3GPP TSG CN Plenary Meeting #26 8th – 10th December 2004 Athens, Greece.

Source: TSG CN WG4

Title: Corrections on TEI5 Mc-interface

Agenda item: 8.8

Document for: APPROVAL

Spec	CR	Rev	Doc-2nd-Level N4-040	Phase	Subject	Cat	Ver_C
29.232	082		1434	Rel-5	Embedded Events/Signals	F	5.8.0
29.232	084		1436	Rel-5	Multiple Streams Per Termination	F	5.8.0
29.232	081	1	1545	Rel-5	Correction to Q.1950 reference	F	5.8.0
29.232	080	1	1669	Rel-5	Scope Of H.248.1 base protocol.	F	5.8.0
29.232	085	1	1670	Rel-5	Overspecified and Underspecified Parameters	F	5.8.0
29.232	088	2	1674	Rel-5	Alignment of Mc procedures with command types as defined in stage 2	F	5.8.0

3GPP TSG-CN WG4 Meeting #25

Seoul, KOREA. 15th to 19th November 2004.

CR-Form-v7.1 CHANGE REQUEST							
*	29.232 CR 082						
For <u>HELP</u> on u	ing this form, see bottom of this page or look at the pop-up text over the \mathbb{H} symbols.						
Proposed change a	ffects: UICC apps第 ME Radio Access Network Core Network X						
Title: Ж	Embedded Events/Signals						
Source: ೫	CN4						
Work item code: ₩	TEI5 Date: 第 6/10/2004						
Category:	Release: Release: Release: Rel5 Use one of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) P (Release 1996) R97 (Release 1997) R98 (Release 1998) P (reditorial modification) R99 (Release 1999) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)						
Reason for change: Standard H.248.1 permits an Event descriptors containing embedded events or signals – from H.248.1: An event can include an Embedded Signals descriptor and/or an Embedded Events descriptor which, if present, replaces the current Signals/Events descriptor when the event is recognized. It is possible, for example, to specify that the dialtone Signal be generated when an off-hook Event is recognized, or that the dialtone Signal be stopped when a digit is recognized. The example above does not apply to 3GPP or the Mc interface and no such requirement for this is defined. In order to avoid interworking problems and to simplify implementations on the Mc interface this feature should be excluded. ESSENTIAL CORRECTION							
Summary of chang	Embedded events or signals excluded from Mc interface						
Consequences if not approved:	# Implementations not supported by requirements - Interoperability problems						
Clauses affected:	光 12						
Other specs affected:	Y N X Other core specifications X Test specifications O&M Specifications						

 \mathfrak{H}

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \(\mathcal{H} \) contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

12 General on Packages and Transactions

The base root package (0x0002) properties shall be provisioned in the MGW.

Event Buffering shall not be supported.

DigitMaps shall not be supported.

H.248 Statistics shall not be audited via the Mc interface and shall be suppressed in the replies to Subtract commands, except where specific 3GPP packages define their use.

Embedded Signals or Embedded Events shall not be supported on the Mc interface.

Seoul, KOREA. 15th to 19th November 2004.

CHANGE REQUEST							
*	29.232 CR 084 # rev - # C	Current version: 5.8.0 #					
For <mark>HELP</mark> on u	sing this form, see bottom of this page or look at the p	pop-up text over the 光 symbols.					
Proposed change	Proposed change affects: UICC apps# ME Radio Access Network Core Network						
Title:	Multiple Streams Per Termination						
Source: ೫	CN4						
Work item code: ₩	TEI5	Date: 第 6/10/2004					
Category:	F Use one of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.	Release: # Rel5 Use one of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)					
Reason for change	Reason for change: Multiple streams per termination are permitted by H.248.1 protocol but no 3GPP application uses this. ESSENTIAL CORRECTION						
Summary of chang	re: The use of Multiple Streams Per Termination a	are excluded from the Mc interface					
Consequences if not approved:	₩ Possible Implementations not supported by reproblems	quirements - Interoperability					
Clauses affected:	第 12						
Other specs affected:	Y N X Other core specifications Test specifications O&M Specifications						
Other comments:	×						

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked \$\mathbb{H}\$ contain pop-up help information about the field that they are closest to.

- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

12 General on Packages and Transactions

The base root package (0x0002) properties shall be provisioned in the MGW.

Event Buffering shall not be supported.

DigitMaps shall not be supported.

H.248 Statistics shall not be audited via the Mc interface and shall be suppressed in the replies to Subtract commands, except where specific 3GPP packages define their use.

Only a single media stream per Termination shall be supported.

