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Supplement 2

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SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

H.248.x sub-series packages guide – Release 2

ITU-T H-series Recommendations – Supplement 2

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Supplement 2 to ITU-T H-series Recommendations

H.248.x sub-series packages guide – Release 2

Summary

This Supplement summarizes packages that have been standardized in the time frame from June 2000 to February 2002. It identifies packages that meet H.248.x sub-series requirements for package definition and are for general use by the wider standards community.

Source

Supplement 2 to ITU-T H-series Recommendations was revised by ITU-T Study Group 16 (2001-2004) and approved under ITU-T Recommendation A.13 (10/2000) procedure on 15 February 2002.

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 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.

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As of the date of approval of this Publication, ITU had received notice of intellectual property, protected by patents, which may be required to implement this Publication. 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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Supplement 2 to H-series Recommendations

H.248.x sub-series packages guide – Release 2

1 Scope

This Supplement summarizes packages that have been standardised in the time frame from June 2000 to February 2002. It identifies packages that meet H.248.x sub-series requirements for package definition and are for general use by the wider standards community.

H.248.x sub-series Packages Guide – Release 2 provides for the:

- Identification of packages which are considered technically consistent with H.248.x sub-series principles and packages definition rules in clause 12/H.248.1.
- Identification of packages which are currently being worked upon.
- Identification of packages which have worked upon over a certain period of time.
- Identification of packages with overlapping functionality.

ITU-T Study Group 16 invites packages authors/editors to share their current and future work on packages in the form of contribution, liaison or communication to ITU-T Study Group 16. This will assist ITU-T Study Group 16 in producing future release of this Supplement. ITU-T Study Group 16 will then endeavour to provide constructive comments to assist you in your packages work. If ITU-T Study Group 16 determines that your packages are consistant with H.248.1 and particularly, clause 12/H.248.1 it will include these in the "Externally defined Packages that meet requirements" of the H.248.x sub-series Packages Implementors' Guide.

2 References

2.1 Normative References

– ITU-T Recommendation Q.1950 (2001), *Bearer independent call bearer control protocol.*

2.2 Informative References

See clauses below for individual references.

3 Definitions

See ITU-T H.248.x sub-series Recommendations.

4 Abbreviations

See ITU-T H.248.x sub-series Recommendations.

5 ITU-T Study Group 16 Packages

Package Name and Description	Identity		Reference	Status
	Text	**Binary**		
H.248.1 – Gateway control protocol: Version 1 The packages contained in this Recommendation are: • Generic package • Base Root package • Tone Generator package • Tone Detection package • Basic DTMF Generator package • DTMF Detection package • Call Progress Tones Generator Package • Call Progress Tones Detection Package • Analog Line Supervision Package • Basic Continuity Package • Network Package • RTP Package • TDM Circuit Package	g root tonegen tonedet dg dd cg cd al ct nt rtp tdmc	0x0001 0x0002 0x0003 0x0004 0x0005 0x0006 0x0007 0x0008 0x0009 0x000a 0x000b 0x000c 0x000d	Annex E/ H.248.1	Done
H.248.2 – Facsimile, text conversation and call discrimination packages This Recommendation describes packages for fax, text telephone, call type discrimination, and data call detection. The packages contained in this Recommendation are: The *Call Type Discrimination package* defines control and monitoring of a PSTN line for the signalling protocols used in the beginning of a session of data transmission for fax, text telephony or data. The *Text Telephone package* defines control of a PSTN text telephone session in any of the modes supported by the automoding text telephone ITU-T Rec. V.18. The *Fax package* defines control of a PSTN fax transmission. The *Fax/Textphone/Modem Tones Detection* package defines control over a termination for detection of any signals from a fax, text telephone or data modem during a connection in voice mode. The *Text Conversation package* defines control over a real time interactive text conversation session using a universal presentation format and transferred with a transport method from a multimedia protocol in any network environment. The *IP Fax package* defines control over facsimile transmission in a packet network.	ftmd txc txp ctyp fax ipfax	0x000e 0x000f 0x0010 0x0011 0x0012 0x0013	H.248.2	Done

Package Name and Description	Identity		Reference	Status
	Text	Binary		
H.248.3 – User interface elements and action packages	dis key kp labelkey kf ind ks anci	0x0014 0x0015 0x0016 0x0017 0x0018 0x0019 0x001a 0x001b	H.248.3	Done
H.248.6 – Dynamic tone definition package This package defines a mechanism to redefine existing tones and create new tones for playback. The existing tones are the ones described in supported packages that extend the tonegen generic package.	dtd	0x001c	H.248.6	Done
H.248.7 – Generic announcement package This package supports announcement functionality at a Media Gateway. This announcement could be realised by the Media Gateway as different sorts of messaging. For example: it could be an audio announcement, a text message or a composition of text messages.	an	0x001d	H.248.7	Done
H.248.9 – Advanced media server packages The Basic Audio package provides support for the standard IVR operations of PlayAnnouncement, PlayCollect, and PlayRecord. It supports direct references to simple audio as well as indirect references to simple and complex audio. It provides audio variables, control of audio interruptibility, digit buffer control, special key sequences, and support for reprompting during data collection. The Advanced Audio package extends the Base package by providing an arbitrary number of user defined qualifiers to be used in resolving complex audio structures. For example, the user could define qualifiers for any or all of the following: language, accent, audio file format, gender, speaker, or customer.	aasb aasdc aasrec aassm	0x0033 0x0034 0x0035 0x0036	H.248.9	In progress
H.248.10 – Media gateway resource congestion handling package The package makes it possible for the MG to control its load.	chp	0x0029	H.248.10	Done

