmission multiplexing and synchronization	H.220–H.229
Systems aspects	H.230–H.239
Communication procedures	H.240–H.259
Coding of moving video	H.260–H.279
Related systems aspects	H.280–H.299
Systems and terminal equipment for audiovisual services	H.300–H.349
Directory services architecture for audiovisual and multimedia services	H.350–H.359
Quality of service architecture for audiovisual and multimedia services	H.360–H.369
Telepresence	H.420–H.429
Supplementary services for multimedia	H.450–H.499
MOBILITY AND COLLABORATION PROCEDURES	
Overview of Mobility and Collaboration, definitions, protocols and procedures	H.500–H.509
Mobility for H-Series multimedia systems and services	H.510–H.519
Mobile multimedia collaboration applications and services	H.520–H.529
Security for mobile multimedia systems and services	H.530–H.539
Security for mobile multimedia collaboration applications and services	H.540–H.549
Mobility interworking procedures	H.550–H.559
Mobile multimedia collaboration inter-working procedures	H.560–H.569
BROADBAND, TRIPLE-PLAY AND ADVANCED MULTIMEDIA SERVICES	
Broadband multimedia services over VDSL	H.610–H.619
Advanced multimedia services and applications	H.620–H.629
Ubiquitous sensor network applications and Internet of Things	H.640–H.649
IPTV MULTIMEDIA SERVICES AND APPLICATIONS FOR IPTV	
General aspects	H.700–H.719
IPTV terminal devices	H.720–H.729
IPTV middleware	H.730–H.739
IPTV application event handling	H.740–H.749
IPTV metadata	H.750–H.759
IPTV multimedia application frameworks	H.760–H.769
IPTV service discovery up to consumption	H.770–H.779
Digital Signage	H.780–H.789
E-HEALTH MULTIMEDIA SERVICES AND APPLICATIONS	
Personal health systems	H.810–H.819
Interoperability compliance testing of personal health systems (HRN, PAN, LAN, TAN and WAN)	H.820–H.859
Multimedia e-health data exchange services	H.860–H.869

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

Supplement 4 to ITU-T H-series Recommendations

Repository of generic parameters for ITU-T H.460.x sub-series Recommendations

Summary

Supplement 4 to the ITU-T H-series Recommendations lists generic parameters assigned in the ITU-T H.460.x series Recommendations. Its purpose is to provide a quick reference to those parameters. This revision adds feature identifiers for ITU-T H.460.26 and ITU-T H.460.27.

History

Edition	Recommendation	Approval	Study Group	Unique ID*
1.0	ITU-T H Suppl. 4	2003-05-30	16	11.1002/1000/6488
2.0	ITU-T H Suppl. 4	2004-01-30	16	11.1002/1000/7243
3.0	ITU-T H Suppl. 4	2004-11-26	16	11.1002/1000/7950
4.0	ITU-T H Suppl. 4	2005-08-05	16	11.1002/1000/8580
5.0	ITU-T H Suppl. 4	2006-04-13	16	11.1002/1000/8831
6.0	ITU-T H Suppl. 4	2007-07-06	16	11.1002/1000/9210
7.0	ITU-T H Suppl. 4	2010-07-30	16	11.1002/1000/11001
8.0	ITU-T H Suppl. 4	2011-12-02	16	11.1002/1000/11549
9.0	ITU-T H Suppl. 4	2016-06-03	16	11.1002/1000/12958

* To access the Recommendation, type the URL <http://handle.itu.int/> in the address field of your web browser, followed by the Recommendation's unique ID. For example, <http://handle.itu.int/11.1002/1000/11830-en>.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, information and communication technologies (ICTs). 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 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 publication, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

Compliance with this publication is voluntary. However, the publication may contain certain mandatory provisions (to ensure, e.g., interoperability or applicability) and compliance with the publication is achieved when all of these mandatory provisions are met. The words "shall" or some other obligatory language such as "must" and the negative equivalents are used to express requirements. The use of such words does not suggest that compliance with the publication is required of any party.

