3GPP TSG CN Plenary Meeting #24 **NP-040219**
2nd – 4th June 2004 Seoul, KOREA.

Source: TSG CN WG4

Title: Technical enhancements and improvements on OoBTC Rel-5

Agenda item: 8.8

Document for: APPROVAL

Spec	CR	Rev	Doc-2nd-Level N4-040	Phase	Subject	Cat	Ver_C
23.153	072		583	Rel-5	Correction to section 6.5 on information flow after UMTS to GSM handover	F	5.7.0

3GPP TSG CN WG4 Meeting #23 **N4-040583**
Zagreb, CROATIA, 10th – 14th MAY 2004

CR-Form-v7

CHANGE REQUEST

⌘ **23.153** **CR** **072** ⌘ **rev** **-** ⌘ Current version: **5.7.0** ⌘

*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 to section 6.5 on information flow after UMTS to GSM handover
Source:	⌘	CN4
Work item code:	⌘	TEI5
Date:	⌘	27/04/04
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:	⌘	Inter-MSC OoBTC signalling has been introduced for handover but there is till text not corrected in section 6.5 that contradicts this. **This is an essential correction**.
Summary of change:	⌘	Text that states that codec negotiation prior to Inter-MSC handover cannot be performed is corrected.
Consequences if not approved:	⌘	Contradicts text in clause 6.11

Clauses affected:	⌘	6.5

	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.

6.5 Information flow for handover from UMTS to GSM after TrFO establishment

Inter-system handover procedures are described at call control level in [11] and details for bearer independent architecture is described in [8]. For TrFO connected UMTS call, when a handover occurs to GSM radio access, by definition the A-interface to the BSC shall be default PCM. Prior to receipt of Handover Detect the Anchor MGW has one leg (A-interface) stream mode as default PCM and two terminations with compressed voice codec properties. It is recommended that after the Handover Complete procedure, the network property is maintained as compressed. Thus the Anchor MGW inserts a "TFO Partner" transcoder. Thus no modification to the compressed bearer to 64k PCM is required. TFO procedures may then ensure that speech quality is maintained by avoiding transcoding.

In the Intra-MSC case shown in Figure 6.5/1 the MSC controlling the handover has both codec lists for each radio access. The codec negotiation for the UMTS call was performed end to end with UMTS list. If this negotiation resulted in a codec being selected that is also included in the GSM list then at handover the MSC shall indicate this codec as the current speech version to the BSC and TFO can be achieved. If the selected codec is not supported for the GSM radio access but the GSM list contains a codec that is also in the Available Codecs list then the MSC has the option to perform codec modification to ensure TFO can be achieved. The MSC may also perform codec list modification by sending forward the GSM list to update nodes in the network of the change to the Available Codecs List.

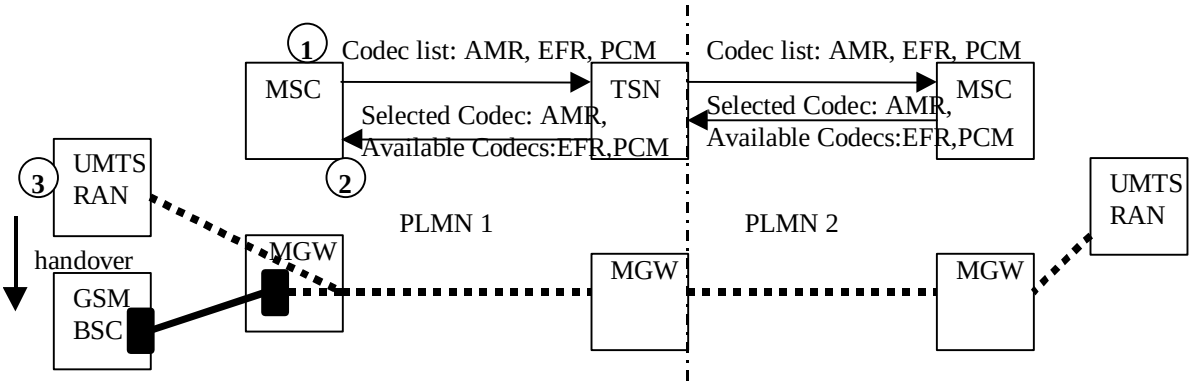

Figure 6.5/1: UMTS to GSM Inter-System Handover

If the Inter-system handover is an inter-MSC handover then the Anchor MSC sends the current speech version and the supported speech versions in the Prepare Handover Request message to the MSC-B. If the current speech version (codec selected for UMTS call) is not included in the GSM list then the MSC-A shall indicate a preferred codec in the current speech version parameter. The speech version for the GSM access that is finally selected by the MSC-B's BSS, is returned to MSC-A in the Prepare Handover Response message. The MSC-A can then decide if codec modification or codec re-negotiation shall be performed as described for the intra-MSC case. ~~The MSC-B shall always assume default PCM across the E-interface, as there is no possibility to perform codec negotiation prior to performing the handover.~~ For further details on the inter-MSC signalling see section 6.11. The connections are shown in Figure 6.5/2.