Package Name and Description	Identity		Reference	Status
	Text	Binary		
H.248.12 – H.248.1 packages for H.323 and H.324 interworking This Recommendation gathers together packages for H.245, H.245 parameters specific to H-series audiovisual terminal and Annex C/H.324 for use with the H.248 gateway control protocol. The packages in this Recommendation are in conformance with clause 12/H.248 package definition guidelines.	h245 h323bc h324 h245com h245ind	0x002a 0x002b 0x002c 0x002d 0x002e	H.248.12	Done
H.248.M.lt – Line test packages This Recommendation contains a number of packages that enables line tests to be performed.	?	?	H.248.M.lt	In progress
H.248.13 – Quality alert ceasing package This package enables the MG to indicate when a line has returned to normal quality.	qac	0x0037	H.248.13	Done
H.248.M.mcu – Media gateway control unit package This package describe the decomposition of an Media Control Unit, requirements and packages for media resource functions.	?	?	H.248.M.mcu	In progress
H.248.15 – SDP H.248 package This package describes SDP attributes to allow the text local and remote descriptor to contain properties.	NA	NA	H.248.16	Done
H.248.14 – Inactivity timer package This package is used by MG to poll whether or not the MGC is still alive.	it	?	H.248.14	In progress
H.248.M.rch – Resource congestion handling package This package is a more indepth proposal than ITU-T Rec. H.248.10	?	?	H.248.M.rch	In progress
H.248.M.profile – Profile handling package This package enables the MGC to determine what packages are on the MG.	?	?	H.248.M.profile	In progress

6 Externally defined packages that meet requirements

The packages identified in this clause are consistent with regards to the package definition rules contained in clause 12/H.248.

6.1 ITU-T Study Group 11

Package Name and Description	Identity		Reference	Status
	Text	Binary		
Bearer Characteristics package This package contains the functionality required to identify which bearer services are to be supported by a MG.	bcp	0x001e	A.3/Q.1950	Done
Bearer Network Connection Cut Through package This package provides the functionality to be able to determine the cut through capabilities of the bearer network.	bnct	0x001f	A.4/Q.1950	Done
Reuse Idle package This package provides the ability to determine the reuse of idle bearer functionality network.	ri	0x0020	A.5/Q.1950	Done
Generic Bearer Connection package This package provides the functionality to be able to establish/modify/release a bearer connection.	gb	0x0021	A.6/Q.1950	Done
Bearer Control Tunnelling package This package describes the functionality to be able support the transport of "Bearer Information Transport" information between an MGC and MG.	bt	0x0022	A.7/Q.1950	Done
Basic Call Progress Tones Generator with Directionality This package defines the basic call progress tones as signals and extends the allowed values of the tl parameter of playtone in tonegen . In addition, this package extends the Tone Generator Package with the ability to specify in which direction the tone is played.	bcg	0x0023	A.8/Q.1950	Done
Expanded Call Progress tones Generator package This package defines the expanded call progress tones as signals and extends the allowed values of the tl parameter of playtone in tonegen. In addition, this package extends the Tone Generator Package with the ability to specify in which direction the tone is played.	Xcg	0x0024	A.9/Q.1950	Done
Basic Services Tones Generation package This package defines signals for use by telephony services and allows for specification of directionality.	srvtn	0x0025	A.10/Q.1950	Done
Expanded Services Tones Generation package This package defines additional signals for use by telephony services and allows for specification of directionality.	xsrvtn	0x0026	A.11/Q.1950	Done

Package Name and Description	Identity		Reference	Status
	Text	Binary		
Intrusion Tones Generation package This package defines for use by operator-based telephony services and allows for specification of directionality.	int	0x0027	A.12/Q.1950	Done
Business Tones Generation package This package defines for use by business telephony services and allows for specification of directionality.	biztn	0x0028	A.13/Q.1950	Done
Bearer Characteristics package v2 Version 2 introduces a new value for TDM bearer characteristics	bcp (Version 2)	0x001e (Version 2)	Q.1950 Amendment 1	In progress