INTELLECTUAL PROPERTY RIGHTS

ITU draws attention to the possibility that the practice or implementation of this publication 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 publication development process.

As of the date of approval of this publication, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this publication. However, implementers are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database at <http://www.itu.int/ITU-T/ipr/>.

© ITU 2016

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

Table of Contents

	Page
1 Scope.....	1
2 References.....	1
3 Abbreviations and acronyms	1
4 Generic identifier assignment	1
5 List of identifiers.....	2
5.1 Feature identifiers	2
5.2 Generic parameters	3

Supplement 4 to ITU-T H-series Recommendations

Repository of generic parameters for ITU-T H.460.x sub-series Recommendations

1 Scope

The generic extensibility framework (GEF) concept is described in [ITU-T H.323], and the corresponding data fields are formally defined in [ITU-T H.225.0]. Individual feature specifications define the meaning and content of those fields for specific features. Recommendation ITU-T H.460.1 gives some guidance on the usage of GEF.

This Supplement to Recommendation ITU-T H.460.1 lists generic parameters assigned in the ITU-T H.460.x series Recommendations. Its purpose is to provide a quick reference to those parameters. This supplement will be regularly updated as new ITU-T H.460.x Recommendations appear.

2 References

- [ITU-T H.225.0] Recommendation ITU-T H.225.0 (2009), *Call signalling protocols and media stream packetization for packet-based multimedia communication systems*.
- [ITU-T H.245] Recommendation ITU-T H.245 (2011), *Control protocol for multimedia communication*.
- [ITU-T H.323] Recommendation ITU-T H.323 (2009), *Packet-based multimedia communications systems*.
- [ITU-T H.460.1] Recommendation ITU-T H.460.1 (2013), *Guidelines for the use of the generic extensible framework*.

3 Abbreviations and acronyms

This Supplement uses the following abbreviations and acronyms:

ASN.1	Abstract Syntax Notation one
EFC	Extended Fast Connect
GEF	Generic Extensibility Framework
ID	Identifier
PER	Packed Encoding Rules

4 Generic identifier assignment

GEF can be used for standard and non-standard features. Each feature and each parameter defined in the context of such a feature are unambiguously identified by an identifier (ID). Standard features are specified in the ITU-T H.460.x series of Recommendations, with some exceptions where a feature is defined in an annex to another Recommendation, and generally use integer values as identifiers. Non-standard features may be defined by an organization other than ITU-T or by a vendor, a service provider, etc. They use object IDs or non-standard parameters as identifiers. In any case, the feature specification also assigns the identifiers used by that feature.

This Supplement lists the identifiers assigned to date for standard GEF features, i.e., features defined by ITU-T.

5 List of identifiers

5.1 Feature identifiers

The identifier n of a feature is the same as the final part in Recommendation ITU-T H.460. n , the designation of the Recommendation defining that feature. Feature identifiers are used at the top level of a *genericData* structure or of a *featureDescriptor* within a *featureSet*.