Seoul, KOREA. 15th to 19th November 2004.

CHANGE REQUEST										
	29.2	2 <mark>32</mark> CI	Q 081	жr	ev	×	Current vers	sion:	5.8.0	ж
For <u>HELP</u> on u	using thi	is form, s	see bottom	of this pag	ge or loc	k at th	e pop-up tex	t over i	the # syr	nbols.
Proposed change affects: UICC apps# ME Radio Access Network Core Network X							etwork X			
Title:	Correc	ction to C	2.1950 refe	rence.						
Source: #	CN4									
Work item code: #	TEI5						Date: ₩	15/1	1/2004	
Category: ₩	F A B C D Detaile	correction (correction) (correspondition) (function) (editorial (correction)) (ed explana)	ollowing cate on) onds to a co of feature), al modificati modification ations of the P TR 21.900	orrection in a ion of featur n) above cate	re)		Release: # Use <u>one</u> of Ph2 e) R96 R97 R98 R99 Rel-4 Rel-5 Rel-6 Rel-7	the foli (GSM) (Relea (Relea (Relea	lowing rele l Phase 2) ase 1996) ase 1997) ase 1998) ase 1999) ase 4) ase 5)	eases:
Reason for change	Reason for change: # - Currently no date/release version is specified for Q.1950 specification but the latest version uses H.248.1 versions 1 and 2. This could be seen as a contradiction to the specific reference of H.248.1 which is version 1. ESSENTIAL CORRECTION									
Summary of chang	_		•				nanged to spe pplies to this			g but a
Consequences if not approved:		Possible protocol		over spec	ification	s whic	h reference t	he ass	ociated F	1.248
Clauses affected: Other specs affected:	₩ H	X Te	ner core sp st specifica M Specific	itions	s ¥					
Other comments:	\mathfrak{H}									

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked \$\mathbb{H}\$ contain pop-up help information about the field that they are closest to.

- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.
- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.
- [1] 3GPP TS 23.153: "Out of band transcoder control; Stage 2". [2] 3GPP TS 23.205: "Bearer independent circuit-switched core network; Stage 2". [3] 3GPP TS 24.008: "Mobile radio interface Layer 3 specification; Core network protocols; Stage 3". [4] 3GPP TS 25.415: "UTRAN Iu interface user plane protocols". [5] 3GPP TS 28.062: "Inband Tandem Free Operation (TFO) of speech codecs; Service description; Stage 3". [6] 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)". [7] 3GPP TS 29.205: "Application of Q.1900 series to Bearer Independent circuit-switched network architecture; Stage 3". [8] 3GPP TS 29.415: "Customized Applications for Mobile network Enhanced Logic (CAMEL) Phase 3; CAMEL Application Part (CAP) specification". [9] 3GPP TS 48.008: "Mobile Switching Centre - Base Station System (MSC - BSS) interface; Layer 3 specification". [10] ITU-T Recommendation H.248.1 (03/02): "Gateway control protocol". Version 1 [11]ITU-T Recommendation Q.2210 (1996): "Message transfer part level 3 functions and messages using the services of ITU-T Recommendation Q.2140". [12] IETF RFC 2960: "Stream control transmission protocol". 3GPP TS 29.202: "Signalling System No. 7 (SS7) signalling transport in core network; Stage 3". [13] [14] ITU-U Recommendation H.248.8: "Error codes and service change reason description". ITU-U Recommendation H.248.10: "Media gateway resource congestion handling package". [15] 3GPP TS 26.103: "Speech codec list for GSM and UMTS". [16] ITU-U Recommendation H.248.2: "Facsimile, text conversation and call discrimination packages". [17] [18] 3GPP TS 26.226: "Cellular text telephony; Transport of text in the voice channel". ITU-T Recommendation T.140: "Protocol for multimedia application text conversation". [19] [20] 3GPP TS 25.413: "UTRAN Iu interface RANAP signalling". [21] 3GPP TS 25.414: "UTRAN Iu interface data transport and transport signalling". 3GPP TS 23.078: "Customized Applications for Mobile network Enhanced Logic (CAMEL); [22]

Stage 2".

[23]	ITU-T Recommendation Q.1950 (12/2002): "Bearer independent call bearer control protocol".				
Note: Only H.248.1 v1 applies to the Mc Interface.					
[24]	ITU-T Recommendation Q.765.5: "Signalling system No. 7 - Application transport mechanism: Bearer Independent Call Control (BICC)".				
[25]	ITU-T Recommendation G.711: "Pulse code modulation (PCM) of voice frequencies".				
[26]	3GPP TS 26.102: "3rd Generation Partnership Project; Mandatory speech codec; AMR speech codec; Interface to Iu, Uu and Nb"				
[27]	3GPP TS 23.014: "Technical Specification Group Core Network; Support of Dual Tone Multi-Frequency (DTMF) signalling".				
[xx]	ITU-T Recommendation H.248.7: "Generic Announcement Package".				

