3GPP TSG RAN WG1#9 **Tdoc R1-(99)l03**
Dresden, Germany
November 30th - December 3rd, 1999 **Meeting No. 9**
Agenda Item: Ad Hoc 16 / Plenary

Source: Nokia, Ericsson

Clarifications for CFN-SFN observed time difference measurement in UTRA FDD

1. Introduction.

This is a revision of R1-99k77.

This contribution proposes to clarify the CFN-SFN measurement in connection with the compressed mode.

2. Background

The UE performs CFN-SFN timing measurements with compressed mode, the SFN number from the measured carriers can not be decoded. This means that the range for this measurements basically is limited to the timing difference of the scrambling codes, the possible frame offset (OFF parameters in the measurement) is not actually measured.

3. Conclusions

The attached CR-021r01 is recommended to be to included in 25.215 for clarifying the SFN-CFN measurement issue in order to avoid misunderstanding of this reported value when provided with compressed mode.

3GPP TSG RAN WG1 Meeting #9
Dresden Germany, Nov. 30-Dec. 3 1999

***Document* R1-99l01**
e.g. for 3GPP use the format TP-99xxx
or for SMG, use the format P-99-xxx

CHANGE REQUEST

Please see embedded help file at the bottom of this page for instructions on how to fill in this form correctly.

25.215	CR	021r01	Current Version:	3.0.0

GSM (AA.BB) or 3G (AA.BBB) specification number ↑ *↑ CR number as allocated by MCC support team*

For submission to: TSG RAN#6 *list expected approval meeting # here ↑*

for approval	X	strategic		*(for SMG use only)*
for information		non-strategic		

Form: CR cover sheet, version 2 for 3GPP and SMG *The latest version of this form is available from: ftp://ftp.3gpp.org/Information/CR-Form-v2.doc*

Proposed change affects: *(at least one should be marked with an X)* (U)SIM [ ] ME [X] UTRAN / Radio [X] Core Network [ ]

Source: Nokia, Ericsson **Date:** 29.11.1999

Subject: CFN-SFN measurement with compressed mode

Work item:

Category: *(only one category shall be marked with an X)*

F	Correction	X	**Release:**	Phase 2	
A	Corresponds to a correction in an earlier release			Release 96	
B	Addition of feature			Release 97	
C	Functional modification of feature			Release 98	
D	Editorial modification			Release 99	X
				Release 00	

Reason for change: For the CFN-SFN measurement, the range reported is not available with compressed mode.

Clauses affected: 5.1.11CFN-SFN observed time difference

Other specs affected:

Other 3G core specifications		→ List of CRs:
Other GSM core specifications		→ List of CRs:
MS test specifications		→ List of CRs:
BSS test specifications		→ List of CRs:
O&M specifications		→ List of CRs:

Other comments:

help.doc

<--------- double-click here for help and instructions on how to create a CR.

5.1.11 CFN-SFN observed time difference

Definition	The CFN-SFN observed time difference to cell is defined as: OFF×38400+ T_m, where: T_m= T_{RxSFN} - (T_{UETx}-T_0), given in chip units with the range [0, 1, …, 38399] chips T_{UETx} is the time when the UE transmits an uplink DPCCH/DPDCH frame. T_0 is defined in TS 25.211 section 7.1.3. T_{RxSFN} is time at the beginning of the next received neighbouring P-CCPCH frame after the time instant T_{UETx}-T_0 in the UE. If the next neighbouring P-CCPCH frame is received exactly at T_{UETx}-T_0 then T_{RxSFN}=T_{UETx}-T_0 (which leads to T_m=0). And OFF=(CFN_{Tx}-SFN) mod 256, given in number of frames with the range [0, 1, …, 255] frames CFN_{Tx} is the connection frame number for the UE transmission of an uplink DPCCH/DPDCH frame at the time T_{UETx}. SFN = the system frame number for the neighbouring P-CCPCH frame received in the UE at the time T_{RxSFN}. In case the inter-frequency measurement is done with compressed mode, the value for the parameter OFF is always reported to be 0. In case that the SFN measurement indicator indicates that the UE does not need to read cell SFN of the target neighbour cell, the value of the parameter OFF is always be set to 0. *Note: In Compressed mode it is not required to read cell SFN of the target neighbour cell.*
Applicable for	Connected Inter, Connected Intra
Range/mapping	Time difference is given with the resolution of one chip with the range [0, …, 9830399] chips.