

# 3G TS 25 XXX V0.0.0 (2000-01)

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*Technical Report*

**3<sup>rd</sup> Generation Partnership Project (3GPP);  
Technical Specification Group (TSG);  
Radio Access Network (RAN);  
1.28Mcps UTRA TDD Physical Layer**

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Reference

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# 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:

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where:

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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 specification.

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## 1 Scope

This Technical Report describes the 1.28Mcps UTRA TDD physical layer, identifies commonalities and explains the differences to the 3.84Mcps UTRA TDD.

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## 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.

- [1] TS 25.221: "Physical channels and mapping of transport channels onto physical channels (TDD)"
- [2] TS 25.222: "Multiplexing and channel coding (TDD)"
- [3] TS 25.223: "Spreading and modulation (TDD)"
- [4] TS 25.224: "Physical layer procedures (TDD)"
- [5] TS 25.225: "Physical layer – Measurements (TDD)"
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## 3 Abbreviations

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

CDMA	Code Division Multiple Access
PN	Pseudo Noise
QPSK	Quadrature Phase Shift Keying
RACH	Random Access Channel

## 4 Physical layer - General description

### 4.1 General description of Layer 1

### 4.2 Document structure of the physical layer specification

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- 5 Physical channels and mapping of transport channels onto physical channels
    - 5.1 Transport channels
    - 5.2 Physical channels
    - 5.3 Mapping of transport channels to physical channels

- 6 Multiplexing and channel coding
  - 6.1 Transport channel coding/multiplexing
  - 6.2 Coding for layer 1 control



## 7 Spreading and Modulation

### 7.1 Data modulation

### 7.2 Spreading modulation

### 7.3 Synchronisation codes

- 8 Physical layer procedures
  - 8.1 Transmitter power control
  - 8.2 Timing Advance / UL synchronisation
  - 8.3 Synchronisation and cell search procedures
  - 8.4 Discontinuous transmission (DTX) of radio frames
  - 8.5 Downlink Transmit Diversity

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- 9 Physical layer measurements
    - 9.1 Control of UE/UTRAN measurements
    - 9.2 Measurement abilities for UTRA TDD

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## 10 History

<b>Document history</b>		
V0.0.1	January 2000	