

Technical Specification Group, Radio Access Network
Meeting #3, Shin-Yokohama, 21-23 April 1999

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Source: TSG RAN
Title: Proposed contribution to ITU-R TG 8/1 on TDD harmonisation developments within 3GPP
Document for: Approval
Agenda Item: 5.6

The attached contribution is intended to inform ITU-R TG8/1 on the latest developments within 3GPP TSG RAN on the consideration of the Chinese Narrowband Key Parameters and Features for the UTRA TDD mode.

It is proposed to complete the attached document with the latest information available on the issue, in particular based on the discussion which took place within TSG RAN WG1.

It is proposed the attached contribution be sent to the next meeting of ITU-R TG 8/1 which will be held in Beijing, China from the 31st May to the 11th June 1999.



Received: April 1999

Subject: Questions ITU-R 39/8 and 77/8

[National Administration or ITU Sector Member#]

TDD HARMONISATION DEVELOPMENTS WITHIN 3GPP

1 Introduction

The purpose of this contribution is to inform ITU-R TG8/1 of the latest developments within 3GPP TSG RAN on the consideration of the Chinese Narrowband Key Parameters and Features for the UTRA TDD mode.

2 Latest Developments

Please find attached in Annex 1 a copy of an input contribution to the TSG RAN WG1 (Radio) meeting #4 in Yokohama, Japan, April 19-20 1999. This contribution, from ARIB, CATT, DoCoMo, Ericsson, Nokia, Panasonic, RITT and Siemens, reports on the TDD harmonisation meetings that have taken place over recent months and makes proposals that consideration is given to key parameters and features such as lower chip rate, UL synchronisation, smart antennas and Baton handover from the Chinese technology TDSCDMA.

The WG1 meeting and the RAN Plenary considered this contribution and decided to continue the work based on more detailed contributions expected for the coming WG1 meetings.

3 Summary

3GPP TSG RAN welcomes these TDD harmonisation initiatives and appreciates the involvement of CATT and RITT in facilitating this process. Further reports on future developments will be given as appropriate. TSG RAN thanks TG8/1 for its recent liaison statements concerning the IMT-2000 Radio specifications Recommendations and these are addressed in a separate 3GPP liaison statement. TSG RAN wishes to extend its support in the development of these recommendations by the end of the TG8/1 November 99 meeting in Helsinki.

This contribution was developed in 3GPP TSG RAN.

ANNEX 1

TSG-RAN Working Group 1 (Radio) meeting #4
Yokohama, Japan April, 19-20 1999

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. The 3rd TDD Harmonisation Meeting in Beijing on the 14 April 1999 agreed that several features of CATT's TD-SCDMA approach have advantages and propose them in the 3GPP standard for consideration and adoption.

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

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 understood that it is very important to harmonise the two technologies and to minimise the effects on higher layers of the current draft specification of 3GPP.

Proposal

It is 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 and as defined in the Draft Recommendation on RKEY 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.

CATT will make detailed contributions on each of these features which will enable 3GPP to make decisions.
