ETSI ES 283 049 V2.1.1 (2009-02)
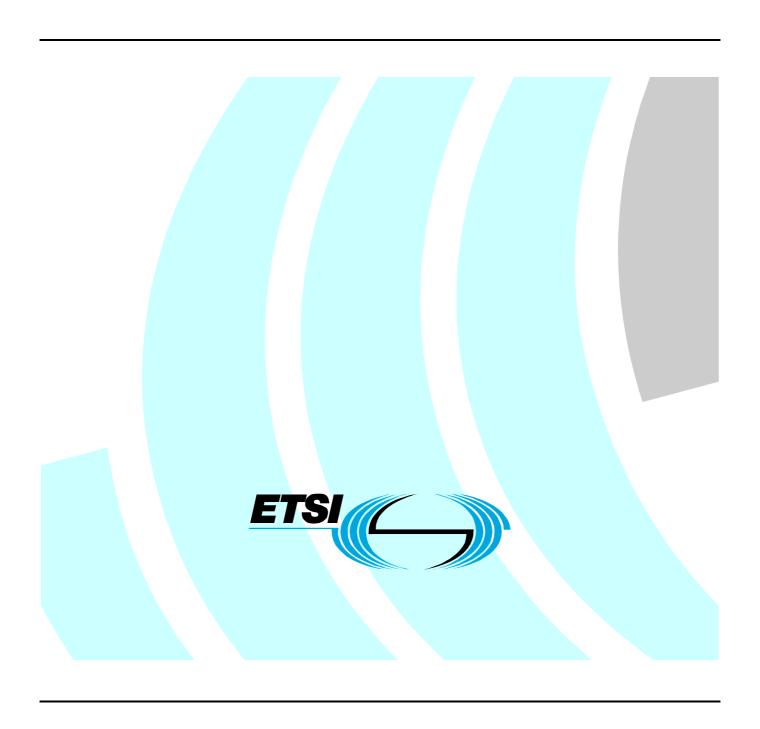
Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); H.248 Profile for controlling Trunking Media Gateways (TMG)

[Endorsement of 3GPP TS 29.332 (V7), modified]

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Foreword

This ETSI Standard (ES) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

1 Scope

The present document provides the ETSI TISPAN endorsement of the 3GPP TS 29.332 [1] "3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Media Gateway Control Function (MGCF) - IM Media Gateway; Mn Interface (Release 7)".

The present document provides the necessary adaptations to the above specification, in order to comply with the requirements of TISPAN NGN Release 2.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.

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2.1 Normative references

The following referenced documents are indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

[1] 3GPP TS 29.332: "3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Media Gateway Control Function (MGCF) - IM Media Gateway; Mn Interface (Release 7)".

2.2 Informative references

The following referenced documents are not essential to the use of the present document but they assist the user with regard to a particular subject area. For non-specific references, the latest version of the referenced document (including any amendments) applies.

[i.1] ETSI ES 283 024: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); H.248 Profile for controlling Trunking Media Gateways; Protocol specification".

Endorsement notice

The present document endorses 3GPP TS 29.332 "Media Gateway Control Function (MGCF) - IM Media Gateway; Mn Interface (Release 7) [1], the contents of which apply together with the addition of the modifications being covered herein.

Global modifications to 3GPP TS 29.332

NOTE: When making modifications to the endorsed document's original text [1], strikethrough text means deleted text and underlined text means inserted text. If there has been underlined text in the endorsed document's original text [1], the underlining has been removed for the sake of clarity.

Throughout the text of 3GPP TS 29.332

2 References

The references in clause 2 of [1] should be replaced as shown in table 1.

