

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

NP-040521

Source: TSG CN WG4
Title: Corrections on CSSPLIT
Agenda item: 7.8
Document for: APPROVAL

Spec	CR	Rev	Doc-2nd-Level N4-040	Phase	Subject	Cat	Ver_C
29.232	077		1309	Rel-4	Correction of distant codec list	F	4.9.0
29.232	078		1310	Rel-5	Correction of distant codec list	A	5.8.0

CHANGE REQUEST

⌘ **29.232 CR 077** ⌘ rev **-** ⌘ Current version: **4.9.0** ⌘

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:	⌘ Correction of distant codec list		
Source:	⌘ CN4		
Work item code:	⌘ CSSPLIT	Date:	⌘ 29/10/2004
Category:	⌘ F	Release:	⌘ Rel-4
	<i>Use one of the following categories:</i> 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 .		<i>Use one of the following releases:</i> 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:	⌘ Essential correction:
	<p>1) Currently, TS 29.232 specifies for the distant codec list that</p> <p style="padding-left: 40px;">The first Codec Type in the list is the one proposed for use (Optimal Codec Type).</p> <p>In some cases, however, there is no optimal codec, therefore the distant codec list cannot be implemented as specified. Furthermore, there is already another specific event ("codec modify") to inform the MGC about the optimal codec.</p> <p>2) The first entry in the TFO codec list is specified as 'active codec'. It is proposed to use the more specific term 'local used codec' from TS 28.062, in order to avoid confusion with the G.711 codec – which is the codec actually active at the respective MGW termination.</p>
Summary of change:	⌘
	<p>1) In the distant codec list, the first Codec Type is the distant used codec, received from the distant TFO partner (see 3GPP TS 28.062 [5])</p> <p>2) In the TFO codec list, the first entry is the local used codec (see 3GPP TS 28.062 [5]).</p>
Consequences if not approved:	⌘
	<p>If an MGC interpretes the first codec in the distant codec list as common optimal codec, proposed by the MGW although the MGC does not support this codec, it may in the worst case release the call (dependent on the implemented error handling).</p>

Clauses affected:	⌘	15.1.3.1, 15.1.3.2										
Other specs affected:	⌘	<table border="1"><tr><td>Y</td><td>N</td></tr><tr><td></td><td>X</td></tr><tr><td></td><td>X</td></tr><tr><td></td><td>X</td></tr></table>	Y	N		X		X		X	Other core specifications	⌘
		Y	N									
			X									
	X											
	X											
	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 ⌘ 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.

***** FOR INFORMATION ONLY *****

14.2.31 TFO Activation

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

The MGC sends a MOD.req command with the following information.

- 1 MOD.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 MOD.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 MOD.req command with the following information.

- 1 MOD.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 MOD.resp (Optimal codec and codec list) MGW to MGC

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

14.2.33 Codec Modify

When the procedure "Codec Modify" is required the following procedure is initiated:

The MGW sends a NOT.req command with the following information.

- 1 NOT.req (Codec modify) MGW to MGC

Address Information	Control information	Bearer information
	Transaction ID = z Context ID = c1 Termination ID = bearer1 Event_ID (Event ID = x, "Optimal codec")	

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

- 2 NOT.resp (Codec modify) MGC to MGW

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

14.2.34 Distant Codec List

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

The MGW sends a NOT.req command with the following information.

- 1 NOT.req (Distant codec list) MGW to MGC

Address Information	Control information	Bearer information
	Transaction ID = z Context ID = c1 Termination ID = bearer1 Event_ID (Event ID = x, "Distant list")	

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

- 2 NOT.resp (Distant codec list) MGC to MGW

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

***** FIRST MODIFIED SECTION *****

15.1.3 TFO package

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

PackageID: threegtfo (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.

15.1.3.1 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 ~~active-codec~~[Local Used Codec \(see 3GPP TS 28.062 \[5\]\)](#) is always the first entry in the list.

Type: Octet string

Possible Values:

List of codec types; each entry:

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.

Defined in: Local Control descriptor

Characteristics: Read/Write

15.1.3.2 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:

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.

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: Octet string

Possible Values:

List of codecs of type Codec Type:

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.

The first Codec Type in the list is the ~~one proposed for use (Optimal Codec Type)~~[Distant Used Codec, received from the distant TFO partner \(see 3GPP TS 28.062 \[5\]\).](#)

15.1.3.3 Signals

None

15.1.3.4 Statistics

None

15.1.3.5 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.

CHANGE REQUEST

⌘ **29.232 CR 078** ⌘ rev **-** ⌘ Current version: **5.8.0** ⌘

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:	⌘ Correction of distant codec list		
Source:	⌘ CN4		
Work item code:	⌘ CSSPLIT	Date:	⌘ 29/10/2004
Category:	⌘ A	Release:	⌘ Rel-5
	<p>Use <u>one</u> of the following categories:</p> <p>F (correction) A (corresponds to a correction in an earlier release) B (addition of feature), C (functional modification of feature) D (editorial modification)</p> <p>Detailed explanations of the above categories can be found in 3GPP TR 21.900.</p>		<p>Use <u>one</u> of the following releases:</p> <p>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)</p>

Reason for change:	⌘ Essential correction:
	<p>1) Currently, TS 29.232 specifies for the distant codec list that</p> <p>The first Codec Type in the list is the one proposed for use (Optimal Codec Type).</p> <p>In some cases, however, there is no optimal codec, therefore the distant codec list cannot be implemented as specified. Furthermore, there is already another specific event ("codec modify") to inform the MGC about the optimal codec.</p> <p>2) The first entry in the TFO codec list is specified as 'active codec'. It is proposed to use the more specific term 'local used codec' from TS 28.062, in order to avoid confusion with the G.711 codec – which is the codec actually active at the respective MGW termination.</p>
Summary of change:	⌘
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Consequences if not approved:	⌘
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PackageID: threegtfo (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.

15.1.3.1 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 ~~active-codec~~[Local Used Codec \(see 3GPP TS 28.062 \[5\]\)](#) is always the first entry in the list.

Type: Octet string.

Possible Values:

- List of codec types; each entry:
 - 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].

Defined in: Local Control descriptor.

Characteristics: Read/Write.

15.1.3.2 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: 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].

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: Octet string.
 - Possible Values:
 - List of codecs of type Codec Type: 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 first Codec Type in the list is the ~~one proposed for use (Optimal Codec Type)~~[Distant Used Codec, received from the distant TFO partner \(see 3GPP TS 28.062 \[5\]\)](#).

15.1.3.3 Signals

None.

15.1.3.4 Statistics

None.

15.1.3.5 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 Recommendation G.711 [25] (see annex C of ITU-T Recommendation H.248 [10]). 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-T Recommendation G.711 [25].