

3GPP TSG CN Plenary Meeting #27
9th – 11th March 2005 Tokyo, JAPAN.

NP-050055

Source: TSG CN WG4
Title: Corrections on Mc-interface
Agenda item: 9.21
Document for: APPROVAL

Doc-2nd-Level	Spec	CR	Rev	Phase	Subject	Cat	Ver_C
N4-050087	29.232	131		Rel-6	Removal of Signals on ROOT	F	6.0.0
N4-050088	29.232	132		Rel-6	Removal of usage of Stream ID in Topology descriptor	F	6.0.0
N4-050089	29.232	133		Rel-6	H.248.1 version contradiction	F	6.0.0
N4-050471	29.232	165	2	Rel-6	Continuity Test	F	6.0.0

CHANGE REQUEST

⌘ **29.232 CR 131** ⌘ 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

Title:	⌘ Removal of Signals on ROOT		
Source:	⌘ CN4		
Work item code:	⌘ TEI6	Date:	⌘ 19/01/2005
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> 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 <u>one</u> 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:	⌘ H.248.1 version 2 introduces the possibility to apply signals on the ROOT termination. However at the moment Signals on ROOT termination are not used on the Mc-interface. ESSENTIAL CORRECTION
Summary of change:	⌘ Explicitely removal of signals on ROOT use.
Consequences if not approved:	⌘ Interoperability problems.

Clauses affected:	⌘ 12						
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> </table> Other core specifications	Y	N	⌘	X	⌘	
Y	N						
⌘	X						
	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="text-align: center;">⌘</td> <td style="text-align: center;">X</td> </tr> </table> Test specifications	⌘	X				
⌘	X						
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⌘	X						
Other comments:	⌘						

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- 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.

Only a single media stream per Termination shall be supported.

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.

[Signals on ROOT termination shall not be supported](#)

CHANGE REQUEST

⌘ **29.232 CR 132** ⌘ 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

Title:	⌘ Removal of usage of Stream ID in Topology descriptor		
Source:	⌘ CN4		
Work item code:	⌘ TEI6	Date:	⌘ 19/01/2005
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> 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 <u>one</u> 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:	⌘ H.248.1 version 2 introduces the possibility to specify the stream ID to which a Topology Descriptor triple apply. However at the Mc-interface only one stream per termination shall be supported. So the use of the Stream ID in the Topology descriptor shall not be supported. ESSENTIAL CORRECTION
Summary of change:	⌘ Explicitly removal of usage of stream ID in Topology descriptor.
Consequences if not approved:	⌘ Interoperability problems

Clauses affected:	⌘ 12						
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
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	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input checked="" type="checkbox"/></td> <td style="text-align: center;"><input type="checkbox"/></td> </tr> </table> O&M Specifications	Y	N	<input checked="" type="checkbox"/>	<input type="checkbox"/>	⌘	
Y	N						
<input checked="" type="checkbox"/>	<input type="checkbox"/>						
Other comments:	⌘						

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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.

Only a single media stream per Termination shall be supported.

[Stream ID in Topology Descriptor shall not be supported.](#)

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.

CHANGE REQUEST

⌘ **29.232 CR 133** ⌘ 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

Title:	⌘ H.248.1 version contradiction		
Source:	⌘ CN4		
Work item code:	⌘ TEI6	Date:	⌘ 25/01/2005
Category:	⌘ F	Release:	⌘ Rel-6
	Use <u>one</u> 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 <u>one</u> 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:	⌘ CRs 081 and 092 from CN4#25 are not correctly implemented. 29.232 specifies in clause 4 that H.248.1 version 2 should be used in Release 6. However there is still a note under reference [23] ITU-T Recommendation Q.1950: "Bearer independent call bearer control protocol" that "only H.248.1 version 1 applies on the Mc interface". This CR corrects this contradiction. The missing Q.1950 version is added. ESSENTIAL CORRECTION
Summary of change:	⌘ Removal of the note under reference 23. Missing Q.1950 version is added.
Consequences if not approved:	⌘ Interoperability problems, because of contradictory H.248.1 version information.

Clauses affected:	⌘ 2								
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Y</td> <td style="padding: 2px;">N</td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;"><input checked="" type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;"><input type="checkbox"/></td> <td style="padding: 2px;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications ⌘ Test specifications ⌘ O&M Specifications ⌘	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Y	N								
<input type="checkbox"/>	<input checked="" type="checkbox"/>								
<input type="checkbox"/>	<input checked="" type="checkbox"/>								
<input type="checkbox"/>	<input checked="" type="checkbox"/>								
Other comments:	⌘ Q.1950 version seems to be missing also from Rel-5, so we also need a Rel-5 version of this CR.								

