

TSG-RAN Meeting #15
Jeju-do, Korea, 5 - 8 March 2002

RP-020079

Title: Agreed CRs (Rel-4) to TS 25.302

Source: TSG-RAN WG2

Agenda item: 7.2.4

Doc-1st-	Status-	Spec	CR	Rev	Phase	Subject	Cat	Version	Versio	Workite
R2-020533	agreed	25.302	119	1	Rel-4	UE GPS Code Phase Measurement	F	4.3.0	4.4.0	LCS1- UEpos- enh

CR-Form-v5

CHANGE REQUEST

⌘ **25.302 CR 119** ⌘ rev **r1** ⌘ Current version: **4.3.0** ⌘

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

Title:	⌘ UE GPS Code Phase Measurement		
Source:	⌘ TSG-RAN WG2		
Work item code:	⌘ LCS1-UEpos-enh	Date:	⌘ 22 Feb 2002
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> 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 change:	⌘ As described in LS R1-01-1345, the definition of UE GPS code phase measurement has been incorporated into TS 25.215 v4.3.0 and TS 25.225 v4.3.0. The "UE Measurement" section (clause 9.2) of TS 25.302 v4.3.0 directly references the UE measurement definitions specified within TS 25.215 and TS 25.225. Thus, a brief description of the UE GPS code phase measurement should be added to clause 9.2.
Summary of change:	⌘ A description of the UE GPS code phase measurement is added to clause 9.2.
Consequences if not approved:	⌘ Clause 9.2 will remain incomplete and thus inconsistent with the UE measurement definitions specified within TS 25.215 and TS 25.225.

Clauses affected:	⌘ 2, 9.2.18 (new)		
Other specs affected:	<input type="checkbox"/> Other core specifications <input type="checkbox"/> Test specifications <input type="checkbox"/> 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/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://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.

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. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

- [1] 3GPP TS 23.110: "UMTS Access Stratum; Services and Functions".
- [2] 3GPP TS 25.301: "Radio Interface Protocol Architecture".
- [3] 3GPP TS 25.212: "Multiplexing and channel coding (FDD)".
- [4] 3GPP TS 25.222: "Multiplexing and channel coding (TDD)".
- [5] 3GPP TS 25.224: "Physical Layer Procedures (TDD)".
- [6] 3GPP TS 25.215: "Physical Layer – Measurements (FDD)".
- [7] 3GPP TS 25.213: "Spreading and modulation (FDD)".
- [8] 3GPP TS 25.214: "Physical layer procedures (FDD)".
- [9] 3GPP TS 25.123: "Requirements for Support of Radio Resource Management (TDD)".
- [10] 3GPP TS 25.133: "Requirements for Support of Radio Resource Management (FDD)".
- [11] 3GPP TS 25.225: "Physical Layer – Measurements (TDD)".
- [12] 3GPP TS 25.221: "Physical channels and mapping of transport channels onto physical channels (TDD)".
- [13] [3GPP TS 25.331: "Radio Resource Control \(RRC\); protocol specification"](#).

***** NEXT SECTION MODIFIED *****

9.2 UE Measurements

For definitions of the measurements, see [6] and [11].

9.2.1 SFN-CFN observed time difference

This measure is mandatory for UE.

Measurement	SFN-CFN observed time difference
Source	L1 (UE)
Destination	RRC (RNC) for handover
Reporting Trigger	On-demand, Event-triggered
Description	Time difference between the SFN of the target neighbouring cell and the CFN in the UE.

9.2.2 Observed time difference to GSM cell

This measure is mandatory for UE capable of handover to GSM.

Measurement	Observed time difference to GSM cell
Source	L1 (UE)
Destination	RRC (RNC) for maintenance and handover to GSM
Reporting Trigger	On-demand, Event-triggered
Description	Time difference between a UTRA cell and a GSM cell.

9.2.3 CPICH E_c/N_0

This measure is mandatory for UE with FDD mode capability.

Measurement	CPICH E_c/N_0
Source	L1(UE)
Destination	RRC (UE, RNC)
Reporting Trigger	Periodic, on demand and event triggered
Description	The received energy per chip of the CPICH divided by the power density in the frequency band.

9.2.4 Void

9.2.5 CPICH RSCP

This measure is mandatory for UE with FDD mode capability.

Measurement	CPICH RSCP
Source	L1(UE)
Destination	RRC (UE, RNC)
Reporting Trigger	periodic or event triggered
Description	Received signal code power of the CPICH.

