

# ETSI TS 129 161 V12.0.0 (2014-10)



**Universal Mobile Telecommunications System (UMTS);  
LTE;  
Interworking between the Public Land Mobile Network (PLMN)  
supporting packet based services with  
Wireless Local Area Network (WLAN)  
access and Packet data Networks (PDN)  
(3GPP TS 29.161 version 12.0.0 Release 12)**



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# Foreword

This Technical Specification (TS) has been produced by the 3<sup>rd</sup> Generation Partnership Project (3GPP).

The present document describes the network interworking for the Packet Domain. Interworking to various external networks is defined together with the interworking for data forwarding while subscribers roam within the 3GPP system.

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# 1 Scope

The present document defines the requirements for Packet Domain interworking between a:

- a) PLMN with WLAN access and PDN;
- b) PLMN with WLAN access and PLMN.

The present document also defines, in clause 12, the usage of Radius at the Pp Reference Point between the Packet Data Gateway and the Presence Network Agent, see 3GPP TS 23.141 [18].

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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] 3GPP TS 23.234: "3GPP system to Wireless Local Area Network (WLAN) interworking; System description".
- [2] 3GPP TS 29.234: "3GPP system to Wireless Local Area Network (WLAN) interworking; Stage 3".
- [3] 3GPP TS 24.234: "3GPP system to Wireless Local Area Network (WLAN) interworking; User Equipment (UE) to network protocols; Stage 3".
- [4] 3GPP TS 29.061: "Interworking between the Public Land Mobile Network (PLMN) supporting packet based services and Packet Data Networks (PDN)".
- [5] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".
- [6] IETF RFC 1034 (1987): "Domain names - concepts and facilities".
- [7] IETF RFC 1035 (1987): "Domain names - implementation and specification".
- [8] IETF RFC 2131 (1997): "Dynamic Host Configuration Protocol".
- [9] IETF RFC 3315 (2003) "Dynamic Host Configuration Protocol for IPv6 (DHCPv6)".
- [10] IETF RFC 2865 (2000): "Remote Authentication Dial In User Service (RADIUS)".
- [11] IETF RFC 3162 (2001): "RADIUS and IPv6".
- [12] IETF RFC 2866 (2000): "RADIUS Accounting".
- [13] IETF RFC 2373 (1998): "IP Version 6 Addressing Architecture".
- [14] IETF RFC 2461 (1998): "Neighbor Discovery for IP Version 6 (IPv6)".
- [15] IETF RFC 2462 (1998): "IPv6 Stateless Address Autoconfiguration".
- [16] 3GPP TS 33.234: "3G security; Wireless Local Area Network (WLAN) interworking security".
- [17] 3GPP TS 24.229: "Internet Protocol (IP) multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".