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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 (05/2002): "Gateway control protocol". Version 2
- [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".
- [13] 3GPP TS 29.202: "Signalling System No. 7 (SS7) signalling transport in core network; Stage 3".
- [14] ITU-U Recommendation H.248.8: "Error codes and service change reason description".
- [15] ITU-U Recommendation H.248.10: "Media gateway resource congestion handling package".
- [16] 3GPP TS 26.103: "Speech codec list for GSM and UMTS".
- [17] ITU-U Recommendation H.248.2: "Facsimile, text conversation and call discrimination packages".
- [18] 3GPP TS 26.226: "Cellular text telephony; Transport of text in the voice channel".
- [19] ITU-T Recommendation T.140: "Protocol for multimedia application text conversation".
- [20] 3GPP TS 25.413: "UTRAN Iu interface RANAP signalling".
- [21] 3GPP TS 25.414: "UTRAN Iu interface data transport and transport signalling".
- [22] 3GPP TS 23.078: "Customized Applications for Mobile network Enhanced Logic (CAMEL); 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 Me 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".
- [28] ITU-T Recommendation H.248.7: "Generic Announcement Package".

CHANGE REQUEST

⌘ **29.232 CR 165** ⌘ rev **2** ⌘ 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

Title:	⌘ Continuity Test		
Source:	⌘ CN4		
Work item code:	⌘ TEI6	Date:	⌘ 31/01/2005
Category:	⌘ F	Release:	⌘ Rel6
	Use <u>one</u> 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 <u>one</u> 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:	⌘ Introduction of Continuity Test into Mc interface
Summary of change:	⌘ ContinuityTestTone Note added to clarify that this COT procedure could also be used for other maintenance tasks but the details are not in the scope of the Mc profile.
Consequences if not approved:	⌘ Cannot request continuity test on TDM circuits

Clauses affected:	⌘ 14.1						
Other specs affected:	<table border="1" style="display: inline-table; border-collapse: collapse;"> <tr> <td style="width: 20px; text-align: center;">Y</td> <td style="width: 20px; text-align: center;">N</td> </tr> <tr> <td style="text-align: center;"><input type="checkbox"/></td> <td style="text-align: center;"><input checked="" type="checkbox"/></td> </tr> </table> Other core specifications	Y	N	<input type="checkbox"/>	<input checked="" type="checkbox"/>	⌘	
Y	N						
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Y	N						
<input type="checkbox"/>	<input checked="" type="checkbox"/>						
Other comments:	⌘						

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14.1 Call independent H.248 transactions

Table 2 shows the relationship between each non call-related procedure in ITU-T Recommendation Q.1950 [23] (see 3GPP TS 29.205 [7]) and the corresponding stage 2 procedure defined in 3GPP TS 23.205 [2].

For further description of error codes and service change reasons, refer to ITU-T Recommendation H.248.8 [14].

Table 2: Correspondence between ITU-T Recommendation Q.1950 [23] non call-related transactions and 3GPP TS 23.205 [2] procedures

Transaction used in ITU-T Recommendation Q.1950 [23]	Procedure defined in 3GPP TS 23.205 [2]	Comments
BIWF_Service_Cancellation_Indication	MGW Out of Service	
BIWF_Lost_Communication	MGW Communication Up	
BIWF_Service_Restoration_Indication	MGW Restoration	
BIWF_Registration	MGW Register	
BIWF_Re-Registration	MGW Re-register	
CCU Ordered BIWF Re-Registration	(G)MSC Server Ordered Re-register	
CCU Initiated Service Restoration	(G)MSC Server Restoration	
CCU Initiated Service Cancellation	(G)MSC Server Out of Service	
BIWF_Service_Cancellation_Indication	Termination Out-of-Service	Is a part of BIWF Service cancellation in Q.1950
BIWF_Service_Restoration_Indication	Termination Restoration	Is a part of BIWF Service cancellation in Q.1950
Audit_Values	Audit Value	
Audit_Capabilities	Audit Capability	
BIWF_Capability_Change	Capability Update	
	MGW Resource Congestion Handling - Activate	
	MGW Resource Congestion Handling - Indication	
Continuity Check Tone		
Continuity Check Verify		
Continuity Check Response		

[14.1.x Continuity Check Tone](#)

[This procedure is the same as described in Annex B.7.1.1 of ITU-T Recommendation Q.1950 \[10\] with the following clarification:](#)

[The addition to “Prepare BNC Notify” defined in Annex B.7.1.1 of ITU-T Recommendation Q.1950 \[10\] shall be applied instead to “Reserve Circuit”, as defined in Clause 13.2.2.1](#)

[Note: This does not preclude the use of the continuity check tone for other maintenance procedures. If the termination is audited it shall report state in service.](#)

[14.1.y Continuity Check Verify](#)

[This procedure is the same as described in Annex B.7.2.1 of ITU-T Recommendation Q.1950 \[10\]](#)

[14.1.z Continuity Check Response](#)

[This procedure is the same as described in Annex B.7.1.2 of ITU-T Recommendation Q.1950 \[10\] with the following clarification:](#)

The addition to "~~Prepare BNC Notify~~" defined in Annex B.7.1.2 of ITU-T Recommendation Q.1950 [10] shall be applied instead to "Reserve Circuit", as defined in Clause 13.2.2.1

Note: This does not preclude the use of the continuity check response for other maintenance procedures. If the termination is audited is shall report state in service.