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Technical Specification

**LTE;
Evolved Universal Terrestrial Radio
Access Network (E-UTRAN);
Layer 1 for interfaces supporting Multimedia Broadcast
Multicast Service (MBMS) within E-UTRAN
(3GPP TS 36.441 version 9.0.0 Release 9)**



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Foreword

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1 Scope

The present document specifies the standards allowed to implement layer 1 on the interfaces supporting Multimedia Broadcast Multicast Service (MBMS) within E-UTRAN.

In the following, 'layer 1' and 'physical layer' are assumed to be synonymous.

2 References

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

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[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 36.300: " Evolved Universal Terrestrial Radio Access (E-UTRA) and Evolved Universal Terrestrial Radio Access Network (E-UTRAN); Overall description; Stage 2".

3 Abbreviations

For the purposes of the present document, the abbreviations given in TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in TR 21.905 [1].

E-UTRAN	Evolved Universal Terrestrial Radio Access Network
MBMS	Multimedia Broadcast Multicast Service

4 Introduction

The main functions of layer 1 are summarized in the following:

- Interface to physical medium;
- Frame delineation;
- Layer 1 alarms extraction and generation;
- Transmission quality control.

5 Layer 1 specifications

The support of any suitable layer 1 technique - like point-to-point or point-to-multipoint techniques - shall not be prevented.

Annex A (informative): Change history

TSG #	TSG Doc.	CR	Rev	Subject/Comment	New
2009-10				Update to take into account comments raised at RAN3 #65bis	0.0.2
2009-12				Stepping to version 2.0.0 for approval at RAN#46	2.0.0
46	RP-091209			Approved at RAN#46	9.0.0

History

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V9.0.0	February 2010	Publication