14 H.248 standard packages

The following H.248 packages are used by this UMTS Capability Set:

- Generic v1 (see ITU-T Recommendation H.248.1 [10] annex E.1).
- Base Root Package v1 (see ITU-T Recommendation H.248.1 [10] annex E.2).
- Tone Generator Package v1 (see ITU-T Recommendation H.248.1 [10] annex E.3).
- Tone Detection Package v1 (see ITU-T Recommendation H.248.1 [10] annex E.4).
- Basic DTMF Generator Package v1 (see ITU-T Recommendation H.248.1 [10] annex E.5).
- DTMF Detection Package v1 (see ITU-T Recommendation H.248.1 [10] annex E.6).
- Call Progress Tones Generator Package v1 (see ITU-T Recommendation H.248.1 [10] annex E.7).
- Generic Announcement Package v1 (see ITU-T Recommendation H.248.7 [xx]1 [10] annex K).
- TDM Circuit Package v1 (see ITU-T Recommendation H.248.1 [10] annex E.13).
- Media Gateway Resource Congestion Handling Package v1 (see ITU-T Recommendation H.248.10 [15]).
- Text Telephony Package (see ITU-T Recommendation H.248.2 [17]).
- Call Discrimination package (see ITU-T Recommendation H.248.2 [17]).

3GPP TSG-CN WG4 Meeting #25

Seoul, KOREA. 15th to 19th November 2004.

	CR-Form-v7.1 CHANGE REQUEST								CR-Form-v7.1			
*	29	.232	CR 0	30	жr	ev	1 ³	€ (Current ver	sion:	5.8.0	ж
For <u>HELP</u> on u	ising i	this fori	m, see b	ottom of	this pag	ge or lo	ook at	the	pop-up tex	t over	the ¥ syr	mbols.
Proposed change	affec	<i>ts:</i> L	JICC app	os#	M	IE	Radic	Aco	cess Netwo	ork	Core Ne	etwork X
Title: #	Sco	oe Of H	1.248.1 k	ase prot	tocol.							
Source: #	CN	4										
Work item code: ₩	TE	5							Date: ♯	18/	/11/2004	
Category: ∺	Deta	F (corred) A (corred) B (add) C (function D (edited)	ection) esponds lition of fe ctional mo orial mod	odification ification) of the ab	ection in a	e)			Ph2	f the for (GSN) (Relea (Relea (Relea (Relea (Relea (Relea	lS bllowing related Phase 2) pase 1996) pase 1997) pase 1998) pase 1999) pase 4) pase 5) pase 6)	eases:
Reason for change	Reason for change: H.248.1 is the base protocol on which Mc interface relies but it includes much functionality that does not apply to a PLMN or the 3GPP applications to be provided by the Mc Interface. This does not mean that a MGW cannot support the entire H.248.1 protocol and other packages defined elsewhere than in the Mc interface but it means that compliancy to the Mc interface is limited to only what is required for the 3GPP applications and nothing more. ESSENTIAL CORRECTION					e oport the Mc						
Summary of chang	ge: ૠ		ed for 30						y what addi of the base			
Consequences if not approved:	*	packa from	ages tha the Serv	t needs t	to be sup could re	pporte sult in	d by a	a MC	nd its associately or expension	cted t	o be supp	orted
Clauses affected:	H	1, 4										
Other specs affected:	¥	Y N X X	Test sp	ore spec ecificatio pecificati	ns	S	*					
Other comments:	\mathfrak{H}											

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 1) Fill out the above form. The symbols above marked \$\mathbb{X}\$ contain pop-up help information about the field that they are closest to.
- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

1 Scope

The present document describes the protocol to be used on the Media Gateway Controller (MGC) – Media Gateway (MGW) interface. The Media Gateway Controllers covered in this specification are the MSC server and the GMSC server. The basis for this <u>interface profileprotocol</u> is the H.248.1 [10]/MEGACO protocol as specified in ITU-T-and IETF. The BICC architecture as described in 3GPP TS 23.205 [2] and 3GPP TS 29.205 [7] defines the usage of this protocol.

