Source:	**CN5 (OSA)**	
Title:	**Rel-5/6 CRs 29.198-04-4 OSA API Part 4: Call control;**	
	Sub-part 4: Multi-Media Call Control SCF	
Agenda item:	**8.2**	
Document for:	**APPROVAL**	

Doc-1st-Level	Spec	CR	R	Ph	Subject	Cat	Version-Current	Doc-2nd-Lev	WI
NP-030551	29.198-04-4	011	-	Rel-5	Correction of method references in MMCC	F	5.4.0	N5-030351	OSA2
NP-030551	29.198-04-4	012	-	Rel-5	Include full set of 3GPP codecs in TpAudioCapabiltiesType and TpVideoCapabilitiesType	F	5.4.0	N5-030361	OSA2
NP-030551	29.198-04-4	013	-	Rel-6	Include full set of 3GPP codecs in TpAudioCapabiltiesType andTpVideoCapabilitiesType	A	6.0.0	N5-030362	OSA2

CR-Form-v7

CHANGE REQUEST

| ⌘ | **29.198-04-4** | **CR** | **011** | ⌘**rev** | **-** | ⌘ | Current version: | **5.4.0** | ⌘ |

For **HELP** *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: ⌘	Correction of method references in MMCC	
Source: ⌘	CN5 Gareth Carroll (Open API Solutions)	
Work item code:⌘	OSA2	***Date:*** ⌘ 18/07/2003
Category: ⌘ **F**		***Release:*** ⌘ REL-5

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.

Use one of the following releases:
    2   *(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)*

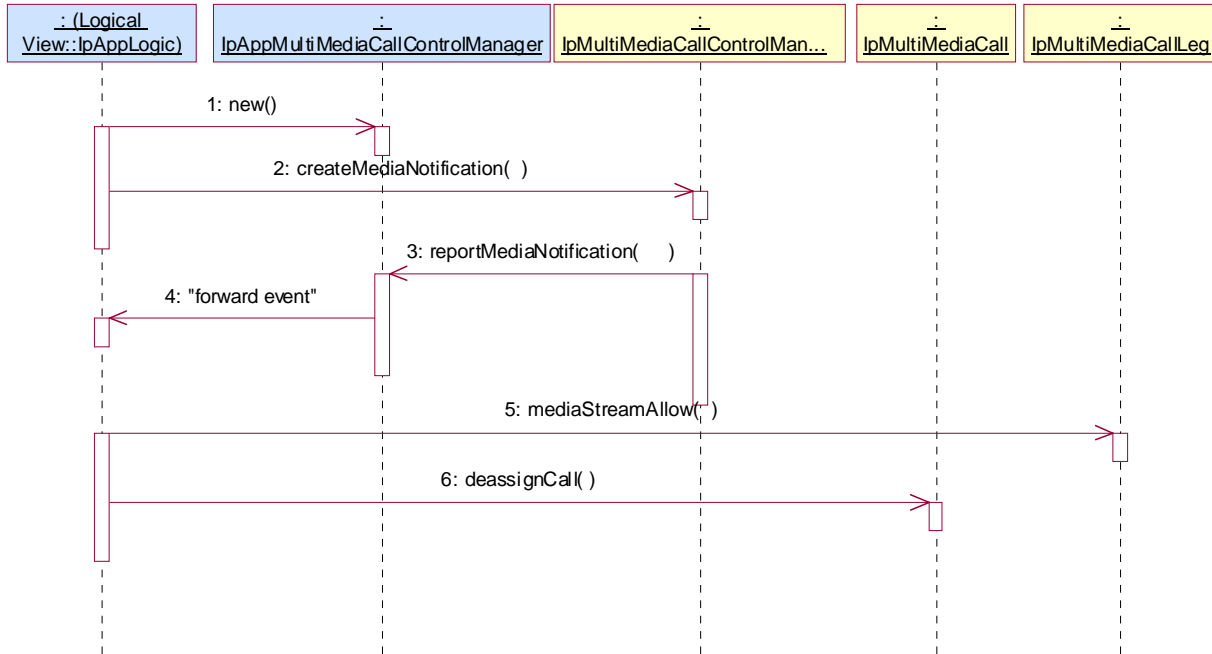|	
Reason for change: ⌘	There are a number of incorrect method references in the Multi-media call control specification. Sequence diagram 4.4 references routeReq which no longer exists on IpMultiPartyCall, and routeRes, which no longer exists on IpAppMultiPartyCall.
Summary of change:⌘	We propose to correct the incorrect method references.
Consequences if not approved: ⌘	Failure to correct these method references can lead to confusion and, potentially, incorrect and non-interoperable implementations.