Feature ID	Feature name	Defined in:	Remarks
0	idAnnexGProfiles	ITU-T H.501	Usage defined in Annex G of [ITU-T H.225.0].
1	robustnessId	Annex R of [ITU-T H.323]	Feature ID also used as parameter ID.
2	Number Portability	ITU-T H.460.2	
3	Circuit Status	ITU-T H.460.3	
4	CallPriorityDesignation	ITU-T H.460.4	
5	DuplicateIEs	ITU-T H.460.5	
6	Extended Fast Connect (EFC)	ITU-T H.460.6	
7	Digit Maps	ITU-T H.460.7	
8	Querying for Alternate Routes	ITU-T H.460.8	
9	QoS-monitoring Reporting	ITU-T H.460.9	
10	Call Party Category	ITU-T H.460.10	
11	Delayed Call Establishment	ITU-T H.460.11	
12	Glare Control Indicator	ITU-T H.460.12	
13	Called User Release Control	ITU-T H.460.13	
14	Multi-Level Precedence and Preemption (MLPP)	ITU-T H.460.14	
15	Suspend and Resume TCP Signalling Channel	ITU-T H.460.15	
16	Multiple-message Release Sequence	ITU-T H.460.16	
17	RAS over H.225.0	ITU-T H.460.17	
18	Signalling Traversal	ITU-T H.460.18	This feature makes also use of the [ITU-T H.245] genericIndication message.
19	mediaNATFWTraversal	ITU-T H.460.19	This feature makes also use of the genericInformation field in [ITU-T H.245] messages.
20	LocationSourceAddress	ITU-T H.460.20	
21	Message Broadcast	ITU-T H.460.21	

Feature ID	Feature name	Defined in:	Remarks
22	SecurityProtocolNegotiation	ITU-T H.460.22	
23	NAT/FW determination	ITU-T H.460.23	
24	P2Pnat media	ITU-T H.460.24	This feature also makes use of the [ITU-T H.240] genericIndication message and the genericInformation field of the OLC and OLCAck messages defined in [ITU-T H.245].
25	Geographic Information	ITU-T H.460.25	
26	Media over ITU-T H.225.0	ITU-T H.460.26	
27	Session Identifier	ITU-T H.460.27	
1000	RAS Protocol Tunnel	Annex M4 of [ITU-T H.323]	

5.2 Generic parameters

Each *enumeratedParameter* carried within a *genericData* structure (or a *featureSet* in case of feature negotiation) is identified by an identifier with local context, i.e., a value that is only unique within the scope of the specific feature. Therefore, parameter identifiers appear on a level below a feature identifier.

Parameters may carry content in addition to the identifier. However, for feature negotiation (i.e., inside a *featureSet*), parameters will be included as identifiers without content.

Feature	Parameter			Reference
	ID	Name	Content	
0	1	idAnnexGProfileA	none	ITU-T H.501 and Annex G of [ITU-T H.225.0]
1	1	robustnessId	ASN.1/PER	Annex R of [ITU-T H.323]
2	1	NumberPortabilityData	ASN.1/PER	ITU-T H.460.2
3	1	Circuit Status Map	ASN.1/PER	ITU-T H.460.3
4	1	CallPriorityRequest	ASN.1/PER	ITU-T H.460.4
	2	CallPriorityConfirm	ASN.1/PER	
5	1	IEsString	raw	ITU-T H.460.5
6	1	EFC Proposal	none	ITU-T H.460.6
	2	EFC Close All Media Channels	none	
	3	EFC Request New Proposals	none	
	4	EFC Require Symmetric Operation	none	
7	1	Digit Maps Length	number32	Clause 5 of [ITU-T H.460.7] (parameters for featureSet)
	2	Digit Maps Length for Overlapped Sending	number32	
	3	HTTP Download Capability	bool	
	1	Start Timer	number8	Clause 6 of [ITU-T H.460.7] (parameters for genericData)
	2	Short Timer	number8	
	3	Long Timer	number8	

