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

CHANGE REQUEST								
Ø	25.214	CR 150	∠ rev	1 &	Current vers	3.5.0	Æ	
For <u>HELF</u>	For \underline{HELP} on using this form, see bottom of this page or look at the pop-up text over the $ ot \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$							
Proposed cha	ange affects: 🗷	(U)SIM	ME/UE X	Radio Ac	cess Network	X Core Ne	twork	
Title:		ion of the order	of SSDT signal	ling in 2 b	it FBI			
Source:		ic						
Work item co	de: ⊭				Date: ⋈	28th, Februa	ry, 2001	
Category:	€ F				Release: 🗷	R99		
	F (es A (cc B (Ac C (Ft D (Ec	f the following cate sential correction) presponds to a coldition of feature), unctional modification in the feature of the fe	rrection in an ear ion of feature) n) above categorie		2 R96 R97 R98 R99 REL-4	the following rele (GSM Phase 2) (Release 1996) (Release 1997) (Release 1998) (Release 1999) (Release 4) (Release 5)	eases:	
Reason for change: The order of SSDT signalling in 2-bit FBI case is not described.								
Summary of change: The text was added to clarify the order.								
Consequence not approved		order of SSDT serstanding of the		defined.	This may lead	d different		
Clauses affect	ted:	1.4.1.1						
Other specs affected:	Т	Other core specificets on Specification Specification	S					
Other comme	nts: 🗷							

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://www.3gpp.org/specs/ 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.

5.2.1.4 Site selection diversity transmit power control

5.2.1.4.1 General

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

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					
ID label	"long"	"medium"	"short"			
а	000000000000000	(0)0000000	00000			
b	101010101010101	(0)1010101	01001			
С	011001100110011	(0)0110011	11011			
d	110011001100110	(0)1100110	10010			
е	000111100001111	(0)0001111	00111			
f	101101001011010	(0)1011010	01110			
g	011110000111100	(0)0111100	11100			
h	110100101101001	(0)1101001	10101			

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. In table 4, the first row gives the first FBI bit in each slot, the second row gives the 2nd FBI bit in each slot. The ID code(s) are transmitted aligned to the radio frame structure (i.e. ID codes shall be terminated within a frame). If FBI space for sending the last ID code within

a frame cannot be obtained, the first bit(s) fromthat ID code are punctured. The bit(s) to be punctured are shown 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.