Clauses affected: ⌘	4.3, 4.4, 6.1.3

	Y	N		
Other specs ⌘		X	Other core specifications	⌘
affected:		X	Test specifications	
		X	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:

4.3 Barring for media, simple

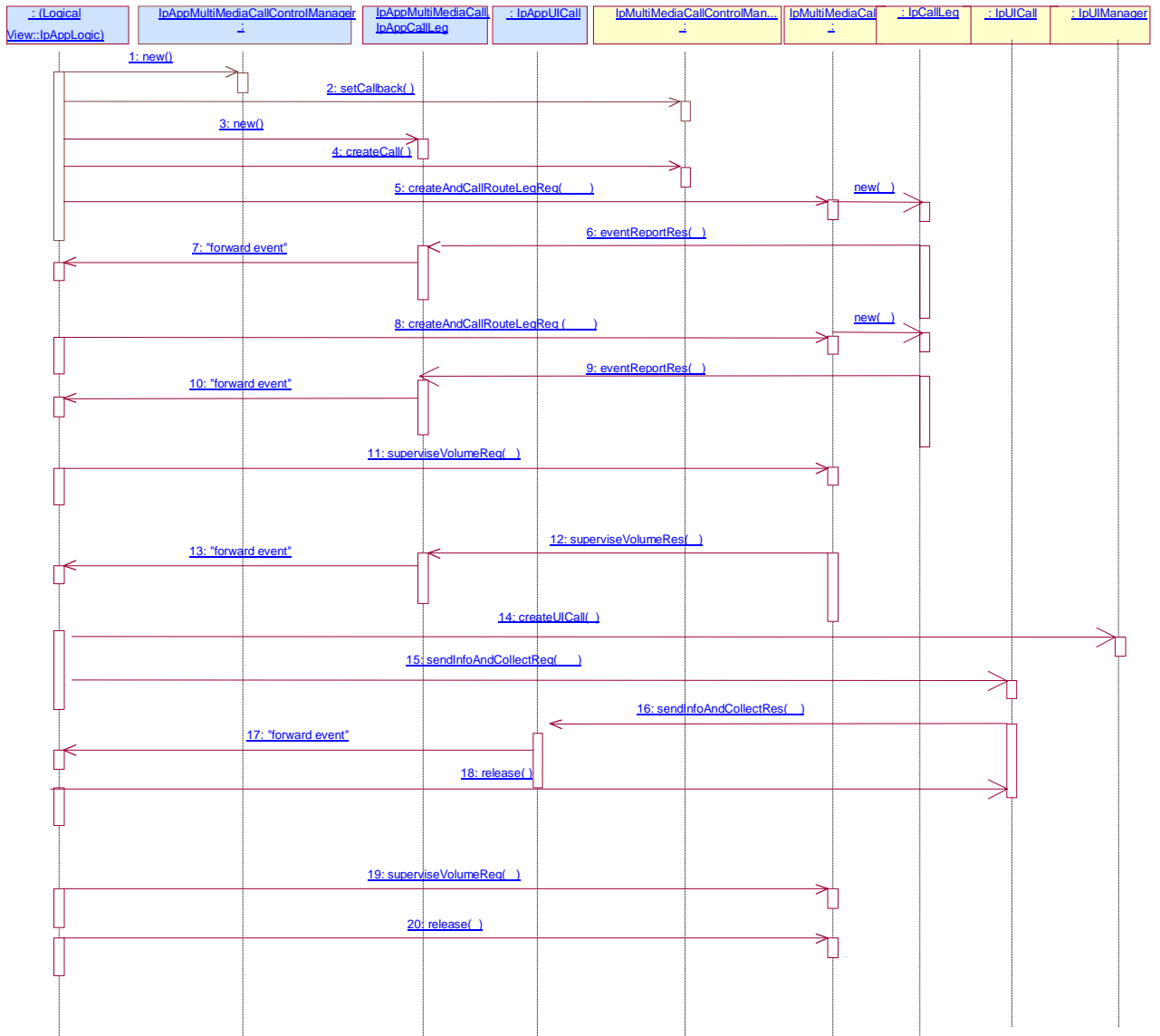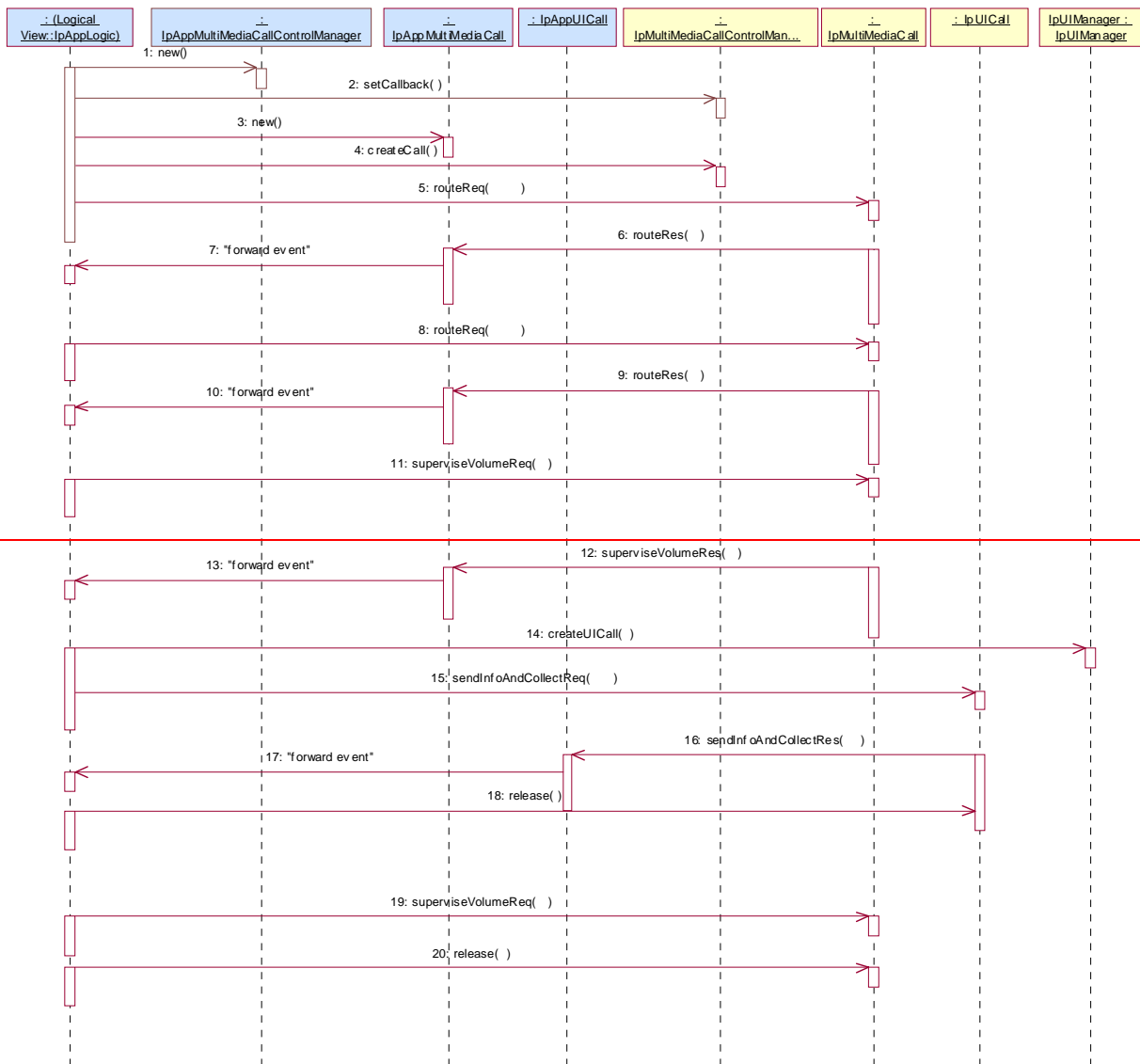This sequence illustrates how an application can block the establishment of video streams for a certain user.

