

Yokohama Japan, 19-20, April 1999

Agenda Item: AdHoc #7**Source:** LG Information & Communications, Ltd. KOREA**Title:** Text Proposal for the modification of Secondary CCPCH**Document for:** Discussion and Decision

1. Introduction

The necessity of the addition of TFCI field for Secondary CCPCH was addressed at the last WG1 meeting at Nynashamn. This proposal provides the necessary changes for S1.11 to include TFCI field into Secondary CCPCH.

2. Required Modifications

<Text Changes for S1.11>

5.3.2.2 Secondary Common Control Physical Channel

The secondary CCPCH is used to carry the FACH, and PCH and multicast data. ~~It is of constant rate. However, in contrast to the Primary CCPCH, the rate may be different for different secondary CCPCH within one cell and between cells, in order to be able to allocate different amount of FACH and PCH capacity to a cell. The rate and spreading factor of each secondary CCPCH is broadcast on the BCH. There are basically two types of Secondary CCPCH: those that include TFCI (e.g., for services requiring fast rate change such as multimedia distribution service) and those that do not include TFCI (e.g., for fixed rate services). It is the UTRAN that determines if a TFCI should be transmitted, hence making it is mandatory for all UEs to support the use of TFCI.~~ The set of possible rates is the same as for the downlink DPCH, see Section 5.3.1.

<Figure 13>

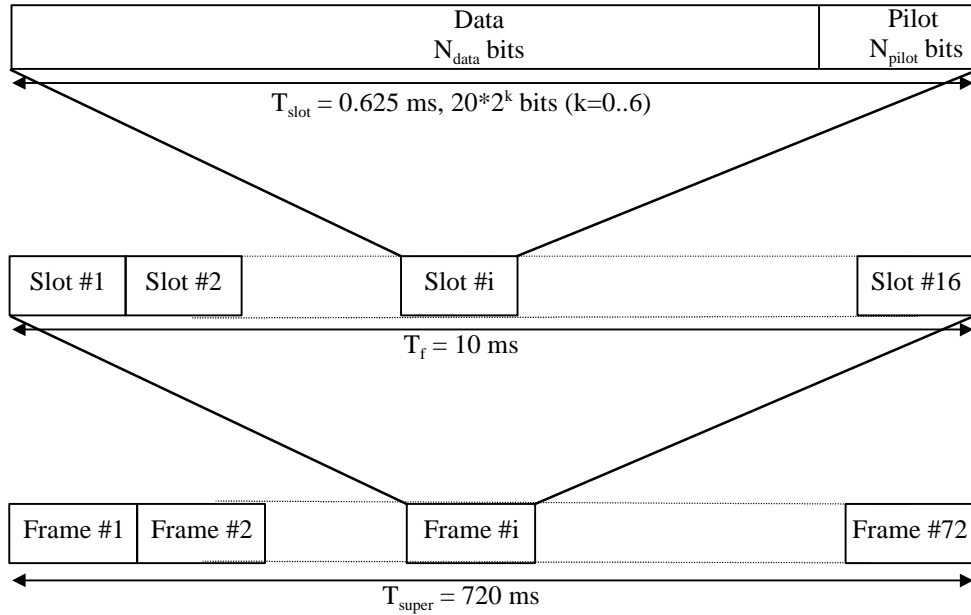
The parameter k in Figure 13 determines the total number of bits per downlink Secondary CCPCH slot. It is related to the spreading factor SF of the physical channel as $SF = 256/2^k$. The spreading factor range is from 256 down to 4. The values for the number of bits per field are given in Table 10. The channel bit and symbol rates given in Table 10 are the rates immediately before spreading. The pilot patterns are given in Table 11.

The FACH and PCH are mapped to separate Secondary CCPCHs. The main difference between a CCPCH and a downlink dedicated physical channel is that a CCPCH is not power controlled. The main difference between the Primary and Secondary CCPCH is that the Primary CCPCH has a fixed predefined rate ~~while the Secondary CCPCH has a constant rate that may be different for different cells, depending on the capacity needed for FACH and PCH.~~ while the secondary CCPCH can support variable rate with the help of TFCI field included. Furthermore, a Primary CCPCH is continuously transmitted over the entire cell while a Secondary CCPCH is only transmitted when there is data available and may be transmitted in a narrow lobe in the same way as a dedicated physical channel (only valid for a Secondary CCPCH carrying the FACH).

<Figure Changes>

The current Figure 13 describing the frame structure for Secondary CCPCH has to be modified as follows:

Old:



New:

