

**TSG-RAN Meeting #11  
Palm Springs, CA, USA, 13 - 16 March 2001**

***RP-010036***

**Title:** Agreed CRs (Release '99) to TS 34.109

**Source:** TSG-RAN WG2

**Agenda item:** 5.2.3

Doc-1st-	Status-	Spec	CR	Rev	Phase	Subject	Cat	Version	Versio
R2-010525	agreed	34.109	006		R99	Electrical Man Machine Interface	B	3.2.0	3.3.0

## CHANGE REQUEST

⌘ **34.109 CR 006** ⌘ rev **-** ⌘ Current version: **3.2.0** ⌘

For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.

**Proposed change affects:** ⌘ (U)SIM  ME/UE  Radio Access Network  Core Network

<b>Title:</b>	⌘ Electrical Man Machine Interface		
<b>Source:</b>	⌘ TSG-RAN WG2		
<b>Work item code:</b>	⌘	<b>Date:</b>	⌘
<b>Category:</b>	⌘ <b>B</b>	<b>Release:</b>	⌘ R99
Use <u>one</u> of the following categories: <b>F</b> (essential correction) <b>A</b> (corresponds to a correction in an earlier release) <b>B</b> (Addition of feature), <b>C</b> (Functional modification of feature) <b>D</b> (Editorial modification) Detailed explanations of the above categories can be found in 3GPP TR 21.900.		Use <u>one</u> of the following releases: <b>2</b> (GSM Phase 2) <b>R96</b> (Release 1996) <b>R97</b> (Release 1997) <b>R98</b> (Release 1998) <b>R99</b> (Release 1999) <b>REL-4</b> (Release 4) <b>REL-5</b> (Release 5)	

<b>Reason for change:</b>	⌘ Addition of the Electrical Man Machine Interface (EMMI) as agreed in TSG-T1.		
<b>Summary of change:</b>	⌘ Contents of clause 7 added.		
<b>Consequences if not approved:</b>	⌘ Ability to automate UE conformance testing will not be provided.		

<b>Clauses affected:</b>	⌘ 2, 7		
<b>Other specs affected:</b>	<input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> O&M Specifications	⌘	
<b>Other comments:</b>	⌘ This CR will have impact on System Simulator		

### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: [http://www.3gpp.org/3G\\_Specs/CRs.htm](http://www.3gpp.org/3G_Specs/CRs.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://www.3gpp.org/specs/>. For the latest version, look for the directory name with the latest date e.g. 2000-09 contains the specifications resulting from the September 2000 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.

<START OF MODIFIED SECTION>

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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.

- [1] 3GPP TS 24.007: "Mobile radio interface signalling layer 3; General aspects".
- [2] 3GPP TS 24.008: "Digital cellular telecommunications system (Phase 2+); Mobile radio interface layer 3 specification".
- [3] 3GPP TS 25.101: "UE Radio transmission and reception (FDD)".
- [4] 3GPP TS 25.102: "UE Radio transmission and reception (TDD)".
- [5] 3GPP TS 25.331: "Radio Resource Control; Protocol Specification".
- [6] 3GPP TR 21.905: "3G Vocabulary".
- [7] 3GPP TS 31.101: "UICC Physical and Logical Characteristics".
- [8] 3GPP TS 34.121: "Terminal Conformance Specification; Radio transmission and reception (FDD)".
- [9] 3GPP TS 34.122: "Terminal Conformance Specification; Radio transmission and reception (TDD)".
- [10] 3GPP TS 34.108: "Reference test environment".
- [11] 3GPP TS 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)".
- [12] 3GPP TS 25.133: "Requirements for support of RRM (FDD)".
- [13] 3GPP TS 04.14: "Individual equipment type requirements and interworking; Special conformance testing functions".
- [14] 3GPP TS 27.005: "Use of Data Terminal Equipment - Data Circuit terminating; Equipment (DTE - DCE) interface for Short Message Service (SMS) and Cell Broadcast Service (CBS)"
- [15] 3GPP TS 27.007: "AT command set for 3G User Equipment (UE)"
- [16] 3GPP TS 27.060: "Mobile Stations (MS) supporting packet switched services"

<END OF MODIFIED SECTION>

&lt;START OF MODIFIED SECTION&gt;

## 7 Electrical Man Machine Interface (EMMI)

FFS

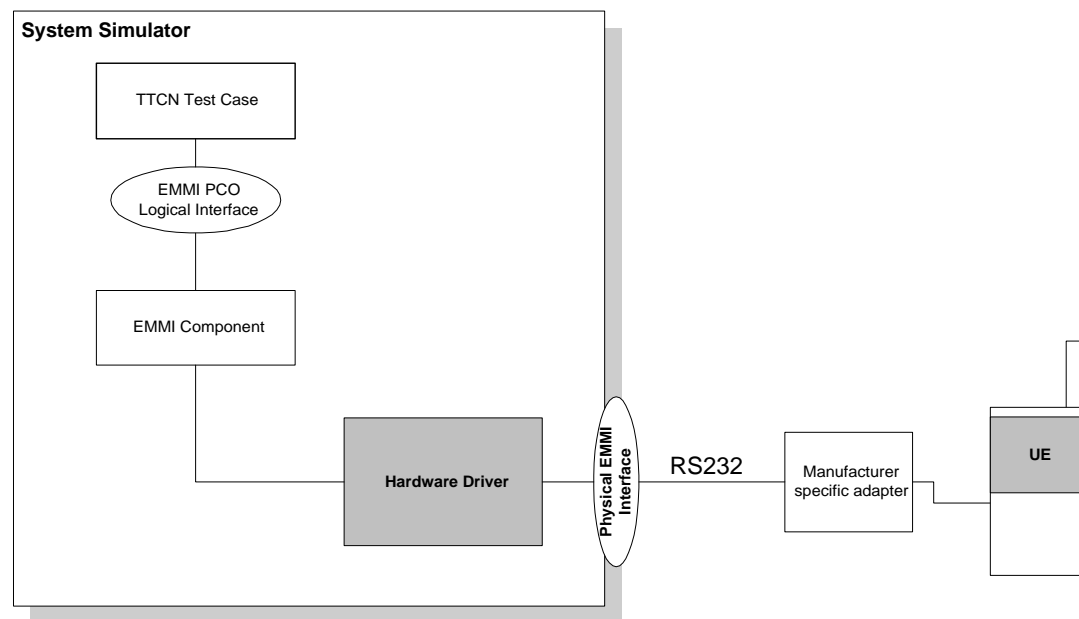
~~NOTE The EMMI is regarded as needed to provide efficient testing of 3G terminals and will be included in later revisions. EMMI will also be useful for testing of UEs not having an user interface. The support of EMMI will be optional to the UE.~~

~~The EMMI is used for automation of conformance testing. The commands used on the EMMI by the System Simulator, shall be limited to the AT commands specified in [15] TS 27.005, [16] TS 27.007 and [17] TS 27.060. The EMMI and its use for automation of signalling testing are illustrated in figure 7.1 as an example.~~

~~The use of EMMI is optional for the UE. At the System Simulator side, a logical EMMI using AT commands shall interface with the TTCN test cases. A physical EMMI interface may be a standard RS232 interface towards the UE. Other interfaces shall not be precluded.~~

~~At the UE side the physical interface may be of various types, and an adapter may be provided by the UE manufacturer for converting the AT commands between the System Simulator interface into the UE manufacturer specific interface and format.~~

~~The use of EMMI is optional for the UE.~~



**Figure 7.1: An example of EMMI and its use for automation of signalling testing**

&lt;END OF MODIFIED SECTION&gt;