1: The application starts a new AppMultiMediaCallControlManager interface for reception of callbacks.

2: The application expresses interest in all calls from or to subscriber A that use video. The just created App interface is given as the callback interface.

3: Subscriber A makes a call with the SIP INVITE with SDP media stream indicating video.

4: The message is forwarded to the application.

5: The application indicates that the setup of the media stream is not allowed by not including the media stream in the allowed list. This has the effect of suppressing the video capabilities in the setup.

6: The application is no longer interested in the call.

New attempts to open video streams will again be indicated with a ~~createMediaNotification~~reportMediaNotification.

4.4 Call Volume charging supervision

This sequence illustrates how an application may supervise a call based on the number of bytes that are exchanged.

Note: In the sequence diagram above, a single box represents both an IpAppCall and an IpAppCallLeg for space reasons.

1: The application creates a new interface to receive callbacks on the call control manager.

2: The created interface is set as the callback interface for the call control manager.

3: The application creates a new interface to receive callback on the call.

4: The application requests the creation of a call.

5: The application initiates the call by routing to the origination. This will implicitly create a call leg. The application requests a notification when the party answers.

6: When the A party answers the application is notified.

7: The message is forwarded to the logic.

8: The application also routes the call to the destination. This implicitly creates a call leg. The application requests to be notified on answer of the B-party.

9: When the B-party answers the application is notified.

10: The message is forwarded to the logic.

11: The application requests to supervise the call. In the request the application specifies a limit on the amount of bytes that may be transferred. The application specifies that if the limit is reached the application should be notified.

12: When the limit is reached a notification is send to the application.

13: The message is forwarded to the logic.

15: The application plays an announcement to the user, asking whether the user wants to end the call or continue the call.

16: When the user answers whether the call should continue.

17: The message is forwarded to the logic.

18: The UIcall is released, since no further announcements are needed.

19: In case the user answers that the call should continue, the supervision is reset with a new maximum number of allowed bytes. (note that this might have charging consequences, not shown)

20: If the user answered that the call should not continue, the call is released.

6.1.3 Method changeMediaNotification()

This method is used by the application to change the event criteria introduced with createMediaNotification. Any stored criteria associated with the specified assignmentID will be replaced with the specified criteria.

Parameters

assignmentID : in TpAssignmentID

Specifies the ID assigned by the multi-media call control manager interface for the media stream notification. If two callbacks have been registered under this assignment ID both of them will be ~~disabled~~changed.

notificationMediaRequest : in TpNotificationMediaRequest

Specifies the new set of event specific criteria used by the application to define the event required. Only events that meet these criteria are reported.

Raises

TpCommonExceptions, P_INVALID_ASSIGNMENT_ID, P_INVALID_CRITERIA, P_INVALID_EVENT_TYPE

CR-Form-v7

CHANGE REQUEST

⌘	**29.198-04-4**	CR	**012**	⌘**rev**	**-**	⌘	Current version:	**5.4.0**	⌘

*For **HELP** 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:	⌘	Include full set of 3GPP codecs in TpAudioCapabiltiesType and TpVideoCapabilitiesType

Source:	⌘	CN5 (ETSI PTCC)

Work item code: ⌘	OSA2		***Date:*** ⌘	18/07/2003

Category:	⌘	**F**	***Release:*** ⌘	*REL-5*

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.

Use one of the following releases:
2   *(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)*

Reason for change:	⌘	TpAudioCapabilitiesType and TpVideoCapabilitiesType do not support the full set of codecs which can be used with UMTS systems. TpAudioCapabilitiesType and TpVideoCapabilitiesType contain values to identify various audio or video codecs which are meaningless, misleading, or potentially conflicting.

Summary of change: ⌘		Add value to TpAudioCapabilitiesType to select 3GPP AMR audio codec. Add value to TpVideoCapabilitiesType to select MPEG-4 video codec. Correct values of TpAudioCapabilitiesType corresponding to MPEG-1 and MPEG-2 audio codecs. Correct value of TpVideoCapabilitiesType corresponding to MPEG-1 video codec.

Consequences if not approved:	⌘	The Multi Media Call Control API will not support the use of all of the mandatory or recommended UMTS codecs.

Clauses affected:	⌘	8.1.6, 8.1.7

	Y	N			
Other specs affected: ⌘	X		Other core specifications	⌘	Rel-6 29.198-04-4
		X	Test specifications		
		X	O&M Specifications		

Other comments:	⌘	Rel-6 Mirror CR in N5-030362.

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.

8.1.6   TpAudioCapabilitiesType

Defines the audio codec. The requested capabilities can be indicated by adding the values together (i.e., a logical OR function). e.g., 28 indicates interest in all G.722 codes (4+8+16).

