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Contents

Foreword

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1 Scope

The present document describes Domain Name System (DNS) Procedures for the Evolved Packet System. This document covers the Evolved Packet Core gateway node selection using DNS (e.g. SGW and PGW nodes) excluding all User Equipment (UE) initiated DNS-based discovery and selection procedures.

The present document specifies functions, procedures and information which apply to GERAN Iu mode. However, functionality related to GERAN Iu mode is neither maintained nor enhanced.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

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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 TR 21.905: "Vocabulary for 3GPP Specifications".

[2] IETF RFC 1034:"DOMAIN NAMES - CONCEPTS AND FACILITIES".

[3] IETF RFC 1035:"DOMAIN NAMES - IMPLEMENTATION AND SPECIFICATION".

[4] 3GPP TS 23.003: "Numbering, addressing and identification".

[5] GSMA PRD IR.67: "DNS Guidelines for Operators" Version 2.1.0.

[6] IETF RFC 3596: "DNS Extensions to Support IP Version 6".

[7] IETF RFC 3403: " Dynamic Delegation Discovery System (DDDS) Part Three: The Domain Name System (DNS) Database".

[8] IETF RFC 2782: "A DNS RR for specifying the location of services (DNS SRV)".

[9] IETF RFC 3958: "Domain-Based Application Service Location Using SRV RRs and the Dynamic Delegation Discovery Service (DDDS)".

[10] IETF RFC 3401: "Dynamic Delegation Discovery System (DDDS) Part One: The Comprehensive DDDS".

[11] 3GPP TS 23.401: "GPRS enhancements for E-UTRAN access ".

[12] 3GPP TS 25.413: "UTRAN Iu interface RANAP signalling".

[13] IETF RFC 2671: "Extension Mechanisms for DNS (EDNS0)".

[14] IETF RFC 3402: "Dynamic Delegation Discovery System (DDDS) Part Two: The Algorithm".

[15] IETF RFC 2308: "Negative Caching of DNS Queries (DNS NCACHE)".

[16] IETF RFC 3330: "Special Use IPv4 Addresses".

[17] IETF RFC 3849: "IPv6 Address Prefix Reserved for Documentation".

[18] 3GPP TS 23.060: "General Packet Radio Service (GPRS); Service Description; Stage 2".

[19] 3GPP TS 36.413: "Evolved Universal Terrestrial Access Network (E-UTRAN); S1 Application Protocol (S1AP)".