## 3GPP TSG-RAN-WG1 Meeting #19 Las Vegas, USA, Februrary 27th - March 2nd, 2001

CHANGE REQUEST	
<b>z</b> 25	5.215 CR 082
For <u>HELP</u> on using this form, see bottom of this page or look at the pop-up text over the $\varkappa$ symbols.	
Proposed change affects: ∠ (U)SIM ME/UE X Radio Access Network X Core Network	
Title:	Correction of GSM reference
Source:	Panasonic
Work item code: A	<b>Date:</b>
Category:	<b>E</b> Release: <b>Ø</b> R99
	Use one of the following categories:  F (essential 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)
Reason for chang	ge:   The reference document, GSM 03.03, does not exist in Release 99 specification.
Reason for Chang	The contents are moved to TS 23.003 in Release 99 specificification and This document are CN controlled document. The basic principle of reference is the same version (release 99) of the specification.
Summary of char	nge: Z To remove the reference is proposed.
Consequences if not approved:	The document which does not exist in Release 99 are refered.
Clauses affected:	<b>∠</b> 2, 6.1.1.2
Other specs affected:	Other core specifications  Test specifications  O&M Specifications
Other comments:	K.

#### How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at: <a href="http://www.3gpp.org/3G">http://www.3gpp.org/3G</a> 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 <a href="ftp://www.3gpp.org/specs/">ftp://www.3gpp.org/specs/</a> 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.

# 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 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)".
- [2] 3GPP TS 25.212: "Multiplexing and channel coding (FDD)".
- [3] 3GPP TS 25.213: "Spreading and modulation (FDD)".
- [4] 3GPP TS 25.214: "Physical layer procedures (FDD)".
- [5] 3GPP TS 25.215: "Physical layer Measurements (FDD)".
- [6] 3GPP TS 25.221: "Physical channels and mapping of transport channels onto physical channels (TDD)".
- [7] 3GPP TS 25.222: "Multiplexing and channel coding (TDD)".
- [8] 3GPP TS 25.223: "Spreading and modulation (TDD)".
- [9] 3GPP TS 25.224: "Physical layer procedures (TDD)".
- [10] 3GPP TS 25.301: "Radio Interface Protocol Architecture".
- [11] 3GPP TS 25.302: "Services provided by the Physical layer".
- [12] 3GPP TS 25.303: "UE functions and interlayer procedures in connected mode".
- [13] 3GPP TS 25.304: "UE procedures in idle mode".
- [14] 3GPP TS 25.331: "RRC Protocol Specification".
- [15] 3GPP TR 25.922: "Radio Resource Management Strategies".
- [16] 3GPP TR 25.923: "Report on Location Services (LCS)".
- [17] 3GPP TR 25.401: "UTRAN Overall Description".
- [18] 3GPP TS 25.101: "UE Radio transmission and Reception (FDD)".
- [19] 3GPP TS 25.104: "UTRA (BS) FDD; Radio transmission and Reception".
- [20] GSM 03.03: "Digital cellular telecommunications system (Phase 2+); Numbering, adding and identification".

### \*\*\* Next modified sub-clause \*\*\*

### 6.1.1.2 Parameterisation of the compressed mode

In response to a request from higher layers, the UTRAN shall signal to the UE the compressed mode parameters.

A transmission gap pattern sequence consists of alternating transmission gap patterns 1 and 2, each of these patterns in turn consists of one or two transmission gaps. See figure 1.

The following parameters characterise a transmission gap pattern:

- TGSN (Transmission Gap Starting Slot Number): A transmission gap pattern begins in a radio frame, henceforward called first radio frame of the transmission gap pattern, containing at least one transmission gap slot. TGSN is the slot number of the first transmission gap slot within the first radio frame of the transmission gap pattern;
- TGL1 (Transmission Gap Length 1): This is the duration of the first transmission gap within the transmission gap pattern, expressed in number of slots;
- TGL2 (Transmission Gap Length 2): This is the duration of the second transmission gap within the transmission gap pattern, expressed in number of slots. If this parameter is not explicitly set by higher layers, then TGL2 = TGL1;
- TGD (Transmission Gap start Distance): This is the duration between the starting slots of two consecutive transmission gaps within a transmission gap pattern, expressed in number of slots. The resulting position of the second transmission gap within its radio frame(s) shall comply with the limitations of [2]. If this parameter is not set by higher layers, then there is only one transmission gap in the transmission gap pattern;
- TGPL1 (Transmission Gap Pattern Length): This is the duration of transmission gap pattern 1, expressed in number of frames:
- TGPL2 (Transmission Gap Pattern Length): This is the duration of transmission gap pattern 2, expressed in number of frames. If this parameter is not explicitly set by higher layers, then TGPL2 = TGPL1.