Name	Value	Description
P_G711_64K	1	ITU-T Rec. G.711 on 64k, both A-Law and µ-Law
P_G711_56K	2	ITU-T Rec. G.711 on 56k, both A-Law and µ-Law
P_G722_64K	4	ITU-T Rec. G.722 at 64kbit/s
P_G722_56K	8	ITU-T Rec. G.722 at 56kbit/s
P_G722_48K	16	ITU-T Rec. G.722 at 48kbit/s
P_G7231	32	ITU-T Rec. G.723.1
P_G728	64	ITU-T Rec. G.728
P_G729	128	ITU-T Rec. G.729
P_G729_ANNEX_A	256	ITU-T Rec. G.729 Annex A
P_IS11172_3	512	ISO/IEC 11172-3 (MPEG-1 audio)
P_IS13818_3	1024	ISO/IEC 13818-3 (MPEG-2 audio)
P_G729_ANNEXB	2048	ITU-T Rec. G.729 Annex B
P_G729_ANNEX_A_AND_B	4096	ITU-T Rec. G.729 Annex A and B
P_G7231_ANNEX_C	8192	ITU-T Rec. G.723.1 Annex C
P_GSM_FULLRATE	16384	GSM Full Rate Codec
P_GSM_HALFRATE	32768	GSM Half Rate Codec
P_GSM_ENHANCED	65536	GSM Enhanced Full Rate Codec
P_UMTS_AMR_NB	131072	UMTS Narrowband Adaptive Multirate Codec
P_UMTS_AMR_WB	262144	UMTS Wideband Adaptive Multirate Codec

8.1.7   TpVideoCapabilitiesType

Defines the video codec. The requested capabilities can be indicated by adding the values together (i.e., a logical OR function). e.g., 3 indicates both H.261 and H.262 codecs.

Name	Value	Description
P_H261	1	ITU-T Rec. H.261
P_H262	2	ITU-T Rec. H.262
P_H263	4	ITU-T Rec. H.263
P_IS11172_2	8	ISO/IEC 11172-2 (MPEG-1 video)
P_IS14496_2	16	ISO/IEC 14496-2 (MPEG-4 video)

Annex D (informative): Change history

Change history								
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**		**Old**	**New**
Mar 2001	CN_11	NP-010134	047	--	CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)		3.2.0	1.0.0
June 2001	CN_12	NP-010327	--	--	Approved at TSG CN#12 and placed under Change Control		2.0.0	4.0.0
Sep 2001	CN_13	NP-010467	001	--	Changing references to JAIN		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	002	--	Correction of text descriptions for methods enableCallNotification and createNotification		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	003	--	Specify the behaviour when a call leg times out		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	004	--	Removal of Faulty state in MPCCS Call State Transition Diagram and method callFaultDetected in MPCCS in OSA R4		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	005	--	Missing TpCallAppInfoSet description in OSA R4		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	006	--	Redirecting a call leg vs. creating a call leg clarification in OSA R4		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	007	--	Introduction of MPCC Originating and Terminating Call Leg STDs for IpCallLeg		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	008	--	Corrections to SetChargePlan() Addition of PartyToCharge parmeter		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	009	--	Corrections to SetChargePlan()		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	010	--	Remove distinction between final- and intermediate-report		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	011	--	Inclusion of TpMediaType		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	012	--	Corrections to GCC STD		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	013	--	Introduction of sequence diagrams for MPCC services		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	014	--	The use of the REDIRECT event needs to be illustrated		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	015	--	Corrections to SetCallChargePlan()		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	016	--	Add one additional error indication		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	017	--	Corrections to Call Control – GCCS Exception handling		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	018	--	Corrections to Call Control – Errors in Exceptions		4.0.0	4.1.0
Dec 2001	CN_14	NP-010597	019	--	Replace Out Parameters with Return Types		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	020	--	Removal of time based charging property		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	021	--	Make attachMedia() and detachMedia() asynchronous		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	022	--	Correction of treatment datatype in superviseReq on call leg		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	023	--	Corrections to Call Control Data Types		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	024	--	Correction to Call Control (CC)		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	025	--	Amend the Generic Call Control introductory part		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	026	--	Correction in TpCallEventType		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	027	--	Addition of missing description of RouteErr()		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	028	--	Misleading description of createAndRouteCallLegErr()		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	029	--	Correction to values of TpCallNotificationType, TpCallLoadControlMechanismType		4.1.0	4.2.0
Dec 2001	CN_14	NP-010695	030	--	Correction of method getLastRedirectionAddress		4.1.0	4.2.0
Mar 2002	CN_15	NP-020106	031	--	Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()		4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	032	--	Correction of Event Subscription/Notification Data Type		4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	033	--	Correction of parameter name in IpCallLeg.routeReq() and in IpCallLeg.setAdviceOfCharge()		4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	034	--	Clarification of ambiguous Event handling rules		4.2.0	4.3.0
Jun 2002	CN_16	NP-020180	035	--	Correction to TpCallChargePlan		4.3.0	4.4.0
Jun 2002	CN_16	NP-020180	036	--	Correction to CAMEL Service Property values		4.3.0	4.4.0
Jun 2002	CN_16	NP-020181	037	--	Addition of support for Java API technology realisation		4.4.0	5.0.0
Jun 2002	CN_16	NP-020182	038	--	Addition of support for WSDL realisation		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	039	--	Addition of support for Emergency Telecommunications Service		4.4.0	5.0.0
Jun 2002	CN_16	NP-020183	040	--	Addition of support for Network Controlled Notifications MPCC		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	041	--	Changes to getNotification()		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	042	--	Addition of P_UNSUPPORTED_MEDIA release cause to TpReleaseCause		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	043	--	Addition of CAMEL Phase 4 Service Property values		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	044	--	Addition of indication whether SCS supports initially multiple routeReqs in parallel		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	045	--	Explicit exception for continueProcessing when not in interrupted mode		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	046	--	Indication needed that supervision will be ended when call or callLeg is deassigned		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	047	--	Clarify ambiguous Supervision duration		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	048	--	Detach/Attach request illegal during pending Attach/Detach request		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	049	--	Correction of Multi-Party Call Control properties		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	050	--	Correcting the sequence diagram descriptions in GCC and MPCC		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	051	--	Correcting erroneous description of UI behaviour in call control		4.4.0	5.0.0

