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Architecture enhancements for control and user plane separation of EPC nodes
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Contents

Foreword

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1 Scope

The present document specifies the overall stage 2 level functionality for control and user plane separation of EPC's SGW, PGW and TDF. This enables a flexible placement of the separated control plane and user plane functions for supporting diverse deployment scenarios (e.g. central or distributed user plane function) without affecting the overall functionality provided by these EPC entities.

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] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] 3GPP TS 23.401: "General Packet Radio Service (GPRS) enhancements for Evolved Universal Terrestrial Radio Access Network (E-UTRAN) access".

[3] 3GPP TS 23.203: "Policy and charging control architecture".

[4] 3GPP TS 23.402: "Architecture enhancements for non-3GPP accesses".

[5] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service description; Stage 2".

[6] 3GPP TS 29.060: "GPRS Tunnelling Protocol (GTP) across the Gn and Gp interface".

[7] 3GPP TS 29.274: "3GPP Evolved Packet System (EPS); Evolved General Packet Radio Service (GPRS) Tunnelling Protocol for Control plane (GTPv2-C); Stage 3".

[8] 3GPP TS 32.251: "Telecommunication management; Charging management; Packet Switched (PS) domain charging".

[9] 3GPP TS 32.240: "Charging architecture and principles".

[10] 3GPP TS 33.107: "3G security; Lawful interception architecture and functions".

[11] 3GPP TS 29.212: "Policy and Charging Control (PCC); Reference points".

[12] 3GPP TS 29.244: "Interface between the Control Plane and the User Plane of EPC Nodes; Stage 3".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in TR 21.905 [1], TS 23.401 [2], TS 23.203 [3] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in TR 21.905 [1].

F-TEID: as defined in clause 8.22 of TS 29.274 [7].

F-TEIDu: The F-TEID of a GTP-u tunnel.