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**Universal Mobile Telecommunications System (UMTS);  
UTRAN Iu interface layer 1  
(3GPP TS 25.411 version 14.0.0 Release 14)**



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Reference

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Keywords

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# 1 Scope

The present document specifies the standards allowed to implement Layer 1 on the Iu interface.

The specification of transmission delay requirements and O&M requirements are not in the scope of the present document.

In the following 'Layer 1' and 'Physical Layer' are assumed to be synonymous.

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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.
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- 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] ITU-T Recommendation I.432.2 (1996-08): "ISDN User-Network interfaces, Layer 1 Recommendations, 155 520 kbit/s and 622 080 kbit/s operation".
- [2] Void.
- [3] ITU-T Recommendation G.703 (1998-10): "Physical/electrical characteristics of hierarchical digital interfaces".
- [4] ITU-T Recommendation G.704 (1998-10): "Synchronous frame structures used at 1544, 6312, 2048, 8448 and 44 736 kbit/s hierarchical levels".
- [5] ITU-T Recommendation G.957 (1995-07): "Optical interfaces for equipments and systems relating to the synchronous digital hierarchy".
- [6] ITU-T Recommendation I.432.1 (1996-08): "ISDN User-Network interfaces, Layer 1 Recommendations, General characteristics".
- [7] ITU-T Recommendation G.823 (2000-03): "The control of jitter and wander within digital networks which are based on the 2048 kbit/s hierarchy".
- [8] ITU-T Recommendation G.824 (2000-03): "The control of jitter and wander within digital networks which are based on the 1544 kbit/s hierarchy".
- [9] ITU-T Recommendation G.825 (2001-08): "The control of jitter and wander within digital networks which are based on the synchronous digital hierarchy (SDH)".
- [10] ITU-T Recommendation G.826 (1996-08): "Error performance parameters and objectives for international, constant bit rate digital paths at or above the primary rate".
- [11] ITU-T Recommendation I.361 (1995-11): "B-ISDN ATM layer specification".
- [12] ATM Forum AF-PHY-0016.000 (1994-09): "DS1 Physical Layer Specification".
- [13] ATM Forum AF-PHY-0064.000 (1996-09): "E1 Physical Layer Interface Specification".
- [14] ATM Forum AF-PHY-0086.001 (1999-02): "Inverse Multiplexing for ATM (IMA) Specification Version 1.1".