Jun 2002	CN_16	NP-020187	052	--	Correcting the descriptions of sequence diagrams that don't match the diagram	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	053	--	Correcting erroneous references to GCC in MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	054	--	Addition of the Multi-media APIs to Call control SCF (29.198-4)	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	055	--	Updating Clause 4 for Release 5	4.4.0	5.0.0
Jun 2002	CN_16	NP-020188	056	--	Splitting of 29.198-04 into 4 separate TSs (sub-parts)	4.4.0	5.0.0
Sep 2002	CN_17	NP-020395	001	--	29.198-04-4 Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	5.1.0
Mar 2003	CN_19	NP-030032	002	--	Correction of status of MMCC methods	5.1.0	5.2.0
Mar 2003	CN_19	NP-030032	003	--	Correction of TpMediaStreamDataTypeRequest	5.1.0	5.2.0
Mar 2003	CN_19	NP-030032	004	--	Addition of missing TpMultiMediaCallIdentifierSet to data types	5.1.0	5.2.0
Jun 2003	CN_20	NP-030238	005	--	Correction of the description for callEventNotify & reportNotification	5.2.0	5.3.0
Jun 2003	CN_20	NP-030243	006	--	Correction to TpAudioCapabiltiesType and TpVideoCapabilitiesType to correctly indicate the required capabilities	5.2.0	5.3.0

CR-Form-v7

CHANGE REQUEST

| ⌘ | **29.198-04-4** CR **013** | ⌘**rev** | **-** | ⌘ | Current version: | **6.0.0** | ⌘ |

*For **HELP** 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: ⌘	Include full set of 3GPP codecs in TpAudioCapabiltiesType andTpVideoCapabilitiesType	
Source: ⌘	CN5 (ETSI PTCC)	
Work item code:⌘	OSA2	***Date:*** ⌘ 18/07/2003

Category: ⌘ **A**	***Release:*** ⌘ *REL-6*

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.

Use one of the following releases:
2 *(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)*

Reason for change: ⌘	TpAudioCapabilitiesType and TpVideoCapabilitiesType do not support the full set of codecs which can be used with UMTS systems. TpAudioCapabilitiesType and TpVideoCapabilitiesType contain values to identify various audio or video codecs which are meaningless, misleading, or potentially conflicting.
Summary of change:⌘	Add value to TpAudioCapabilitiesType to select 3GPP AMR audio codec. Add value to TpVideoCapabilitiesType to select MPEG-4 video codec. Correct values of TpAudioCapabilitiesType corresponding to MPEG-1 and MPEG-2 audio codecs. Correct value of TpVideoCapabilitiesType corresponding to MPEG-1 video codec.
Consequences if not approved: ⌘	The Multi Media Call Control API will not support the use of all of the mandatory or recommended UMTS codecs.

Clauses affected: ⌘	8.1.6, 8.1.7

	Y	N		
Other specs affected: ⌘		X	Other core specifications ⌘	
		X	Test specifications	
		X	O&M Specifications	

Other comments: ⌘	Rel-6 Mirror CR of N5-030361.