Feature	Parameter			Reference
	ID	Name	Content	
	4	Digit Map String	text	
	5	ToN Associated Digit Map	compound	(components of parameter 5)
	1	Type of Number (ToN)	number8	
	2	Digit Map Strings for ToN	text	
	6	Digit Map URL	alias	
8	1	Query Count	number8	ITU-T H.460.8
	2	Call Termination Cause	raw	
9	0	qosMonitoringFinalOnly	none	ITU-T H.460.9 Annex B of [ITU-T H.460.9]
	1	qosMonitoringReportData	ASN.1/PER	
	2	qosMonitoringExtendedRTPMetrics	ASN.1/PER	
10	1	Call Party Category Info	ASN.1/PER	ITU-T H.460.10
11	1	Delay Point Indicator (DPI)	number8	ITU-T H.460.11
	2	Implicit DCE Release	none	
	3	Delay Point Reached (DPR)	none	
	4	DCE Release	none	
12	1	Glare Control Indicator Parameter	number8	ITU-T H.460.12
13	1	Called User Release Control	number8	ITU-T H.460.13
14	1	MLPP Information	ASN.1/PER	ITU-T H.460.14
15	1	Signalling Channel Suspend and Redirect Parameter	ASN.1/PER	ITU-T H.460.15
16	1	MMRS Use Required	none	ITU-T H.460.16
	2	MMRS Procedure	number8	
	3	MMRS Additional IEs	raw	
17	1	RAS message	ASN.1/PER	ITU-T H.460.17
18	1	IncomingCallIndication	ASN.1/PER	ITU-T H.460.18
	2	LRQKeepAliveData	ASN.1/PER	
	1 2	<i>callIdentifier</i> <i>answerCall</i> NOTE – Both only used within an ITU-T H.245 <i>genericIndication</i> message with <i>subMessageIdentifier</i> <i>connectionCorrelation</i> = 1	<i>octetString</i> <i>logical</i>	
19	1	supportTransmitMultiplexedMedia	none	ITU-T H.460.19
	2	hMAServer	none	
	1	<i>Traversal Parameters</i> NOTE – Only used within <i>genericInformation</i> field of ITU-T H.245 messages	ASN.1/PER	
20	1	LocationSourceAddress	ASN.1/PER	ITU-T H.460.20
21	1	MessageBroadcastParameter	ASN.1/PER	ITU-T H.460.21

Feature	Parameter			Reference
	ID	Name	Content	
22	1	tlsSecurityProtocol	compound	ITU-T H.460.22
	1 2	priority connectionAddress	number8 transport	(components of parameter 1)
	2 1	ipsecSecurityProtocol priority	compound number8	(components of parameter 2)
23	1	RemoteNAT	bool	ITU-T H.460.23
	2	SameNATProbe	bool	
	3	NATPresent	bool	
	4	RASPresentation	transport	
	5	NATTest	transport	
	6	NATType	number8	
	7	ExternalNATProbe	bool	
24	1	RemoteProxy	bool	ITU-T H.460.24
	2	RemoteNAT	bool	
	3	MustProxyNAT	bool	
	4	CalledIsNAT	bool	
	5	CalledNATType	number8	
	6	ApparentSourceAddress	transport	
	7	SameNatProbe	bool	
	8	MediaStrategy	number8	
	9	ExternalNATProbe	bool	
25	1	Location	raw	ITU-T H.460.25
	2	Screening Indicator	number8	
	3	Presentation Indicator	number8	
26	1	Media Payload	raw	ITU-T H.460.26
27	1	Sender-UUID	text	ITU-T H.460.27
	2	Recipient-UUID	text	
1000	1	Protocol Tunnel	ASN.1/PER	Annex M4 of [ITU-T H.323]
NOTE – ASN.1/PER means raw format containing a PER encoding, supplemented by an ASN.1 definition of the content.				

SERIES OF ITU-T RECOMMENDATIONS

Series A	Organization of the work of ITU-T
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	Cable networks and transmission of television, sound programme and other multimedia signals
Series K	Protection against interference
Series L	Environment and ICTs, climate change, e-waste, energy efficiency; construction, installation and protection of cables and other elements of outside plant
Series M	Telecommunication management, including TMN and network maintenance
Series N	Maintenance: international sound programme and television transmission circuits
Series O	Specifications of measuring equipment
Series P	Terminals and subjective and objective assessment methods
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, open system communications and security
Series Y	Global information infrastructure, Internet protocol aspects and next-generation networks, Internet of Things and smart cities
Series Z	Languages and general software aspects for telecommunication systems