This specification describes the changes to H.248/MEGACO which are needed to handle 3GPP specific traffic cases. This is done by using the H.248/MEGACO standard extension mechanism. In addition certain aspects of the base protocol H.248 are not needed for this interface and thus excluded by this profile.

The present document is valid for a 3rd generation PLMN (UMTS) complying with Release 4 and later.

4 UMTS capability set

This capability set shall be used in its entirety whenever it is used within an H.248 profile. Failure to do so will result in a non-standard implementation.

ITU-T Recommendation H.248.1 [10] shall be the basis for supported by this Capability Set. The compatibility rules for packages, signals, events, properties and statistics and the H.248 protocol are defined in ITU-T Recommendation H.248.1 [10] but Theire use or exclusion for this interface is clarified in clause 12.

3GPP TSG-CN WG4 Meeting #25

Seoul, KOREA. 15th to 19th November 2004.

	CR-Form-v7.1 CHANGE REQUEST						
*	29.232 CR 085						
For <u>HELP</u> on usii	ng this form, see bottom of this page or look at the pop-up text over the 光 symbols.						
Proposed change af	ects: UICC apps# ME Radio Access Network Core Network X						
Title: 第 C	verspecified and Underspecified Parameters						
Source: #	CN4						
Work item code: ₩	TEI5 Date: # 19/11/2004						
D	Release: # Rel5 se one of the following categories: F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification) etailed explanations of the above categories can found in 3GPP TR 21.900. Release: # Rel5 Use one of the following releases: Ph2 (GSM Phase 2) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 6) Rel-7 (Release 7)						
Reason for change:	 Standard H.248 permits parameters to be fully specified or overspecified or underspecified: 2) Underspecified parameters, using the CHOOSE value, allow the command 						
	responder to choose any value it can support. 3) Overspecified parameters have a list of potential values. The list order specifies the command initiator's order of preference of selection. The command responder chooses one value from the offered list and returns that value to the command initiator. In general this form of parameter specification should not be used as it leaves the interface open for interoperability problems. 29.232 and Q.1950 explicitly describe uses of Underspecification. Only where these referenced profiles define this shall						
	the use of Underspecified or OverSpecified parameters be permitted. ESSENTIAL CORRECTION						
Summary of change.	Overspecification and Underspecification of parameters shall not be used unless explicitly defined by the Mc interface specification.						
Consequences if not approved:	# Implementations not supported by requirements - Interoperability problems						
Clauses affected:	光 12						
	YN						

Other specs affected:	>	Other core specifications Test specifications O&M Specifications	¥	
Other comments:	×			

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

12 General on Packages and Transactions

The base root package (0x0002) properties shall be provisioned in the MGW.

Event Buffering shall not be supported.

DigitMaps shall not be supported.

H.248 Statistics shall not be audited via the Mc interface and shall be suppressed in the replies to Subtract commands, except where specific 3GPP packages define their use.

The use of "Overspecified" (e.g. range of values) and "Underspecified" (e.g. "?") parameter specification shall not be permitted except where explicitly indicated in or referenced by the Mc interface specification.

Seoul, KOREA. 15th to 19th November 2004.

CHANGE REQUEST							
*	29.232 CR ⁰⁸⁸	⊭rev 2 [⊭]	Current version: 5.8.0				
For <u>HELP</u> on	using this form, see bottom of this	page or look at the	pop-up text over the % symbols.				
Proposed change affects: UICC apps# ME Radio Access Network Core Network X							
Title:	f Alignment of Mc procedures with	command types a	s defined in stage 2				
Source:	€ CN4						
Work item code:	€ TEI5		Date: 第 18/11/2004				
Category:	Use one of the following categories: F (correction) A (corresponds to a correction B (addition of feature), C (functional modification of fe D (editorial modification) Detailed explanations of the above of the found in 3GPP TR 21.900.	in an earlier release) ature)	Release: # Rel5 Use one of the following releases: Ph2 (GSM Phase 2)) R96 (Release 1996) R97 (Release 1997) R98 (Release 1998) R99 (Release 1999) Rel-4 (Release 4) Rel-5 (Release 5) Rel-6 (Release 7)				
Reason for change: A number of procedures are defined to be able to be sent in different command types. In order to prevent interoperation problems this CR aligns the procedures with command types that are required for the stage 2 sequences. ESSENTIAL CORRECTION							
	Removal of command type						
Consequences if not approved:	# Interoperability problems if required by stage 2 specifi		pted with command types not				
Clauses affected: Other specs affected:	Y N X Other core specificat						
Other comments:	X						

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked \$\mathbb{H}\$ contain pop-up help information about the field that they are closest to.

