3GPP TSG CT Meeting #28 **CP-050247**
1st – 3rd June 2005. Quebec, CANADA. **(Revision of C4-050899)**

CR-Form-v7.1

CHANGE REQUEST

⌘ **29.232** **CR** **207** ⌘ **rev** **4** ⌘ Current version: **5.10.0** ⌘

*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:	⌘	Codec IE and Codec List on the Mc interface
Source:	⌘	Lucent, Alcatel
Work item code:	⌘	OoBTC
Date:	⌘	03/06/2005
Category:	⌘	**A**
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:

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:	⌘	-The Codec IE for a single codec on the Mc interface is not identical to the Single Codec IE as used in the Nc interface (which is as per the ITU BICC definition) This is not clear in this specification and can lead to interoperability problems. Further the Codec List in the TFO package is not clearly defined. **This is an essential correction.**
Summary of change:	⌘	- The codec used on the Mc interface is defined as the Mc Codec to differentiate it from a single codec on the Nc interface. The definition of the Mc single codec IE is clarified. - Definition TFO codec list is clarified in section 15.1.3. - The H.248 parameter type is corrected to be of type “Sublist”.
Consequences if not approved:	⌘	Serious risks that MGC and MGW provided by different suppliers do not interwork.

Clauses affected:	⌘	11, 15.2.2

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

1) Fill out the above form. The symbols above marked ⌘ 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.

11 Mandatory Support of SDP and H.248.1 annex C information elements

This section shall be in accordance with the subclause "Mandatory Support of SDP and H.248 Annex C information elements" in ITU-T Recommendation Q.1950 (see 3GPP TS 29.205 [7]), with the following requirements:

- Mc Single Codec encoding:

  The ACodec property in H.248 binary encoding are set as defined in ITU-T Recommendation Q.765.5 [24], for single codec information (figure 14/Q.765.5), where the Codec Information is defined either in ITU-T Recommendation Q.765.5 [24] or in another specification for the given Organization Identifier. For 3GPP codecs these are defined in 3GPP TS 26.103 [16]. The ~~codecconfig and~~ ACodec parameter~~s~~ contains the contents of the Single Codec IE, excluding the Single Codec Identifier, Length Indication and Compatibility Information.

  Example of encoding of an AMR codec-:

  ~~a=codecconfig:~~ Acodec = 0206959504

  where AMR parameters are: ETSI, UMTS_AMR_2, [ACS={4.75, 5.90, 7.4, 12.2}, SCS={4.75, 5.90, 7.4, 12.2}, OM=0, MACS=4]

  Note: The "Mc Single Codec IE" differs from the ITU-T defined "Single Codec IE", while on the Nc interface (i.e. in OoBTC) the ITU-T Single Codec IE is used without deviation.

15.2.2 TFO package

The addition of text encoding for the TFO codec list is for further study.

PackageID: threegtfoc (0x0031)

Version: 1

Extends: None

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.

15.2.2.1 Properties

TFO Activity Control

PropertyID: tfoenable (0x0001)

Description: Defines if TFO is enabled or not.

Type: Enumeration

Possible Values:

"On" (0x0001): TFO is enabled, TFO protocol is supported

"Off" (0x0002): TFO is not enabled, TFO protocol is not initiated or terminated

Defined in: Local Control descriptor

Characteristics: Read/Write

TFO Codec List

PropertyID: codeclist (0x0002)

Description: List of codecs for use in TFO protocol, the Local Used Codec (see 3GPP TS 28.062 [5]) is always the first entry in the list.

Type: Sub-list of ~~-~~Octet string

Possible Values:

List of codec types; each entry:

Mc Single Codec, similar to ~~A~~as defined in Q.765.5, for single codec information (Figure 14/Q.765.5), where the Codec Information is defined either in Q.765.5 or in another specification for the given Organisation Identifier. For 3GPP codecs these are defined in 3GPP TS 26.103 [16]. The ACodec parameters contain the contents of the ITU-T Single Codec IE, excluding the Single Codec Identifier, Length Indication and Compatibility Information.

Defined in: Local Control descriptor

Characteristics: Read/Write

15.2.2.2 Events

Optimal Codec Event

EventID: codec_modify (0x0010)

Description:
The event is used to notify the MGC that TFO negotiation has resulted in an optimal codec type being proposed.

EventsDescriptor Parameters: None

ObservedEventsDescriptor Parameters:

Optimal Codec Type

ParameterID: optimalcodec (0x0011)

Description: indicates which is the proposed codec type for TFO

Type: Octet string

Possible Values:

~~Codec Type:~~ Mc Single Codec;

Similar a~~A~~s defined in Q.765.5, for the ITU-T single codec information (Figure 14/Q.765.5), where the Codec Information is defined either in Q.765.5 or in another specification for the given Organisation Identifier. For 3GPP codecs these are defined in 3GPP TS 26.103 [16]. The ACodec parameters contain the contents of the ITU-T Single Codec IE, excluding the Single Codec Identifier, Length Indication and Compatibility Information.

Codec List Event

EventID: distant codec_list (0x0012)

Description: The event is used to notify the MGC of the distant TFO partner's supported codec list..

EventsDescriptor Parameters: None

ObservedEventsDescriptor Parameters:

Distant Codec List

ParameterID: distlist(0x0013)

Description: indicates the codec list for TFO

Type: Sub-list of Octet string

Possible Values:

List of codec~~s~~ types; each entry:~~of type Codec Type:~~

Mc Single Codec similar to a~~A~~s defined in Q.765.5, for single codec information (Figure 14/Q.765.5), where the Codec Information is defined either in Q.765.5 or in another specification for the given Organisation Identifier. For 3GPP codecs these are defined in 3GPP TS 26.103 [16]. The ACodec parameters contain the contents of the ITU-T Single Codec IE, excluding the Single Codec Identifier, Length Indication and Compatibility Information

The first Codec Type in the list is the Distant Used Codec, received from the distant TFO partner (see 3GPP TS 28.062 [5]).

15.2.2.3 Signals

None

15.2.2.4 Statistics

None

15.2.2.5 Procedures

For the procedures for TFO see 3GPP TS 28.062 [5].

The use of the properties in this package is applicable only when the MGW Termination to which the package properties are applied has the media stream property for Codec Type set to ITU-T G.711 (see Annex C of ITU-T Recommendation H.248). Furthermore, the package properties are applicable only if the Codec Type property of the media stream at the opposing MGW Termination is not set to ITU G.711.