

ETSI TS 103 269-2 V1.1.1 (2015-01)



TECHNICAL SPECIFICATION

**TETRA and Critical Communications Evolution (TCCE);
Critical Communications Architecture;
Part 2: Critical Communications application
mobile to network interface architecture**

Reference

DTS/TCCE-04187

Keywords

broadband, radio, security, TETRA

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Foreword

This Technical Specification (TS) has been produced by ETSI Technical Committee TETRA and Critical Communications Evolution (TCCE).

The present document is part 2 of a multi-part deliverable covering TETRA and Critical Communications Evolution (TCCE); Critical Communications Architecture, as identified below:

TR 103 269-1: "Critical Communications Architecture Reference Model";

TS 103 269-2: "Critical Communications application mobile to network interface architecture".

Modal verbs terminology

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1 Scope

The present document presents an overview of the architecture for a generic mission critical service for use by a Critical Communications Application in network and terminal over a broadband IP bearer, with specific focus for LTE. The architecture is part of the overall Critical Communications Architecture Reference Model, described in ETSI TR 103 269-1 [1]. The overall architecture and services are described and the implementation of services equivalent to the existing narrowband technologies, for example those in TETRA and Tetrapol systems. Off network services are for future study and so are outside the scope of the present document.

2 References

2.1 Normative references

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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The following referenced documents are necessary for the application of the present document.

- [1] ETSI TR 103 269-1: "TETRA and Critical Communications Evolution (TCCE); Critical Communications Architecture; Part 1: Critical Communications Architecture Reference Model".
- [2] IETF RFC 3261: "SIP: Session Initiation Protocol (SIP)".
- [3] IETF RFC 5389: "Session Traversal Utilities for NAT (STUN)".
- [4] IETF RFC 6665: "SIP-Specific Event Notification".
- [5] IETF RFC 3428: "Session Initiation Protocol (SIP) Extension for Instant Messaging".
- [6] IETF RFC 3903: "Session Initiation Protocol (SIP) Extension for Event State Publication".
- [7] IETF RFC 4566: "Session Description Protocol (SDP)".
- [8] IETF RFC 5359: "Session Initiation Protocol Service Examples".
- [9] IETF RFC 791: "Internet Protocol (v4)".
- [10] IETF RFC 2460: "Internet Protocol, version 6".
- [11] IETF RFC 793: "Transmission Control Protocol (TCP)".
- [12] IETF RFC 4960: "Stream Control Transmission Protocol (SCTP)".
- [13] IETF RFC 5246: "Transport Layer Security protocol (TLS)".
- [14] IETF RFC 6347: "Datagram Transport Layer Security (DTLS)".
- [15] IETF RFC 768: "User Datagram Protocol (UDP)".
- [16] IETF RFC 3550: "Real Time Protocol (RTP)".
- [17] IETF RFC 3711: "Secure Real Time Protocol (SRTP)".
- [18] IETF RFC 5245: "Interactive Connectivity Establishment (ICE)".