3GPP TSG-T (Terminals) Meeting #14
Kyoto, Japan, 12 - 14 December 2001

Tdoc TP-010239

3GPP TSG-T WG2 Meeting #15
Cancun, Mexico, Nov. 27-30, 2001

Tdoc T2-011178

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Agenda Item :

Title :   **LS Response to LS from CN1 on UMTS_AMR2
                Dual-Mode Operation**

Source: **T2**

To :   **CN1, SA4**

cc :   **TSG-T**

Response to: **LS (T2-010886) on Introduction of UMTS_AMR_2 into
                 R99 UE's from CN1.**

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Attachments: BACKGROUND FOR MAIN RECOMMENDATION
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1. OVERALL DESCRIPTION

T2 thanks CN1 for its thoughtful LS N1-011286 (T2-010886) regarding the UMTS_AMR2 codec. This document contains the response from T2.

An e-mail was also sent on October 2nd to the 3GPP CN1 and SA3 Reflectors outlining some of the contents in this response.

MAIN RECOMMENDATION -

After considering the subject LS, T2 would like to make the following Proposal -

        that in fact TR21.904 is not the appropriate document in which to have the sole specification for UE codec types usage, but that the core specs 26.103, 26.071, 26.093 and 24.008 (Rls99) perhaps need to be updated with the new requirements created by UMTS_AMR2 for R99 Dual-Mode UMTS/GSM Operation.

TR21.904 should contain references to these changes in these <u>core specs</u>, and a CR should be generated to TR21.904 for any changes to correctly reference the new requirements for UMTS_AMR2 dual-mode operation in the core specs. TR21.904 already contains the main references to the appropriate specs, and these should be modified and enhanced, including changes after the core specs are updated.

The Attachment gives some of the background for the above Proposal.

2. Actions:

To CN1, SA4 group.

ACTION:

1. T2 requests CN1 and SA4 groups to consider making the corrections regarding UMTS_AMR_2 codec support to the relevant core specs, using the suggestions in this LS as inputs.

2. T2 requests CN1 and SA4 to inform T2 when the core specs have been modified with the changes for UMTS_AMR_2, including the references for those changes, in order to allow T2 to make the changes to TR21.904 as discussed in this LS.

3. Date of Next T2 Meetings:

T2#16	11-15 Feb 2002	Sophia Antipolis
T2#17	13-17 May 2002	tbd

BACKGROUND FOR THE MAIN RECOMMENDATION

TR21.904 (UCR) Factors -

UCR-1.
When TR21.904 was being developed, the TSG's agreed among themselves that TR21.904 should be an informative document only and should not be a core spec, and it should not have any item which is also not found in a core spec, and that its purpose should not be to supercede the function of the main and core specifications documents in 3GPP under the purview of TSG-RAN and TSG-SA. The Scope section of TR21.904 states the following -
> The present document should not be used as the sole basis for UE design, only as an informative indication of capabilities required to support a given functionality, and as a pointer to the location of text describing said functionality, in the core specifications.

A request such as in the subject LS would require a re-definition of the scope of TR21.904 to include core specs. Such agreement does not currently exist, and in fact the opposite agreement is in place. After agreement in TSG-T, this change in Scope would need to be re-negotiated with TSG-RAN and TSG-SA.

UCR-2.
The scope of TR21.904 is that it is not to be kept as a living document. It is to be an informative Report for Release 99 only, and it was decided to freeze the Report in December 2000, aligned with the core specs versions of June 2000. From the Scope -
> The present document's scope is the Release 99 of the 3GPP specifications to which it refers. This document is not currently planned to be kept updated beyond December 2000.

UCR-3.
TR21.904 specifically and deliberately does not address multi-mode issues, but is limited to the 3GPP and UMTS single-mode functions only. Another T2 Report, TR21.910, is a Report on Multi-mode issues. An early listing of Multi-mode types in 21.904 UCR Section 5 was removed and simplified to list only that 3 basic modes are possible, and to refer out to 21.910. Introducing multi-mode issues into TR21.904 will radically alter the structure of the TR, since many other multi-mode issues should then also be expected to be specified in it.
This also requires a change of Scope of TR21.904 in TSG-T.

CHANGES PROPOSED TO TR21.904

Changes to TR21.904 Section 7.1.1.1.1 with a CR may be required if more detail than currently listed there is deemed to be necessary. Section 7.1.1.1.1 informs the reader about Default Speech Service and refers-out to the relevant core AMR specs. After appropriate changes to the core specs listed therein, and to 24.008 R99, the refer-out lists should be changed via a CR to add 24.008, and a note should be added to also emphasize that dual-mode UMTS/GSM issues for AMR Speech service are specified in 24.008.

The 21.904 Annex B for Speech Service seems to appropriately refer to the AMR specs and to 24.008 already.

Core Specs Factors -

CS-1. AMR Core Specs
The AMR Core specs need to be updated to reflect the 3GPP decisions on UMTS_AMR2 dual-mode operation, they currently do not correctly reflect them, and thus appear to be incorrect.

26.071 Section 5 and Table 1 therein with its notes lists various AMR codec types and support required in R99 UE's, but does not yet mention UMTS_AMR2 or its support requirements in dual-mode. It appears that this core spec needs to be corrected.

26.093 Section 1, Section 5.1.1. Table 1 and Annex B (Normative) do not list UMTS_AMR2; and Annex B in particular refers to UMTS/GSM AMR codecs and their interaction as FFS, which is not a correct statement now. This may be an appropriate place to specify dual-mode AMR codec type specifications. This core spec seems to require changes to include UMTS_AMR2 dual-mode operation, and needs to be corrected.

TR21.904 correctly refers out to both of these above specs docs.

CS-2. Layer 3 Core Specs 24.008 for Rls 99.
The LS from CN1 attachment N1-011241 could be understood to suggest that 24.008 (R99) specifies R99 MSC only which does not require to be updated for UMTS_AMR2, hence 24.008 (R99) does not require to be updated. (24.008 Rel4 will be updated).

It appears that 24.008 (Rls99) in Sections 5.2.1, 5.2.1.2, 5.2.2.3.1. etc. also calls out for dual-mode ME's what different versions of GSM and UMTS codecs should be used, and how to signal these using Bearer Capability IEs. Thus it seems that updating these particular core specifications of ME required behavior may be the right place to capture the decisions regarding UMTS_AMR2 dual-mode interworking mentioned in the subject LS. These specifications sections should be amplified to include these UMTS_AMR2 dual-mode related changes.

Then TR21.904 should be updated to correctly refer to these 24.008 (Rls99) changes.