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.

8.1.6 TpAudioCapabilitiesType

Defines the audio codec. The requested capabilities can be indicated by adding the values together (i.e., a logical OR function). e.g., 28 indicates interest in all G.722 codes (4+8+16).

Name	Value	Description
P_G711_64K	1	ITU-T Rec. G.711 on 64k, both A-Law and µ-Law
P_G711_56K	2	ITU-T Rec. G.711 on 56k, both A-Law and µ-Law
P_G722_64K	4	ITU-T Rec. G.722 at 64kbit/s
P_G722_56K	8	ITU-T Rec. G.722 at 56kbit/s
P_G722_48K	16	ITU-T Rec. G.722 at 48kbit/s
P_G7231	32	ITU-T Rec. G.723.1
P_G728	64	ITU-T Rec. G.728
P_G729	128	ITU-T Rec. G.729
P_G729_ANNEX_A	256	ITU-T Rec. G.729 Annex A
P_IS11172_2	512	ISO/IEC 11172-3 (MPEG-1 audio)
P_IS13818_2	1024	ISO/IEC 13818-3 (MPEG-2 audio)
P_G729_ANNEXB	2048	ITU-T Rec. G.729 Annex B
P_G729_ANNEX_A_AND_B	4096	ITU-T Rec. G.729 Annex A and B
P_G7231_ANNEX_C	8192	ITU-T Rec. G.723.1 Annex C
P_GSM_FULLRATE	16384	GSM Full Rate Codec
P_GSM_HALFRATE	32768	GSM Half Rate Codec
P_GSM_ENHANCED	65536	GSM Enhanced Full Rate Codec
P_UMTS_AMR_NB	131072	UMTS Narrowband Adaptive Multirate Codec
P_UMTS_AMR_WB	262144	UMTS Wideband Adaptive Multirate Codec

8.1.7 TpVideoCapabilitiesType

Defines the video codec. The requested capabilities can be indicated by adding the values together (i.e., a logical OR function). e.g., 3 indicates both H.261 and H.262 codecs.

Name	Value	Description
P_H261	1	ITU-T Rec. H.261
P_H262	2	ITU-T Rec. H.262
P_H263	4	ITU-T Rec. H.263
P_IS11172_2	8	ISO/IEC 11172-2 (MPEG-1 video)
P_IS14496_2	16	ISO/IEC 14496-2 (MPEG-4 video)