Table 1

	Reference in 3GPP TS 29.332 [1]	Replaced reference
[1]	3GPP TS 23.228: "IP Multimedia Subsystem (IMS); Stage 2".	ETSI TS 182 006: "Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN); IP Multimedia Subsystem (IMS); Stage 2 description (3GPP TS 23.228 V7.2.0, modified)".
[2]	3GPP TS 29.007: "General requirements on interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN)".	ETSI TS 129 007: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); General requirements on interworking between the Public Land Mobile Network (PLMN) and the Integrated Services Digital Network (ISDN) or Public Switched Telephone Network (PSTN) (3GPP TS 29.007 Release 7)".
[3]	3GPP TS 29.205: "Application of Q.1900 series to Bearer Independent CS Network architecture; Stage 3".	ETSI TS 129 205: "Universal Mobile Telecommunications System (UMTS); Application of Q.1900 series to bearer-independent Circuit Switched (CS) core network architecture; Stage 3 (3GPP TS 29.205 Release 7)".
[4]	3GPP TS 29.163: "Interworking between the IM CN subsystem and CS networks – Stage 3".	ETSI TS 129 163: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Interworking between the IP Multimedia (IM) Core Network (CN) subsystem and Circuit Switched (CS) networks (3GPP TS 29.163 Release 7)".
[5]	3GPP TS 29.232: "Media Gateway Controller (MGC); Media Gateway (MGW) interface; Stage 3".	ETSI TS 129 232: "Universal Mobile Telecommunications System (UMTS); Media Gateway Controller (MGC) - Media Gateway (MGW) interface; Stage 3 (3GPP TS 29.232 Release 7)".
[6]	3GPP TS 26.226: "Cellular Text Telephone Modem; General Description".	ETSI TS 126 226: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Cellular text telephone modem; General description (3GPP TS 26.226 Release 7)".
[7]	3GPP TS 26.103: "Speech codec list for GSM and UMTS".	ETSI TS 126 103: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Speech codec list for GSM and UMTS (3GPP TS 26.103 Release 7)".
[8]	3GPP TS 29.202: "Application of Q.1900 series to Bearer Independent CS Network architecture; Stage 3".	ETSI TS 129 202: "Universal Mobile Telecommunications System (UMTS); Signalling System No. 7 (SS7) signalling transport in core network; Stage 3 (3GPP TS 29.202 Release 7)".
[18]	IETF RFC 2833: "RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals".	IETF RFC 4733: "RTP Payload for DTMF Digits, Telephony Tones and Telephony Signals" (note 2).
[20]	3GPP TS 26.236: "Packet switched conversational multimedia applications; Transport protocols".	ETSI TS 126 236: "Universal Mobile Telecommunications System (UMTS); Packet switched conversational multimedia applications; Transport protocols (3GPP TS 26.236 Release 7)".
[21]	3GPP TS 29.415: "Core Network Nb Interface User Plane Protocols".	ETSI TS 129 415: "Universal Mobile Telecommunications System (UMTS); Core network Nb interface user plane protocols (3GPP TS 29.415 Release 7)".
[22]	3GPP TS 23.153: "Out of band transcoder control".	ETSI TS 123 153: "Universal Mobile Telecommunications System (UMTS); Out of band transcoder control; Stage 2 (3GPP TS 23.153 Release 7)".
[25]	3GPP TS 29.202: "SS7 Signalling Transport in Core Network".	ETSI TS 129 202: "Universal Mobile Telecommunications System (UMTS); Signalling System No. 7 (SS7) signalling transport in core network; Stage 3 (3GPP TS 29.202 Release 7)".
[40]	3GPP TR 21.905: "Vocabulary for 3GPP Specifications".	ETSI TR 121 905: "Digital cellular telecommunications system (Phase 2+); Universal Mobile Telecommunications System (UMTS); Vocabulary for 3GPP Specifications (3GPP TR 21.905 Release 7)".
NOTE 1:	The reference in [1] is replaced by the document listed on the right column. This replacement is applicable to all occurrences of the reference throughout the present endorsement.	
NOTE 2:	RFC 4733 obsoletes RFC 2833 in general. The functionality of RFC 2833 was partitioned into multiple separate RFCs: there is RFC 4734 "Definition of Events for Modem, Fax, and Text Telephony Signals" and IETF draft-ietf-avt-rfc2833biscas "Definition of Events For Channel-Oriented Telephony Signalling" besides RFC 4733, but only RFC 4733 is required for the present document.	

17 Transactions towards BICC

For the purpose of the present document clause 17 of [1] is not applicable.

Annex A (Normative): Profile Description

A.3 Gateway Control Protocol Version

For the purpose of the present document the text of clause A.3 of [1] is replaced by the modified text as shown below.

The Profile conforms to the Profile Template as specified in ITU-T Recommendation H.248.1 Version 3 Appendix III. The value ALL specified in the template is according to ITU-T Recommendation H.248.1 Version 2 [9].

A.5 Context Attributes

For the purpose of the present document the text of clause A.5 of [1] is replaced by the modified text as shown below.

Table A.5: Context attributes

Context Attribute	Supported	Values Supported
Topology	Optional	All
Priority Indicator	Yes	0-15
Emergency Indicator	Yes	Not Applicable
AND/OR Context Attribute	No	Not applicable
NOTE 1: The "Topology" attribute is optional for example support of monitoring. If requested and not supported error code 444 shall be returned.		
NOTE 2: AND/OR Context Attribute is for ITU-T Recommendation H.248.1 Version 3 only, so it does not apply to ETSI TISPAN Profile but the entry is kept to maintain the template layout.		

A.7.9 Error Descriptor

For the purpose of the present document clause A.7.9 is replaced by the modified clause as shown below.

Table A.7.9/1: Error Codes Sent by MGCF

Supported H.248.8 Error Codes:	FFS < list of individual numbers>
Supported Error Codes defined in packages:	All error codes defined in supported packages shall be supported.