The following parameters control the transmission gap pattern sequence start and repetition:

- TGPRC (Transmission Gap Pattern Repetition Count): This is the number of transmission gap patterns within the transmission gap pattern sequence;
- TGCFN (Transmission Gap Connection Frame Number): This is the CFN of the first radio frame of the first pattern 1 within the transmission gap pattern sequence.

In addition to the parameters defining the positions of transmission gaps, each transmission gap pattern sequence is characterised by:

- UL/DL compressed mode selection: This parameter specifies whether compressed mode is used in UL only, DL only or both UL and DL;
- UL compressed mode method: The methods for generating the uplink compressed mode gap are spreading factor division by two or higher layer scheduling and are described in [2];
- DL compressed mode method: The methods for generating the downlink compressed mode gap are puncturing, spreading factor division by two or higher layer scheduling and are described in [2];
- downlink frame type: This parameter defines if frame structure type 'A' or 'B' shall be used in downlink compressed mode. The frame structures are defined in [2];
- scrambling code change: This parameter indicates whether the alternative scrambling code is used for compressed mode method 'SF/2'. Alternative scrambling codes are described in [3];
- RPP: Recovery Period Power control mode specifies the uplink power control algorithm applied during recovery period after each transmission gap in compressed mode. RPP can take 2 values (0 or 1). The different power control modes are described in [4];
- ITP: Initial Transmit Power mode selects the uplink power control method to calculate the initial transmit power after the gap. ITP can take two values (0 or 1) and is described in [4].

The UE shall support simultaneous compressed mode pattern sequences which can be used for different measurements. The following measurement purposes can be signalled from higher layers:

- FDD

- TDD
- GSM carrier RSSI measurement
- Initial BSIC identification
- BSIC re-confirmation.

The UE shall support one compressed mode pattern sequence for each measurement purpose while operating in FDD mode, assuming the UE needs compressed mode to perform the respective measurement. In case the UE supports several of the measurement purposes, it shall support in parallel one compressed mode pattern sequence for each supported measurement purpose where the UE needs compressed mode to perform the measurement. The capability of the UE to operate in compressed mode in uplink and downlink is given from the UE capabilities.

The GSM measurements Initial BSIC identification and BSIC re-confirmation are GSM measurement are defined in [20].

Higher layers will ensure that the compressed mode gaps do not overlap and are not scheduled to overlap the same frame. The behaviour when an overlap occurs is described in [11].

In all cases, higher layers have control of individual UE parameters. Any pattern sequence can be stopped on higher layers' command.

The parameters TGSN, TGL1, TGL2, TGD, TGPL1, TGPL2, TGPRC and TGCFN shall all be integers.

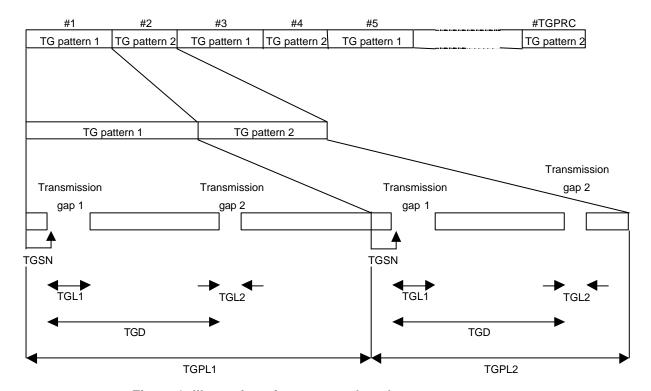


Figure 1: Illustration of compressed mode pattern parameters