3GPP TSG RAN Meeting #17 ***RP-020578***
Biarritz, France, 3 – 6, September 2002

Title: **Agreed CRs (Rel-4 and Rel-5 Category A) to TS 25.225**

Source: **TSG-RAN WG1**

Agenda item: **7.1.4**

No.	Spec	CR	Rev	R1 T-doc	Subject	Phase	Cat	Workitem	V_old	V_new
1	25.225	052	-	R1-02-1058	Correction to SFN-SFN Type 2 measurement	Rel-4	F	TEI4	4.4.0	4.5.0
2	25.225	053	-	R1-02-1058	Correction to SFN-SFN Type 2 measurement	Rel-5	A	TEI4	5.1.0	5.2.0

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CR-Form-v7

CHANGE REQUEST

⌘ **25.225** **CR** **052** ⌘ **rev** **-** ⌘ Current version: **4.4.0** ⌘

*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 SFN-SFN Type 2 measurement
Source:	⌘	TSG RAN WG1
Work item code:	⌘	TEI4
Date:	⌘	28/06/2002
Category:	⌘	**F**
Release:	⌘	Rel-4

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:	⌘	Current description will lead to ambiguous measurement reports
Summary of change:	⌘	The definition of the SFN-SFN type 2 measurement is corrected.
Consequences if not approved:	⌘	The current definition will lead to ambiguous measurement reports which can result in usefullness of the reported measurement.
Clauses affected:	⌘	5.1.10, 5.2.10

	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.
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5.1.10 SFN-SFN observed time difference

Definition	SFN-SFN observed time difference is the time difference of the reception times of frames from two cells (serving and target) measured in the UE and expressed in chips. It is distinguished by two types. Type 2 applies if the serving and the target cell have the same frame timing. The reference point for the SFN-SFN observed time difference type 1 and 2 shall be the antenna connector of the UE. **Type 1:** SFN-SFN observed time difference = $\begin{cases} \text{OFF} \times 12800 + T_m \text{ in chips} & \text{for } 1.28 \text{ Mcps TDD} \\ \text{OFF} \times 38400 + T_m \text{ in chips} & \text{for } 3.84 \text{ Mcps TDD} \end{cases}$ where: T_m = T_{RxSFNi} - T_{RxSFNk}, given in chip units with the range $\begin{cases} [0,1,\ldots,12799] \text{ chips} & \text{for } 1.28 \text{ Mcps TDD} \\ [0,1,\ldots,38399] \text{chips} & \text{for } 3.84 \text{ Mcps TDD} \end{cases}$ T_{RxSFNi} = time of start (defined by the first detected path in time) of the received frame SFN_i of the serving TDD cell i. T_{RxSFNk} = time of start (defined by the first detected path in time) of the received frame SFN_k of the target UTRA cell k received most recently in time before the time instant T_{RxSFNi} in the UE. If this frame SFN_k of the target UTRA cell is received exactly at T_{RxSFNi} then T_{RxSFNk}= T_{RxSFNi} (which leads to T_m=0). OFF = (SFN_i- SFN_k) mod 256, given in number of frames with the range [0, 1, …, 255] frames SFNi = system frame number for downlink frame from serving TDD cell i in the UE at the time T_{RxSFNi}. SFNk = system frame number for downlink frame from target UTRA cell k received in the UE at the time T_{RxSFNk}.(for FDD: the P-CCPCH frame) The reference point for the SFN-SFN observed time difference type 1 shall be the antenna connector of the UE. **Type 2:** SFN-SFN observed time difference = ~~T_{RxTSk}~~ $T_{Rx\_Frame\_cell\ k}$ - ~~T_{RxTSi}~~ $T_{Rx\_Frame\_cell\ i}$, in chips, where ~~T_{RxTSi}~~ $T_{Rx\_Frame\_cell\ i}$: time of start (defined by the first detected path in time) of ~~a timeslot received~~the frame boundary from the serving TDD cell i. ~~T_{RxTSk}~~ $T_{Rx\_Frame\_cell\ k}$: time of start (defined by the first detected path in time) of ~~a timeslot received~~the frame boundary from the target UTRA cell k that is closest in time to the ~~start of the timeslot~~frame boundary of the serving TDD cell i. The reference point for the SFN-SFN observed time difference type 2 shall be the antenna connector of the UE.
Applicable for	**Type 1:** CELL_FACH intra, CELL_DCH intra **Type 2:** Idle, URA_PCH intra, URA_PCH inter, CELL_PCH intra, CELL_PCH inter, CELL_FACH intra, CELL_FACH inter, CELL_DCH intra, CELL_DCH inter

5.2.10 SFN-SFN observed time difference

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Work item code:	⌘	TEI4
Date:	⌘	28/06/2002
Category:	⌘	**A**
Release:	⌘	Rel-5

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