TSG-RAN-Working Group 1 (Radio) meeting #3.....#4

TSGR1P#34(99)248457

Shin-Yokohama, Japan (TSGR1#4(99)457)

April, 21–189-23,0 1Apr-999

Agenda Item:

Source: ARIB, CATT, DoCoMo, Ericsson, Nokia,

Panasonic, RITT, Siemens

Title:

Introduction of the Chinese Narrowband Key Parameters and Features for UTRA-TDD Mode

Document for: Decision [Consideration]

Introduction

During the beginning of this year several meetings have been held on harmonisation of the Chinese TD-SCDMA and UTRA TDD. On the 14 Apr 99 Tthe 3rd TDD Harmonisation Meeting took place in Beijing on the 14 April 1999. The named companies agreed that discussed about the introduction of several advantageous features of CATT's TD-SCDMA approach have advatagesadvantages and propose in order to introduce them in the 3GPP standard for consideration and adoption. Therefore this documents proposes an optional chiprate.

All the participating companies express their gratitude to CATT and RITT of facilitating this process.

Proposal Recognition

The TD-SCDMA approach of CATT shows a lot of new features, which potentially improve the UTRA-TDD system. Referring to our common understanding, additional flexibility in the TDD chiprate should be given in order to enable optimal functionality of these features.

Hence it is <u>understood proposed that it is very important</u> to harmonise the two technologies_<u>and to introduce a narrowband chiprate to UTRA TDD. In order_and</u> to minimise the effects on higher layers<u>of the current draft specification of 3GPP.</u> and system architecture the aim should be, that the narrowband chiprate is an addition to L1 of TDD. The effects to other layers or protocols will be minimised.

Proposal

It is proposed recommended -to consider the following key parameter and features

- Lower chiprate
- UL synchronization
- Smart antennas
- Baton handover

It has been suggested that the above features may benefit from the introduction of a lower chiprate. The value of 1.3542Mcps has been proposed by CATT introduce the chiprate of about 1.3542 Mcps, as described in the original CATT's approach and as defined in the Draft Recommendation on RKEY document of the ITU-R TG8/1.

It is further recommended that the 3GPP will define the exact optimum figure for the narrowband chip rate based on CATT contribution to meet the UTRA and IMT-2000 minimum requirements.

Additional features of TD-SCDMA, such as Baton HO, smart antennas, Uplink synchronisation were discussed and are supported by the companies mentioned in the source. CATT will prepare relevant documents for 3GPP.

<u>FCATT</u> will make detailed contributions on each of these features which will enable 3GPP to make decisions.