6.2 3GPP CN4

Package Name and Description	Identity		Reference	Status
	Text	Binary		
3GUP (User Plane) package This package identifies that the User Plane package is used for the termination. It also contains some parameters for the User Plane functions in the MGW.	threegup	0x002f	29.232	Done
Circuit Switched Data package This package contains the information needed to be able to support GSM and UMTS Circuit Switched Data from the media gateway.	threegcsd	0x0030	29.232	Done
TFO package This package defines events and properties for Tandem Free Operation (TFO) control. TFO uses inband signalling and procedures for Transcoders to enable compressed speech to be maintained between a tandem pair of transcoders. This package allows an MGW which has inserted a transcoder to support TFO.	Threegtfoc	0x0031	29.232	Done
3G Expanded Call Progress Tones Generator package This package extends "Expanded Call Progress Tones Generator Package" as defined in ITU-T Rec. Q.1950. The package adds a new toneId for CAMEL prepaid warning tone.	Threegxcg	0x0032	29.232	Done

7 Packages undergoing development

The packages identified in this clause are currently under development and/or have not been reviewed by ITU-T Study Group 16. The packages identified here may have inconsistencies with regards to the package definition rules contained in clause 12/H.248. The packages below may also overlap in functionality.

7.1 ATMF (ATM Forum)

Package Name and Description	Identity		Reference	Status
	Text	Binary		
ATMF are no longer defining their own packages. Reference is made to IETF developed packages. For more information see: BTD-VMOA-LESH248-01.02 LES Using AAL2 – H.248 Signalling Addendum October 2001.				

7.2 ETSI Tiphon

Package Name and Description	Identity		Reference	Status
	Text	Binary		
Aggregate Bearer Control package This package defines aggregate bearer load control information flows between a MG and MGC in order to provide admission control functionality based on aggregate bandwidth usage measurements and transport network QoS performance.	aggr	?	DTS 03022 v0.0.1 (2001-11)	In progress
Middle Box package This package defines a property to enable the MGC to act as a MIDCOM Agent and control a "gateway" acting as a Middlebox	emp	?	DTS3027 V0.0.3 (2002-01)	In progress

7.3 IETF Megaco

NOTE – The packages are official work items adopted by the IETF Megaco work group.

Package Name and Description	Identity		Reference	Status
	Text	Binary		
Megaco/H.248.x sub-series NAS packages	nas nasin nasout nasctl nasroot	0x00???	draft-ietf-megaco-naspkg-02.txt	In progress WG Last Call
Megaco R2 packages and Call Flows	NA	NA	Draft-ietf-megaco-r2pacakge-03.text	Expired

7.4 IETF Individual Submissions

NOTE – This clause identifies packages that individuals have submitted to the IETF. These have not been taken as official work items of the IETF Megaco work group.

Package Name and Description	Identity		Reference	Status
	Text	Binary		
MF Tone Generation and Detection packages	mfg mfd	0x00?? 0x00??	Draft-bothwell-megaco-mftonepkgs-02.txt	In progress expiry 03/02
ISDN Package for Megaco	NA	NA	Draft-bouwen-megaco-isdn-pack-00.txt	Expired
Enhanced Alerting packages for Megaco/H.248.x sub-series	alert andisp	0x00?? 0x00??	Draft-boyle-megaco-alerting-02.txt	On hold Expiry 01/02
Supplemental Tones packages for Megaco/H.248.x sub-series	conftn test carr	0x002a 0x002b 0x002c	Draft-boyle-megaco-tonepkgs-06.txt	IESG Last Call
MGC Cookie Package for Megaco/H248.x sub-series	mgcckie	0x00??	Draft-cutler-megaco-mgc-cookie-02.txt	On hold Expiry 01/02
Megaco/H.248.x sub-series Basic CAS packages Basic CAS (Channel Associated Signalling) Package RBS (Robbed Bit Signalling) package	bcas rbs oses osext	0x00?? 0x00?? 0x00?? 0x00??	Draft-manyfolks-megaco-caspackage-01.txt	WG Last Call
Name Pattern package for Megaco	NA	NA	Draft-rosen-megaco-namepatterns-01.txt	Expired
Megaco/H.248.x sub-series QoS packages This document is work in progress and defines the basic QoS Package that addresses the different means of supporting Quality of service (QoS) on IP networks. This memo also defines the RSVP package (that falls into the Integrated services model) and the Differentiated services package in association with the Megaco/H.248.1 Protocol	Bqos Rsvp diffserv	0x00?? 0x00?? 0x00??	Draft-madhubabu-megaco-qospackage-00.tx	Expired

Package Name and Description	Identity		Reference	Status
	Text	Binary		
Megaco ATM Package	NA	NA	Draft-rosen-megaco-atm-package-01.txt	Expired

7.5 ITU-T Study Group 11

Package Name and Description	Identity		Reference	Status
	Text	Binary		
Control of SPNE in a media gateway This package defines properties and events for SPNE functions controlled by or integrated into a media gateway. Note that echo cancellers associated with media gateways are assumed to be compliant with ITU-T Rec. G.168 as indicated in ITU-T Rec. G.177.	SPNE	0x????	Q.SPNE	In progress

8 H.248.x sub-series MIBS

MIB Name	Reference
H.248.x sub-series MIB	<draft-ietf-megaco-mib-02.txt>
H.248.x sub-series Tones MIB	<draft-doyle-megaco-tonesmib-00>

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