Annex D (informative):
Change history

Change history								
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment		Old	New
Mar 2001	CN_11	NP-010134	047	--	CR 29.198: for moving TS 29.198 from R99 to Rel 4 (N5-010158)		3.2.0	1.0.0
June 2001	CN_12	NP-010327	--	--	Approved at TSG CN#12 and placed under Change Control		2.0.0	4.0.0
Sep 2001	CN_13	NP-010467	001	--	Changing references to JAIN		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	002	--	Correction of text descriptions for methods enableCallNotification and createNotification		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	003	--	Specify the behaviour when a call leg times out		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	004	--	Removal of Faulty state in MPCCS Call State Transition Diagram and method callFaultDetected in MPCCS in OSA R4		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	005	--	Missing TpCallAppInfoSet description in OSA R4		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	006	--	Redirecting a call leg vs. creating a call leg clarification in OSA R4		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	007	--	Introduction of MPCC Originating and Terminating Call Leg STDs for IpCallLeg		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	008	--	Corrections to SetChargePlan() Addition of PartyToCharge parmeter		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	009	--	Corrections to SetChargePlan()		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	010	--	Remove distinction between final- and intermediate-report		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	011	--	Inclusion of TpMediaType		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	012	--	Corrections to GCC STD		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	013	--	Introduction of sequence diagrams for MPCC services		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	014	--	The use of the REDIRECT event needs to be illustrated		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	015	--	Corrections to SetCallChargePlan()		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	016	--	Add one additional error indication		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	017	--	Corrections to Call Control – GCCS Exception handling		4.0.0	4.1.0
Sep 2001	CN_13	NP-010467	018	--	Corrections to Call Control – Errors in Exceptions		4.0.0	4.1.0
Dec 2001	CN_14	NP-010597	019	--	Replace Out Parameters with Return Types		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	020	--	Removal of time based charging property		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	021	--	Make attachMedia() and detachMedia() asynchronous		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	022	--	Correction of treatment datatype in superviseReq on call leg		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	023	--	Corrections to Call Control Data Types		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	024	--	Correction to Call Control (CC)		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	025	--	Amend the Generic Call Control introductory part		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	026	--	Correction in TpCallEventType		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	027	--	Addition of missing description of RouteErr()		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	028	--	Misleading description of createAndRouteCallLegErr()		4.1.0	4.2.0
Dec 2001	CN_14	NP-010597	029	--	Correction to values of TpCallNotificationType, TpCallLoadControlMechanismType		4.1.0	4.2.0
Dec 2001	CN_14	NP-010695	030	--	Correction of method getLastRedirectionAddress		4.1.0	4.2.0
Mar 2002	CN_15	NP-020106	031	--	Add P_INVALID_INTERFACE_TYPE exception to IpService.setCallback() and IpService.setCallbackWithSessionID()		4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	032	--	Correction of Event Subscription/Notification Data Type		4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	033	--	Correction of parameter name in IpCallLeg.routeReq() and in IpCallLeg.setAdviceOfCharge()		4.2.0	4.3.0
Mar 2002	CN_15	NP-020106	034	--	Clarification of ambiguous Event handling rules		4.2.0	4.3.0
Jun 2002	CN_16	NP-020180	035	--	Correction to TpCallChargePlan		4.3.0	4.4.0
Jun 2002	CN_16	NP-020180	036	--	Correction to CAMEL Service Property values		4.3.0	4.4.0
Jun 2002	CN_16	NP-020181	037	--	Addition of support for Java API technology realisation		4.4.0	5.0.0
Jun 2002	CN_16	NP-020182	038	--	Addition of support for WSDL realisation		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	039	--	Addition of support for Emergency Telecommunications Service		4.4.0	5.0.0
Jun 2002	CN_16	NP-020183	040	--	Addition of support for Network Controlled Notifications MPCC		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	041	--	Changes to getNotification()		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	042	--	Addition of P_UNSUPPORTED_MEDIA release cause to TpReleaseCause		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	043	--	Addition of CAMEL Phase 4 Service Property values		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	044	--	Addition of indication whether SCS supports initially multiple routeReqs in parallel		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	045	--	Explicit exception for continueProcessing when not in interrupted mode		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	046	--	Indication needed that supervision will be ended when call or callLeg is deassigned		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	047	--	Clarify ambiguous Supervision duration		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	048	--	Detach/Attach request illegal during pending Attach/Detach request		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	049	--	Correction of Multi-Party Call Control properties		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	050	--	Correcting the sequence diagram descriptions in GCC and MPCC		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	051	--	Correcting erroneous description of UI behaviour in call control		4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	052	--	Correcting the descriptions of sequence diagrams that don't match the		4.4.0	5.0.0

					diagram		
Jun 2002	CN_16	NP-020187	053	--	Correcting erroneous references to GCC in MPCC	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	054	--	Addition of the Multi-media APIs to Call control SCF (29.198-4)	4.4.0	5.0.0
Jun 2002	CN_16	NP-020187	055	--	Updating Clause 4 for Release 5	4.4.0	5.0.0
Jun 2002	CN_16	NP-020188	056	--	Spliting of 29.198-04 into 4 separate TSs (sub-parts)	4.4.0	5.0.0
Sep 2002	CN_17	NP-020395	001	--	29.198-04-4 Add text to clarify relationship between 3GPP and ETSI/Parlay OSA specifications	5.0.0	5.1.0
Mar 2003	CN_19	NP-030032	002	--	Correction of status of MMCC methods	5.1.0	5.2.0
Mar 2003	CN_19	NP-030032	003	--	Correction of TpMediaStreamDataTypeRequest	5.1.0	5.2.0
Mar 2003	CN_19	NP-030032	004	--	Addition of missing TpMultiMediaCallIdentifierSet to data types	5.1.0	5.2.0
Jun 2003	CN_20	NP-030238	005	--	Correction of the description for callEventNotify & reportNotification	5.2.0	5.3.0
Jun 2003	CN_20	NP-030243	006	--	Correction to TpAudioCapabiltiesType and TpVideoCapabilitiesType to correctly indicate the required capabilities	5.2.0	5.3.0
Jun 2003	CN_20	NP-030248	007	--	Adding QoS Reporting Functionality to MMCCS	5.3.0	6.0.0
Jun 2003	CN_20	NP-030306	008	1	Correction of the mechanism for Requesting Event Reports in MMCCS	5.3.0	6.0.0