9.2.6 P-CCPCH RSCP

This measure is mandatory for UE with TDD mode capability.

Measurement	P-CCPCH RSCP
Source	L1(UE)
Destination	RRC (UE, RNC)
Reporting Trigger	periodic or event triggered
Description	Received signal code power of the P-CCPCH

9.2.7 Timeslot ISCP

This measure is mandatory for UE with TDD mode capability.

Measurement	Timeslot ISCP
Source	L1(UE)
Destination	RRC (UE, RNC)
Reporting Trigger	periodic or event triggered
Description	Interference Signal Code Power is the interference on the received signal in a specified timeslot.

9.2.8 Void

9.2.9 SIR

This measure is mandatory for UE with TDD mode capability.

Measurement	SIR
Source	L1(UE)
Destination	RRC (UE,RNC)
Reporting Trigger	Periodic, once every power control cycle , event triggered
Description	Signal to Interference Ratio

9.2.10 UTRA carrier RSSI

This measure is mandatory for UE.

Measurement	UTRA carrier RSSI
Source	L1(UE)
Destination	RRC (RNC)
Reporting Trigger	Periodic, event triggered, on demand
Description	Received Signal Strength Indicator, the wideband received power within the relevant channel bandwidth. For TDD this is measured in specified timeslots.

9.2.11 GSM carrier RSSI

This measure is mandatory for UE with GSM capability.

Measurement	GSM carrier RSSI
Source	L1(UE)
Destination	RRC (RNC)
Reporting Trigger	Periodic, event triggered, on demand
Description	Received Signal Strength Indicator, the wide-band received power within the relevant channel bandwidth. Details are specified in the GSM specification 05.08

9.2.12 Transport channel BLER

This measure is mandatory for UE.

Measurement	Transport channel BLER (Block Error Rate)
Source	L1(UE)
Destination	RRC (RNC,UE)
Reporting Trigger	Periodic, on demand
Description	Estimation of the transport channel block error rate (BLER).

9.2.13 UE transmitted power

This measure is mandatory for UE.

Measurement	UE transmitted power
Source	L1(UE)
Destination	RRC (UE,RNC)
Reporting Trigger	On-demand, periodic, Event-triggered
Description	Total transmitted power on one carrier. For TDD this is measured in specified timeslots.

9.2.14 UE Rx-Tx time difference

This measure is mandatory for UE with FDD mode capability.

Measurement	UE Rx-Tx time difference
Source	L1 (UE)
Destination	RRC (RNC)
Reporting Trigger	On-demand, periodic, event-triggered
Description	Time difference between the UE uplink DPCCH/DPDCH frame transmission and the first detected path (in time) of the downlink DPCH frame from the measured radio link. Type 1 and Type 2 are defined.

9.2.15 SFN-SFN Observed time difference

This measure is mandatory for UE.

Measurement	SFN-SFN observed time difference
Source	L1 (UE)
Destination	RRC (RNC)
Reporting Trigger	On-demand, Event-triggered
Description	Time difference between a specific reference UTRA cell and a target UTRA cell. Type 1 and Type 2 are defined.

9.2.16 UE GPS Timing of Cell Frames for UE positioning

This measure is mandatory for UE that has the capability to measure GPS reference time.

Measurement	UE GPS Timing of Cell Frames for UE positioning
Source	L1 (UE)
Destination	RRC (RNC-UE positioning)
Reporting Trigger	On-demand, Event-triggered, Periodic
Description	The timing between UTRA cell and GPS Time Of Week.

9.2.17 Timing Advance (T_{ADV}) for 1.28 Mcps TDD

This measure is mandatory for 1.28 Mcps TDD UE.

Measurement	Timing Advance (T_{ADV}) for 1.28 Mcps TDD
Source	L1 (UE)
Destination	RRC (RNC)
Reporting Trigger	On-demand, Event-triggered, Periodic
Description	Difference between the uplink transmission of the UE and the downlink reception.

9.2.18 UE GPS code phase

This measure is mandatory for UE with UE-assisted GPS capability.

NOTE: The UE transmits the GPS code phase in the IE "Whole GPS Chips" and in the IE "Fractional GPS Chips" defined in [13].

<u>Measurement</u>	<u>UE GPS code phase</u>
<u>Source</u>	<u>L1 (UE)</u>
<u>Destination</u>	<u>RRC (RNC)</u>
<u>Reporting Trigger</u>	<u>On-demand, Event-triggered, Periodic</u>
<u>Description</u>	<u>The whole and fractional phase of the spreading code of the GPS satellite signal.</u>