

ETSI TS 129 061 V12.11.0 (2016-01)



**Digital cellular telecommunications system (Phase 2+);
Universal Mobile Telecommunications System (UMTS);
LTE;
Interworking between the
Public Land Mobile Network (PLMN) supporting packet
based services and Packet Data Networks (PDN)
(3GPP TS 29.061 version 12.11.0 Release 12)**



Reference

RTS/TSGC-0329061vcb0

Keywords

GSM,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
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Sous-Préfecture de Grasse (06) N° 7803/88

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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.

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1 Scope

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

- a) PLMN and PDN;
- b) PLMN and PLMN.

The present document is valid for a PLMN in A/Gb mode as well as for a PLMN in Iu mode. If text applies only for one of these systems it is explicitly mentioned by using the terms "A/Gb mode" and "Iu mode". Please note, that the A interface does not play any role in the scope of the present document although the term "A/Gb mode" is used.

For inter-working between EPC PLMN and external networks, the present document is valid for both 3GPP accesses and non-3GPP accesses.

The present document also defines, in clause 17, the protocol for the Gmb interface, in clause 20, the protocol for the SGmb interface, and in clause 19, the protocol for the Mz interface.

The present document also defines, in clause 18, the usage of Radius at the Pk Reference Point between the GGSN and the Presence Network Agent.

The term "Packet Domain" includes both EPC based and non-EPC based Packet Domains.

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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- | | |
|------|---|
| [1] | Void. |
| [2] | 3GPP TS 22.060: "General Packet Radio Service (GPRS); Service Description; Stage 1". |
| [3] | 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service Description; Stage 2". |
| [4] | Void. |
| [5] | Void. |
| [6] | Void. |
| [7] | Void. |
| [8] | Void. |
| [9] | Void. |
| [10] | 3GPP TS 27.060: "Packet Domain; Mobile Station (MS) supporting Packet Switched services". |
| [11] | ITU-T Recommendation E.164: "The international public telecommunication numbering plan". |
| [12] | Void. |
| [13] | Void. |