TS 25.201 V2.1.0 (1999-06)

Technical Specification

3rd Generation Partnership Project (3GPP); Technical Specification Group (TSG) Radio Access Network (RAN); Working Group 1 (WG1); Physical layer - General description



The present document has been developed within the 3rd Generation Partnership Project (3GPP TM) and may be further elaborated for the purposes of 3GPP.

The present document has not been subject to any approval process by the 3GPP Organisational Partners and shall not be implemented. This Specification is provided for future development work within 3GPP only. The Organisational Partners accept no liability for any use of this Specification. Specifications and reports for implementation of the 3GPP TM system should be obtained via the 3GPP Organisational Partners' Publications Offices.



Reference
<workitem> (<shortfilename>.PDF)</shortfilename></workitem>
Keywords
<keyword[, keyword]=""></keyword[,>

3GPP

Postal address

Office address

Internet

secretariat@3gpp.org Individual copies of this deliverable can be downloaded from http://www.3gpp.org

3GPP



Contents

Intell	ectual Property Rights	4
Forev	word	4
1	Scope	5
2	References	5
3	Definitions, symbols and abbreviations	5
3.1	Definitions	
3.2	Symbols	6
3.3	Abbreviations	6
4	General description of Layer 1	7
4.1	Relation to other layers	7
4.1.1	General Protocol Architecture	7
4.1.2	Service provided to upper layer	7
4.2	General description of Layer 1	7
4.2.1	Multiple Access	8
4.2.2	Coding and interleaving	8
4.2.3	Modulation and spreading	9
4.2.4	Transmission and reception.	9
4.2.5	Physical layer procedures	9
5	Document structure of physical layer specification	
5.1	Overview	
5.2	25.201: Physical layer – General description	10
5.3	S1.02: User Equipment physical layer capabilities	
5.4	25.211: Physical channels and mapping of transport channels onto physical channels (FDD)	
5.5	25.212: Multiplexing and channel coding (FDD)	
5.6	25.213: Spreading and modulation (FDD)	
5.7	25.214: Physical layer procedures (FDD).	
5.8	25.221: Physical channels and mapping of transport channels onto physical channels (TDD)	11
5.9	25.222: Multiplexing and channel coding (TDD)	
5.10	25.223: Spreading and modulation (TDD)	
5.11	25.224: Physical layer procedures (TDD)	
5.12	25.231: Physical layer - Measurements	12
Histo	ory	13



Intellectual Property Rights

<IPR notice shall be provided once correct notice is available within 3GPP>

Foreword

This Technical Specification has been produced by the 3GPP.

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

Version 3.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 Indicates TSG approved document under change control.
- 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 specification;



1 Scope

This specification gives a general description of the physical layer of the UTRA Radio interface. This specification also describes the document structure of the 3GPP physical layer specifications, i.e. TS 25.200 series. The TS 25.200 series specifies the Uu point for the 3G mobile system, and defines the minimum level of specifications required for basic connections in terms of mutual connectivity and compatibility.

2 References

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

<Editor's Note: Relevant references should be discussed>

```
< 3GPP TS 25.201: "Physical layer – General description" >
```

- [1] 3GPP RAN S1.02 (V1.0.0): "User Equipment physical layer capabilities" <Editor's Note: How to treat S1.02 has not been decided yet >
- [2] 3GPP TS 25.211: "Physical channels and mapping of transport channels onto physical channels (FDD)"
- [3] 3GPP TS 25.212: "Multiplexing and channel coding (FDD)"
- [4] 3GPP TS 25.213: "Spreading and modulation (FDD)"
- [5] 3GPP TS 25.214: "Physical layer procedures (FDD)"
- [6] 3GPP TS 25.221: "Physical channels and mapping of transport channels onto physical channels (TDD)"
- [7] 3GPP TS 25.222: "Multiplexing and channel coding (TDD)"
- [8] 3GPP TS 25.223: "Spreading and modulation (TDD)"
- [9] 3GPP TS 25.224: "Physical layer procedures (TDD)"
- [10] 3GPP TS 25.231: "Physical layer Measurements"
- [11] 3GPP TS 25.301: "Radio Interface Protocol Architecture"
- [12] 3GPP TS 25.302: "Services provided by the physical layer"
- [13] 3GPP TS 25.101: "UE Radio transmission and reception (FDD)"
- [14] 3GPP TS 25.102: "UE Radio transmission and reception (TDD)"

3 Definitions, symbols and abbreviations

3.1 Definitions

For the purposes of the present document, the [following] terms and definitions [given in ... and the following] apply.

<defined term>: <definition>.

3GPP



DOCKET

Explore Litigation Insights



Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time** alerts and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.

