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Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 3: Interworking at the Inter-System Interface (ISI); Sub-part 5: Additional Network Feature for Mobility Management (ANF-ISIMM)

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**Terrestrial Trunked Radio (TETRA);
Voice plus Data (V+D);
Part 3: Interworking at the Inter-System Interface (ISI);
Sub-part 5: Additional Network Feature
for Mobility Management (ANF-ISIMM)**

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Intellectual Property Rights

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Foreword

This European Standard (EN) has been produced by ETSI Technical Committee TETRA and Critical Communications Evolution (TCCE).

- ETSI EN 300 392-1: "General network design";
- ETSI EN 300 392-2: "Air Interface (AI)";
- ETSI EN 300 392-3: "Interworking at the Inter-System Interface (ISI)";**
 - ETSI EN 300 392-3-1: "General design";
 - ETSI EN 300 392-3-2: "Additional Network Feature Individual Call (ANF-ISIIC)";
 - ETSI EN 300 392-3-3: "Additional Network Feature Group Call (ANF-ISIGC)";
 - ETSI EN 300 392-3-4: "Additional Network Feature Short Data Service (ANF-ISISDS)";
- ETSI EN 300 392-3-5: "Additional Network Feature for Mobility Management (ANF-ISIMM)";**
 - ETSI TS 100 392-3-6: "Speech format implementation for circuit mode transmission";
 - ETSI TS 100 392-3-7: "Speech Format Implementation for Packet Mode Transmission";
 - ETSI TS 100 392-3-8: "Speech Format Implementation";
- ETSI ETS 300 392-4: "Gateways basic operation";
- ETSI EN 300 392-5: "Peripheral Equipment Interface (PEI)";
- ETSI EN 300 392-7: "Security";
- ETSI EN 300 392-9: "General requirements for supplementary services";
- ETSI EN 300 392-10: "Supplementary services stage 1";
- ETSI EN 300 392-11: "Supplementary services stage 2";
- ETSI EN 300 392-12: "Supplementary services stage 3";
- ETSI ETS 300 392-13: "SDL model of the Air Interface (AI)";
- ETSI ETS 300 392-14: "Protocol Implementation Conformance Statement (PICS) proforma specification";
- ETSI TS 100 392-15: "TETRA frequency bands, duplex spacings and channel numbering";
- ETSI TS 100 392-16: "Network Performance Metrics";
- ETSI TR 100 392-17: "TETRA V+D and DMO specifications";
- ETSI TS 100 392-18: "Air interface optimized applications".

NOTE 1: Part 3, sub-parts 6 and 7 (Speech format implementation), part 4, sub-part 3 (Data networks gateway), part 10, sub-part 15 (Transfer of control), part 13 (SDL) and part 14 (PICS) of this multi-part deliverable are in status "historical" and are not maintained.

NOTE 2: Some parts are also published as Technical Specifications such as TS 100 392-2 and those may be the latest version of the document.

National transposition dates	
Date of adoption of this EN:	23 May 2016
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Modal verbs terminology

In the present document "**shall**", "**shall not**", "**should**", "**should not**", "**may**", "**need not**", "**will**", "**will not**", "**can**" and "**cannot**" are to be interpreted as described in clause 3.2 of the [ETSI Drafting Rules](#) (Verbal forms for the expression of provisions).

"**must**" and "**must not**" are **NOT** allowed in ETSI deliverables except when used in direct citation.

Introduction

The present document adds enhancement which was introduced after the publication of ETSI EN 300 392-3-5 (V1.2.1). The main addition is:

- Support of group attachment to foreign SwMI groups.

1 Scope

The present document defines the mobility management of interworking at the Inter-System Interface (ISI) for Terrestrial Trunked Radio (TETRA) system supporting Voice plus Data (V+D).

The TETRA V+D Inter-working - basic operation part defines the Inter-System Interface (ISI) between the SwMIs as specified in the following sub-parts:

- Additional Network Feature - Inter-System Interface General Description (ANF-ISIGD).
- Additional Network Feature - Inter-System Interface Individual Call (ANF-ISIIC).
- Additional Network Feature - Inter-System Interface Group Call (ANF-ISIGC).
- Additional Network Feature - Inter-System Interface Short Data Service (ANF-ISISDS).
- Additional Network Feature - Inter-System Interface Mobility Management (ANF-ISIMM).

NOTE: These ENs are produced in analogy with the Recommendation ITU-T I.130 [8].

The present document contains the ANF-ISIMM part. The ANF-ISIMM part defines additional Mobility Management (MM) services to the SwMIs. If supported, the ANF-ISIMM services complement the intra-SwMI-MM, authentication and key management services. In support of these, the ANF-ISIMM enables the invocation and operation of these services between the SwMIs over the ISI. Thus, ANF-ISIMM offers the following services:

- Migration and restricted migration.
- Individual subscriber and group profile update.
- Profile update.
- De-registration.
- Group attachment/detachment.
- Individual subscriber and group database fault recovery.
- Authentication, one-directionally or mutually between the individual subscriber and the home SwMI.
- Over-The-Air-Re-keying (OTAR) for Static Cipher Key (SCK) generation and SCK delivery.

For the following service only the stage 1 descriptions are included:

- Linking/unlinking of groups.

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.

Referenced documents which are not found to be publicly available in the expected location might be found at <https://docbox.etsi.org/Reference/>.

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 necessary for the application of the present document.

- [1] ETSI EN 300 392-2: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 2: Air Interface (AI)".
- [2] ETSI EN 300 392-1: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 1: General network design".
- [3] ETSI EN 300 392-3-1: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 3: Interworking at the Inter-System Interface (ISI); Sub-part 1: General design".
- [4] ETSI EN/ETSI ETS 300 392-12 (all parts): "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 12: Supplementary services stage 3".
- [5] ETSI EN 300 392-7: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 7: Security".
- [6] ISO/IEC 11572: "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Circuit mode bearer services - Inter-exchange signalling procedures and protocol".
- [7] ISO/IEC 11582: "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Generic functional protocol for the support of supplementary services - Inter-exchange signalling procedures and protocol".
- [8] Recommendation ITU-T I.130: "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".
- [9] Recommendation ITU-T Z.100: "Specification and Description Language - Overview of SDL-2010".
- [10] ETSI EN/ETSI ETS 300 392-10 (all parts): "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 10: Supplementary services stage 1".
- [11] ETSI EN 300 392-10-6: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 10: Supplementary services stage 1; Sub-part 6: Call Authorized by Dispatcher (CAD)".
- [12] ETSI EN 300 392-10-18: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 10: Supplementary services stage 1; Sub-part 18: Barring of Outgoing Calls (BOC)".
- [13] ETSI EN 300 392-9: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 9: General requirements for supplementary services".
- [14] Recommendation ITU-T X.219: "Remote Operations: Model, notation and service definition".
- [15] ETSI EN 300 392-3-2: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 3: Interworking at the Inter-System Interface (ISI); Sub-part 2: Additional Network Feature Individual Call (ANF-ISIIC)".
- [16] ETSI EN 300 392-3-3: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 3: Interworking at the Inter-System Interface (ISI); Sub-part 3: Additional Network Feature Group Call (ANF-ISIGC)".
- [17] ETSI TS 101 747: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); IP Interworking (IPI)".
- [18] Void.
- [19] ETSI EN 300 392-12-22: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 12: Supplementary services stage 3; Sub-part 22: Dynamic Group Number Assignment (DGNA)".

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 reference 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.

Not applicable.

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