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Access to the 3GPP Evolved Packet Core (EPC)
via non-3GPP access networks;
Stage 3
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Foreword

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1 Scope

The present document specifies the discovery and network selection procedures for access to 3GPP Evolved Packet Core (EPC) via non-3GPP access networks and includes Authentication and Access Authorization using Authentication, Authorization and Accounting (AAA) procedures used for the interworking of the 3GPP EPC and the non-3GPP access networks.

The present document also specifies the Tunnel management procedures used for establishing an end-to-end tunnel from the UE to the ePDG to the point of obtaining IP connectivity and includes the selection of the IP mobility mode.

The non-3GPP access networks considered in this present document are cdma2000[®] HRPD and Worldwide Interoperability for Microwave Access (WiMAX), and any access technologies covered in 3GPP TS 23.402 [6]. The present document also specifies UE access to PLMN IP-based services via restrictive non-3GPP access networks covered in 3GPP TS 33.402 [15]. These non-3GPP access networks can be trusted or untrusted access networks.

The present document is applicable to the UE and the network. In this technical specification the network is the 3GPP EPC.

NOTE: cdma2000[®] is a registered trademark of the Telecommunications Industry Association (TIA-USA).

2 References

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- 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] Void.
- [2A] 3GPP TS 23.002: "Network architecture".
- [3] 3GPP TS 23.003: "Numbering, addressing and identification".
- [4] 3GPP TS 23.122: "Non-Access-Stratum (NAS) functions related to Mobile Station (MS) in idle mode".
- [5] Void.
- [5A] 3GPP TS 23.203: "Policy and Charging Control Architecture".
- [6] 3GPP TS 23.402: "Architecture enhancements for non-3GPP accesses".
- [7] Void.
- [8] Void.
- [9] 3GPP TS 24.234: "3GPP System to Wireless Local Area Network (WLAN) interworking; WLAN User Equipment (WLAN UE) to network protocols".
- [10] 3GPP TS 24.301: "Non-Access-Stratum (NAS) protocol for Evolved Packet System (EPS)".
- [11] 3GPP TS 24.303: "Mobility management based on Dual-Stack Mobile IPv6".
- [12] 3GPP TS 24.304: "Mobility management based on Mobile IPv4; User Equipment (UE) - Foreign Agent interface".

- [13] 3GPP TS 24.312: "Access Network Discovery and Selection Function (ANDSF) Management Object (MO)".
- [14] 3GPP TS 25.304: "User Equipment (UE) procedures in idle mode and procedures for cell reselection in connected mode".
- [14A] 3GPP TS 25.331: "Radio Resource Control (RRC); Protocol Specification".
- [15] 3GPP TS 33.402: "3GPP System Architecture Evolution: Security aspects of non-3GPP accesses".
- [16] 3GPP TS 36.304: "Evolved Universal Terrestrial Radio Access (E-UTRA); User Equipment (UE) procedures in idle mode".
- [16A] 3GPP TS 45.008: "Radio Access Network; Radio subsystem link control".
- [16B] 3GPP TS 36.331: "Evolved Universal Terrestrial Radio Access (E-UTRA) Radio Resource Control (RRC); Protocol specification".
- [17] 3GPP TS 29.273: "Evolved Packet System; 3GPP EPS AAA Interfaces".
- [18] 3GPP TS 29.275: "Proxy Mobile IPv6 (PMIPv6) based Mobility and Tunnelling protocols".
- [19] 3GPP TS 29.276: "Optimized Handover Procedures and Protocols between EUTRAN Access and cdma2000 HRPD Access".
- [20] 3GPP2 X.S0057-B v2.0: "E-UTRAN - HRPD Connectivity and Interworking: Core Network Aspects".
- [21] 3GPP2 C.S0087-A v4.0: "E-UTRAN - HRPD and CDMA2000 1x Connectivity and Interworking: Air Interface Aspects".
- [22] Void.
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