# TSGR1#15(00)1121

TSG-RAN Working Group 1 meeting #15 Berlin, Germany August 22 – 25, 2000

Agenda item:

Source: NEC

Title: CR 25.214-121r1: Clarification of SSDT ID code bit transmission order

**Document for:** Approval

The attached is the first revision of CR 25.214-121 in Tdoc R1-00-0991. In this revision, the SSDT ID code transmission in uplink compressed frames is clarified. In addition, the wording has been revised.

# 3GPP TSG RAN WG1 Meeting #15 Berlin, Germany, 22-25 Aug 2000

# Document R1-00-1121

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

	(	CHANGE F	REQU	JEST		see embedded help r instructions on how			
		25.214	CR	121r1		Current Versi	on: 3.3.0		
GSM (AA.BB) or 3G (AA.BBB) specification number ↑									
For submission to: TSG RAN #9 For approval  X strategic  (for SMG use only)  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									
FC	orm: CR cover sneet, vers	sion 2 for 3GPP and SMG	i ne iatest	version of this for	m is availa	аые тот: пр://пр.здрр.с	org/information/CR-Form	1-V2.aoc	
Proposed change affects: (at least one should be marked with an X)  (U)SIM ME X UTRAN / Radio X Core Network									
Source:	NEC					Date:	2000-08-25		
Subject: Clarification of SSDT ID code bit transmission order									
Work item:									
Category: F (only one category shall be marked with an X)	Corresponds  Addition of fe	nodification of fea		rlier release	<b>X</b>	Release:	Phase 2 Release 96 Release 97 Release 98 Release 99 Release 00	X	
Reason for change:	The bit transi	mission order of	SSDT II	O code sho	uld be	clarified.			
Clauses affecte	<u>d:</u> 5.2.1.4.	1							
Other specs affected:	Other 3G core Other GSM co MS test specifi BSS test speci O&M specifica	re specifications ications ifications	-		Rs: Rs: Rs:				
Other									

## 5.2.1.4 Site selection diversity transmit power control

### 5.2.1.4.1 General

Site selection diversity transmit power control (SSDT) is an optional macro diversity method in soft handover mode.

Operation is summarised as follows. The UE selects one of the cells from its active set to be 'primary', all other cells are classed as 'non primary'. The main objective is to transmit on the downlink from the primary cell, thus reducing the interference caused by multiple transmissions in a soft handover mode. A second objective is to achieve fast site selection without network intervention, thus maintaining the advantage of the soft handover. In order to select a primary cell, each cell is assigned a temporary identification (ID) and UE periodically informs a primary cell ID to the connecting cells. The non-primary cells selected by UE switch off the transmission power. The primary cell ID is delivered by UE to the active cells via uplink FBI field. SSDT activation, SSDT termination and ID assignment are all carried out by higher layer signalling.

### 5.2.1.4.1.1 Definition of temporary cell identification

Each cell is given a temporary ID during SSDT and the ID is utilised as site selection signal. The ID is given a binary bit sequence. There are three different lengths of coded ID available denoted as "long", "medium" and "short". The network decides which length of coded ID is used. Settings of ID codes for 1-bit and 2-bit FBI are exhibited in table 3 and table 4, respectively.

ID code "medium" "short" **ID** label "long" (0)0000000 00000 а 101010101010101 b (0)1010101 01001 011001100110011 (0)011001111011 С 110011001100110 (0)1100110 10010 d 000111100001111 (0)0001111 е 00111 101101001011010 (0)1011010 f 01110 011110000111100 (0)0111100 11100 g 110100101101001 (0)1101001 10101 h

Table 3: Settings of ID codes for 1 bit FBI

Table 4: Settings of ID codes for 2 bit FBI

	ID code						
	(Column and Row denote slot position and FBI-bit position.)						
ID label	"long"	"medium"	"short"				
а	(0)0000000	(0)000	000				
	(0)0000000	(0)000	000				
b	(0)0000000	(0)000	000				
	(1)1111111	(1)111	111				
С	(0)1010101	(0)101	101				
	(0)1010101	(0)101	101				
d	(0)1010101	(0)101	101				
	(1)0101010	(1)010	010				
е	(0)0110011	(0)011	011				
	(0)0110011	(0)011	011				
f	(0)0110011	(0)011	011				
	(1)1001100	(1)100	100				
g	(0)1100110	(0)110	110				
	(0)1100110	(0)110	110				
h	(0)1100110	(0)110	110				
	(1)0011001	(1)001	001				

The ID code bits shown in table 3 and table 4 are transmitted from left to right. The ID code(s) are transmitted aligned to the radio frame structure (i.e. ID codes mustshall be terminated within a frame). If FBI space for sending a giventhe last ID code within a frame cannot be obtained within a frame, hence if the entire ID is not transmitted within a frame

but must be split over two frames, the first bit(s) of from the at ID  $\underline{\text{code is}}$  (are) punctured. The relating-bit(s) to be punctured are shown with in brackets in table 3 and table 4.

The alignment of the ID codes to the radio frame structure is not affected by transmission gaps resulting from uplink compressed mode.