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)

Reference
RTS/TSGC-0329161vc00

Keywords
LTE, UMTS

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://ipr.etsi.org).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This Technical Specification (TS) has been produced by ETSI 3rd Generation Partnership Project (3GPP).

The present document may refer to technical specifications or reports using their 3GPP identities, UMTS identities or GSM identities. These should be interpreted as being references to the corresponding ETSI deliverables.

The cross reference between GSM, UMTS, 3GPP and ETSI identities can be found under http://webapp.etsi.org/key/queryform.asp.

Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**may not**", "**need**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the ETSI Drafting Rules (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Contents

Foreword

This Technical Specification (TS) has been produced by the 3rd 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.

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 the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

x the first digit:

1 presented to TSG for information;

2 presented to TSG for approval;

3 or greater 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 document.

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].

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. 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".