TR 25.850 V.0.1.0 (2000-11)

Technical Report

3rd Generation Partnership Project (3GPP);
Technical Specification Group (TSG) RAN 3;

UE positioning in UTRAN Iub/Iur protocol aspects
(Release 2000)

UMTS TR 25.850

Reference
<Workitem> (<Shortfilename>.PDF)

Keywords
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Foreword

This Technical Report (TR) has been produced by the 3rd Generation Partnership Project (3GPP), Technical Specification Group RAN.

The contents of this TR are subject to continuing work within 3GPP and may change following formal TSG approval. Should the TSG modify the contents of this TR, it will be re-released with an identifying change of release date and an increase in version number as follows:

Version m.t.e

where:

- m indicates [major version number]
- x the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- y the third digit is incremented when editorial only changes have been incorporated into the specification.

1 Scope

The purpose of the present document is to help the TSG RAN WG3 group to specify the changes to existing specifications, needed for the introduction of the UE positioning in UTRAN for Release 2000.

Based on [1], standard location services are defined as the:

- cell coverage based positioning method;
- OTDOA method with network configurable idle periods; and
- network assisted GPS method.

Since cell coverage based positioning method in WG3 group is already standardised this document will cover the Iub/Iur protocol aspects for OTDOA method with network configurable idle periods and network assisted GPS method.

It is intended to gather all information in order to trace the history and the status of the Work Task in RAN WG3. It is not intended to replace contributions and Change Requests, but only to list conclusions and make reference to agreed contributions and CRs. When solutions are sufficiently stable, the CRs can be issued.

It describes agreed requirements related to the Work Task, and split the Work Task into “Study Areas” in order to group contributions in a consistent way.

It identifies the affected specifications with related Change Requests.

It also describes the schedule of the Work Task.

This document is a ‘living’ document, i.e. it is permanently updated and presented to all TSG-RAN meetings.

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.
- A non-specific reference to an ETS shall also be taken to refer to later versions published as an EN with the same number.

[1.] Work Item Description: "Support of Location Services in UTRA FDD" RP-000135, submitted at RAN#7.

[2.] TS 25.305 Stage 2 Functional Specification of Location Services in UTRAN

[3.] TS 25.214 Physical layer procedures (FDD)

3 Definitions, symbols and abbreviations

3.1 Definitions

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

3.2 Symbols

3.3 Abbreviations

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

GPS	Global Positioning System
IPDL	Idle Periods in the DownLink
LCS	LoCation Services
OTDOA	Observed Time Difference of Arrival
UMTS	Universal Mobile Telecommunications System
UTRAN	UMTS Terrestrial Radio Access Network

4 Overview of the OTDOA and network assisted GPS methods

Standard LCS methods OTDOA and network assisted GPS supported within UMTS are described in [2].

5 Requirements

6 Study Areas

6.1 Architecture

6.2 OTDOA Radio Interface Timing

6.2.1 Iub Interface

6.2.2 Iur Interface

6.3 OTDOA Idle Periods

The Node Bs may provide idle periods in the downlink, in order to potentially improve the hearability of other Cells. The operation and specification of idle periods can be found in [3].

6.3.1 Iub Interface

6.3.2 Iur Interface

6.4 Assisted GPS timing difference

6.4.1 Iub Interface

6.4.2 Iur Interface

6.5 Assisted GPS assistance data from reference GPS receiver

6.6 Relocation

7 Agreements and associated contributions

8 Specification Impact and associated Change Requests

This section is intended to list the affected specifications and the related agreed Change Requests. It also lists the possible new specifications that may be needed for the completion of the Work Task.

9 Project Plan

9.1 Schedule

Date	Meeting	Scope	[expected] Input	[expected]Output

9.2 Work Task Status

	Planned Date	Milestone	Status
1.			
2.			

10 History

Document history		
V. 0.0.1	2000-10	First proposal.
V. 0.0.2	2000-11	Second proposal. - Title corrected to cover TDD also. - TR restructured and study areas identified according to comments from RAN WG3#16 meeting. – TR number allocated
V.0.1.0	2000-11	Version agreed at RAN3#17
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