TSG-RAN Working Group 1(Radio) meeting #3
Nynäshamn, Sweden 22-26, March 1999

*TSGR1#3(99) 202*

**Agenda Item:**     9.2 New contributions: Multiplexing and channel coding

**Source:**     **Siemens**

**Title:**     **Text Proposal for Optimisation of extended TFCI encoding**

**Document for:**     Discussion (Approval at WG1 #4)

_____

# 1   Abstract

In the accompanying contribution "Optimisation of extended TFCI encoding" R1-99201 we presented an improved coding scheme for the extended TFCI encoding achieve a performance gain of about 0.4 dB. In this contribution we present the corresponding text proposal.

# Text Proposal for S1.12 and S1.22 (FDD and TDD multiplexing, channel coding and interleaving description)

### 7.3.1.2 Extended TFCI word

If the number of TFCI bits is 7-10 the TFCI information field is split into two words of length 5 bits as shown in the <u>following formula:</u> ~~Figure 7-19.~~
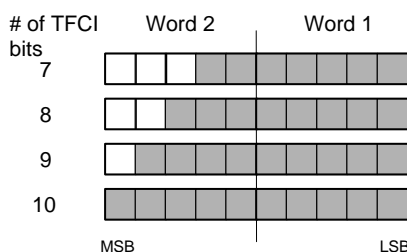


**~~Figure 7-19. Mapping of TFCI bits to two words~~**

$n := \left\lfloor \sqrt{TFCI} \right\rfloor$; n is the largest integer being smaller than or equal to the square root of the transmitted TFCI value.

if $TFCI < n^2 + n$

    then $Word1 := n$; $Word2 := TFCI - n^2$

    else $Word2 := n$; $Word1 := n^2 + 2n - TFCI$