- 2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
- 3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

14.2.4 Establish Bearer

This procedure is the same as that defined in the subclause "Establish BNC_notify" in ITU-T Recommendation Q.1950 [23] (see 3GPP TS 29.205 [7]) except that the Command MOV shall not be used and with additions as shown below.

Address Information	Control information	Bearer information
	UP mode = Mode UP version = version Delivery of erroneous SDUs = value Interface = interface Initdirerection = initdirection Bitrate = bitrate	PLMN bearer capability = PLMN capability GSM channel coding = coding
	If indication on Protocol Negotiation Result requested: NotificationRequested (Event ID = x, "Prot Negotiation Result")	
	If indication on Rate Change requested: NotificationRequested (Event ID = x, "RateChange")	

14.2.5 Prepare Bearer

This procedure is the same as that defined in the subclause "Prepare_BNC_notify" in ITU-T Recommendation Q.1950 [23] (see 3GPP TS 29.205 [7]) except that the Commands MOD and MOV shall not be used and with additions as shown below.

Address Information	Control information	Bearer information
	UP mode = mode UP version = version	PLMN bearer capability = PLMN capability
	Delivery of erroneous SDUs = value Interface = interface Initdirerection = initdirection State= ctmstate Transport= ctmtransport Version= ctmtext version Bitrate = bitrate	GSM channel coding = coding
	If indication on Protocol Negotiation Result requested: NotificationRequested (Event ID = x, "Prot Negotiation Result")	
	If indication on Rate Change requested: NotificationRequested (Event ID = x, "RateChange") If indication on Bearer Modification	
	requested: NotificationRequested (Event ID = x, "Bearer Modification Support") If notification on CTM negotiation result requested: NotificationRequested (Event ID = x, " connchange ")	

14.2.18 Reserve Circuit

This procedure is activated when the "Reserve Circuit" procedure is initiated.

An ADD.req, MOD.req or MOV.req command is sent with the following information.

1 ADD.req/MOV.req (Reserve_Circuit) CSM to BIWF

Address Information	Control information	Bearer information
	Transaction ID = z Termination ID = bearer1	Bearer Service Characteristics
		If data call
	Context Requested:	PLMN capabilities
	Context ID = ?	GSM channel coding = coding
	Context Provided:	
	Context ID = c1	
	State= ctmstate	
	Transport= ctmtransport	
	Version= ctmtext version	
	If indication on Protocol Negotiation Result requested: NotificationRequested (Event ID = x, "Prot Negotiation Result")	
	If indication on Rate Change requested:	
	NotificationRequested (Event ID = x, "RateChange")	
	If notification on CTM negotiation result requested:	
	NotificationRequested (Event ID	
	= x, " connchange ")	

Upon completion of processing command (1) an ADD.resp, MOD.resp or MOV.resp command (2) is sent.

2 ADD.resp/MOV.resp BIWF to CSM

Address Information	Control information	Bearer information
	Transaction ID = z	
	Context ID = c1	
	TerminationID = bearer1	

14.2.31 TFO Activation

When the procedure "TFO activation" is required the following procedure is initiated:

The MGC sends a ADD.req or MOV.req command with the following information.

1 ADD.req/MOD.req/MOV.req (TFO activation) MGC to MGW

Address Information	Control information	Bearer information
	Transaction ID = z	
	Context ID = c1	
	Termination ID = bearer1	
	Tfoenable = Off / value	

When the processing of command (1) is complete, the MGW initiates the following procedure.

2 ADD.resp/MOD.resp/MOV.resp (TFO activation) MGW to MGC

Address Information	Control information	Bearer information
	Transaction ID = z	
	Context ID = c1	
	TerminationID=bearer1	

14.2.32 Optimal Codec and Distant List_Notify

When the procedure "Optimal Codec and Distant List" is required the following procedure is initiated:

The MGC sends a <u>ADD.req.</u> MOD.req <u>or MOV req.</u> command with the following information.

1 ADD.req/MOD.req/MOV.req (Codec modify and distant list) MGC to MGW

Address Information	Control information	Bearer information
	Transaction ID = z Context ID = c1 Termination ID = bearer1 Property= codeclist	
	NotificationRequested (Event ID = x, "Codec modify") NotificationRequested (Event ID = x, "Distant List")	

When the processing of command (1) is complete, the MGW initiates the following procedure.

2 ADD.resp/MOD.resp/MOV.resp (Optimal codec and codec list) MGW to MGC

Address Information	Control information	Bearer information
	Transaction ID = z	
	Context ID = c1	
	TerminationID= bearer1	