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Study into interworking between TETRA and
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Contents

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Foreword

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

Modal verbs terminology

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Introduction

3GPP is standardizing a set of mission critical services as applications working over 3GPP LTE systems. These services include speech PTT systems (MCPTT), data (MCData) and video (MCVideo) systems. Users have a need to interwork between TETRA and 3GPP MC systems for a number of reasons which can include:

- Communication between different user groups who receive service from the different types of system.
- Use of both systems by the same set of users to allow selection of optimum radio coverage and services in any situation.
- Migration from an existing TETRA system to a 3GPP MC system over a period of time, which may be long.

It is envisaged that an interworking function will be standardized as part of this work within ETSI TCCE to allow communication between TETRA and 3GPP MC systems. The present document provides considerations for realizing this interface.

1 Scope

The present document contains scenarios and considerations for an interworking function between TETRA and 3GPP MC services.

2 References

2.1 Normative references

Normative references are not applicable in the present document.

2.2 Informative 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 referenced document (including any amendments) applies.

NOTE: While any hyperlinks included in this clause were valid at the time of publication, ETSI cannot guarantee their long term validity.

The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

[i.1] ETSI EN 300 392-2: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 2: Air Interface (AI)".

NOTE: The latest version of either ETSI EN 300 392-2 or ETSI TS 100 392-2 applies.

[i.2] ETSI TR 102 022-2: "User Requirements Specification Mission Critical Broadband Communications Part 2: Critical Communications Application".

[i.3] ETSI EN 300 392-1: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 1: General network design".

[i.4] Recommendation ITU-T E.218: "Management of the allocation of terrestrial trunk radio Mobile Country Codes".

[i.5] IETF RFC 3986: "Uniform Resource Identifier (URI): Generic Syntax".

[i.6] ETSI EN 300 392-3 (all sub-parts): " Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 3: Interworking at the Inter-System Interface (ISI)".

NOTE: Referenced document has multiple parts; all parts are relevant.

[i.7] ETSI TS 123 280: "LTE; Common functional architecture to support mission critical services; Stage 2 (3GPP TS 23.280)".

[i.8] ETSI TS 123 379: "LTE; Functional architecture and information flows to support Mission Critical Push To Talk (MCPTT); Stage 2 (3GPP TS 23.379)".

[i.9] ETSI TS 123 281: "LTE; Functional architecture and information flows to support Mission Critical Video (MCVideo); Stage 2 (3GPP TS 23.281)".

[i.10] ETSI TS 123 282: "LTE; Functional architecture and information flows to support Mission Critical Data (MCData); Stage 2 (3GPP TS 23.282)".

[i.11] TETRA + Critical Communications Association: "TETRA Interoperability Profile (TIP); Part 1: Core".

NOTE: Available at https://tandcca.com/interoperability/specifications-for-interoperability/.