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**Universal Mobile Telecommunications System (UMTS);
Medium Access Control (MAC) protocol specification
(3GPP TS 25.321 version 13.2.0 Release 13)**



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1 Scope

The present document specifies the MAC protocol.

The specification describes:

- MAC architecture;
- MAC entities;
- channel structure;
- services provided to upper layers;
- MAC functions;
- services expected from the physical layer;
- elements for layer-to-layer communication including primitives between MAC and RLC;
- elements for peer-to-peer communication;
- protocol data units, formats and parameters;
- elementary procedures.

2 References

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- 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. 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] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [2] 3GPP TS 25.301: "Radio Interface Protocol Architecture".
- [3] 3GPP TS 25.302: "Services provided by the Physical Layer".
- [4] 3GPP TS 25.303: "Interlayer Procedures in Connected Mode".
- [5] 3GPP TS 25.304: "UE Procedures in Idle Mode and Procedures for Cell Reselection in Connected Mode".
- [6] 3GPP TS 25.322: "RLC Protocol Specification".
- [7] 3GPP TS 25.331: "Radio Resource Control (RRC); protocol specification".
- [8] 3GPP TR 25.921: "Guidelines and Principles for Protocol Description and Error Handling".
- [9] 3GPP TR 25.990: "Vocabulary for the UTRAN".
- [10] 3GPP TS 33.102: "Security architecture".
- [11] 3GPP TS 25.425: "UTRAN Iur Interface User Plane Protocols for Common Transport Channel Data Streams".