TSG-RAN meeting #27   **RP-050151**
Tokyo, Japan 9 – 11 March 2005

Agenda Item: **9.10.1**
Source: **Rapporteur**
Title: **Revised Draft Skeleton TR of Feasibility Study for EUTRA and EUTRAN**
Document for: **Approval**

Introduction

This document is the revised draft skeleton TR of feasibility study for EUTRA and EUTRAN. In this draft, a section for the RRM aspects is added according to comments in the RAN LTE meeting.

3GPP TR 25.xyz V7.x.x (2005-03)

Technical Report

**3rd Generation Partnership Project;
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Feasibility Study for Evolved UTRA and UTRAN
(Release 7)**

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Foreword

This Technical Report has been produced by the 3rd Generation Partnership Project (3GPP).

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y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.

z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

This present document is the technical report for the study item "Evolved UTRA and UTRAN" [1]. The objective of the study item is to develop a framework for the evolution of the 3GPP radio-access technology towards a high-data-rate, low-latency and packet-optimized radio access technology.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies.   In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document.*

[1]   3GPP TD RP-040461: "Proposed Study Item on Evolved UTRA and UTRAN".

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply.

<defined term>: <definition>.

3.2 Symbols

For the purposes of the present document, the following symbols apply:

<symbol> <Explanation>

3.3 Abbreviations

For the purposes of the present document, the following abbreviations apply:

4 Introduction

At the 3GPP TSG RAN #26 meeting, the SI description on "Evolved UTRA and UTRAN" was approved [1].

The justification of the study item was, that with enhancements such as HSDPA and Enhanced Uplink, the 3GPP radio-access technology will be highly competitive for several years. However, to ensure competitiveness in an even longer time frame, i.e. for the next 10 years and beyond, a long-term evolution of the 3GPP radio-access technology needs to be considered.

Important parts of such a long-term evolution include reduced latency, higher user data rates, improved system capacity and coverage, and reduced cost for the operator. In order to achieve this, an evolution of the radio interface as well as the radio network architecture should be considered.

Considering a desire for even higher data rates and also taking into account future additional 3G spectrum allocations the long-term 3GPP evolution should include an evolution towards support for wider transmission bandwidth than 5 MHz. At the same time, support for transmission bandwidths of 5MHz and less than 5MHz should be investigated in order to allow for more flexibility in whichever frequency bands the system may be deployed

5 Deployment Scenario

Editor's notes: This chapter will capture e.g. possible deployment in scalable frequency bandwidth, multiple antenna, etc.

6 Radio Interface Protocol Architecture for evolved UTRA

Editor's notes: This chapter will capture the overall protocol architecture for evolved UTRA.

7 Physical Layer for evolved UTRA

Editor's notes: This chapter will capture physical layer specific solutions to meet requirements for evolved UTRA and UTRAN.

8 Layer 2 and RRC Evolution for evolved UTRA

Editor's notes: This chapter will capture specific solutions of layer 2 and RRC to meet requirements for evolved UTRA and UTRAN.

9 Architecture for evolved UTRAN

9.1 RAN-CN functional split

Editor's notes: This chapter will capture agreed RAN-CN functional split with SA2.

9.2 System migration scenario

Editor's notes: This chapter will capture possible UTRAN internal and RAN-CN system migration scenario.

9.3 UTRAN architecture

Editor's notes: This chapter will capture specific solutions of UTRAN internal architecture to meet requirements for evolved UTRA and UTRAN.

10 RF Related aspects of evolved UTRA

Editor's notes: This chapter will capture RF related specific solutions to meet requirements for evolved UTRA and UTRAN.

11 Radio Resource Management Aspects of evolved UTRA

Editor's notes: This chapter will capture solution of the RRM aspect, e.g. inter-RAT support

12 System and Terminal Complexity

Editor's notes: This chapter will capture study results on system and terminal complexity.

13 Performance Assessments

Editor's notes: This chapter will capture assumptions for the study and study results on spectrum efficiency, data rate, latency, etc.

14 Conclusions and Recommendations

14.1 Conclusions

14.2 Recommendations

15 Change History

Change history							
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New