Table A.7.9/2: Error Codes Sent by MGW

Supported H.248.8 Error Codes:	~~FFS< list of individual numbers>~~ ALL with exception of: #460 "Unable to set statistic on stream" #518 "Event buffer full"· #519 "Out of space to store digit map"· #520 "Digit Map undefined in the MG"·
Supported Error Codes defined in packages:	All error codes defined in supported packages shall be supported.

A.10 Transactions

For the purpose of the present document the text of clause A.10 of [1] is replaced by the modified text as shown below.

Table A.10/1: Transactions per Message

Maximum number of TransactionRequests / TransactionReplies / TransResponseAcks / Segment Replies per message:	2 (NOTE 1) 10 (NOTE 2)
NOTE 1: Maximum required by TISPAN NGN R2	
NOTE 2: Maximum required by 3GPP	

Table A.10/2: Commands per Transaction Requests

Maximum number of commands per Transaction request:	2 (NOTE 1) Unspecified (NOTE 2)
NOTE 1: Maximum required by TISPAN NGN R2 NOTE 2: Maximum required by 3GPP	

Table A.10/3: Commands per Transaction Reply

Maximum number of commands per Transaction reply:	2 (NOTE 1) Unspecified (NOTE 2)
NOTE 1: Maximum required by TISPAN NGN R2 NOTE 2: Not specified by 3GPP	

Table A.10/4: Optional Commands

Commands able to be marked "Optional":	AuditValue

Table A.10/5: Transaction Timers

Transaction Timer:	Value
normalMGExecutionTime	Provisioned, changeable with Base Root Package (clause A.14.2)
normalMGCExecutionTime	Provisioned, changeable with Base Root Package (clause A.14.2)
MGOriginatedPendingLimit	Provisioned, changeable with Base Root Package (clause A.14.2)
MGCOriginatedPendingLimit	Provisioned, changeable with Base Root Package (clause A.14.2)
MGProvisionalResponseTimerValue	Provisioned, changeable with Base Root Package (clause A.14.2)
MGCProvisionalResponseTimerValue	Provisioned, changeable with Base Root Package (clause A.14.2)

A.14   Packages

For the purpose of the present document the text of clauses A.14.3, A.14.4, A.14.9, A.14.10, A.14.12, A.14.14, A.14.15, A.14.16, A.14.17, A.14.18, A.14.19, A.14.20 is not applicable.

Annex ZA (informative):
Comparison with ES 283 024 (H.248 TGW Profile for TISPAN R1)

Table ZA.1 provides an overview of the differences between the present document and ES 283 024 [i.1] (V1.1.4) (TGW R1).

Table ZA.1: Differences between the present document and ES 283 024 [i.1]

Topic	ES 283 049 (TGW R2)	ES 283 024 [i.1] (TGW R1)
X.1 Profile name	threegimscsiw	etsi_tgw
-version	2	1
X.8.4 Move Command	Optional	Not required
X.8.8 ServiceChange reasons sent by MGW	900-910, 913-917	900-908, 910-917
X.8.9 Context Attributes Manipulated:	Topology (Optional), Emergency, Priority	Topology (Optional)
Packages		

Generic Package v1	Mandatory
	Events: Cause, Signal Completion
	Signal Completion used in commands
	  ADD, MOD, MOVE, NOTIFY
		Optional
		Events: Signal Completion
		Signal Completion used in command
		  NOTIFY

TDM Circuit Package v1	Mandatory
	Echo Cancellation used in commands
	  ADD, MOD, MOVE
	Echo Cancellation provisioned Value:
	  Default= Off (False)
		Mandatory
		Echo Cancellation used in commands
		  ADD, MOD
		Echo Cancellation provisioned Value:
		  -

Basic Continuity Package v1	Mandatory
	Continuity Test used in commands
	  ADD, MOD, MOVE
	Completion used in commands
	  ADD, MOD, MOVE, NOTIFY
		Mandatory
		Continuity Test used in commands
		  ADD, MOD
		Completion used in command
		  NOTIFY

Call Progress Tones Generator Package v1	Optional
	Tones used in commands:
	  ADD, MOD, MOVE
		Optional
		Tones used in command:
		  MOD

Generic Announcement Package v1	Optional
	Mandatory Signal Parameters:
	  Announcement name
	  Number Of Cycles
	  Announcement Direction
		Optional
		Mandatory Signal Parameters:
		  Announcement name

RTP Package v1	Optional
	Events
	  Payload Transition
		Optional
		Events
		  None

Annex A (informative):
Change history

Date	WG Doc.	CR	Rev	CAT	Title / Comment	Current Version	New Version
26-09-08	18bTD286r1	007		F	Change to Mn Reference	2.0.2	2.0.3
					Publication	2.0.3	2.1.1

History

Document history			
V2.0.2	February 2008	Publication	
V2.1.0	December 2008	Membership Approval Procedure	MV 20090220: 2008-12-23 to 2009-02-20
V2.1.1	February 2009	Publication	