

ETSI EN 300 392-3-1 V1.3.1 (2010-08)

European Standard (Telecommunications series)

Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 3: Interworking at the Inter-System Interface (ISI); Sub-part 1: General design

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Contents

Intellectual Property Rights	5
Foreword.....	5
1 Scope	7
2 References	7
2.1 Normative references	7
2.2 Informative references.....	8
3 Definitions and abbreviations.....	9
3.1 Definitions	9
3.2 Abbreviations	10
4 ISI standardization methodology.....	11
4.1 3 stage methodology.....	11
4.1.1 Stage 1 description.....	11
4.1.2 Stage 2 description.....	12
4.1.3 Stage 3 description.....	12
4.2 Usage of Specification and Description Language (SDL).....	12
5 Usage of Private Signalling System 1 (PSS1) for TETRA	13
5.1 PSS1 functionality.....	13
5.2 Protocol stack for signalling information	13
5.3 Generic Functional Protocol (GFP).....	14
5.4 Protocol stack for user information	15
6 TETRA SwMI roles using ISI.....	15
6.1 Management configurations	15
6.1.1 Migration and group attachment configurations	15
6.1.1.1 SwMI roles for migration and group attachment	15
6.1.1.2 SwMI databases	16
6.1.1.3 Migration scenarios	17
6.1.1.4 Group attachment scenarios	18
6.1.2 Group linking configurations.....	18
6.2 Call configurations	20
6.2.1 Group call configuration.....	20
6.2.2 Individual call configuration.....	22
6.2.3 Transit	23
6.3 User information encoding at the ISI	23
7 Introduction to ISI ANFs.....	23
7.1 ANF-ISIMM.....	24
7.2 ANF-ISIIC.....	24
7.3 ANF-ISIGC	24
7.4 ANF-ISISDS	24
7.5 ANF-ISISS	24
8 ISI Generic Functional Protocol (ISI GFP)	24
8.1 Protocol model	24
8.2 Services provided by the protocol model entities.....	25
8.3 Addressing and transport.....	26
8.3.1 Addressing	26
8.3.2 Transport of ROSE APDUs.....	27
8.3.2.1 Call related ROSE APDUs.....	27
8.3.2.2 Call unrelated ROSE APDUs.....	27
8.3.2.2.1 Protocol for the establishment of a call independent signalling connection.....	27
8.3.2.2.2 Use of a call independent signalling connection already established	36
8.3.2.2.3 Clearing of a call independent signalling connection already established.....	36
8.4 Remote Operations Service Entity (ROSE) requirements and operation definition.....	36

8.4.1	General.....	36
8.4.2	Return-result	40
8.4.3	Return-error	40
8.4.4	Reject.....	41
8.5	Segmentation Service Element (SSE)	41
8.5.1	Procedures.....	41
8.5.1.1	Requirements for the segmentation procedure	42
8.5.1.2	Requirements for the re-assembly procedure	42
8.5.2	Segment encoding.....	43
8.6	Co-ordination Function	44
9	Security over the ISI.....	44
9.1	ITSI authentication	45
9.2	End-to-end encryption	45
9.3	End-to-end key management via ISI	45
Annex A (normative):	Security - supporting encryption over ISI.....	46
A.1	Overview	46
A.2	Encryption	47
A.2.1	ISI relation to air interface and end-to-end encryption.....	47
A.2.2	Air interface encryption key management via ISI.....	47
A.2.2.1	Secret Key of individual subscriber (K)	47
A.2.2.2	Derived Cipher Key (DCK)	48
A.2.2.3	Common Cipher Key (CCK)	48
A.2.2.4	Static Cipher Key (SCK)	48
A.2.2.5	Group Cipher Key (GCK).....	48
Annex B (informative):	Maximum length of a ROSE APDU or a SSE segment encoded in a facility information element.....	49
B.1	PSS1 FACILITY message.....	49
B.2	PSS1 basic call message.....	50
B.3	Example of the encoding of an ANF-ISIMM MIGRATION PDU in a ROSE Invoke ROSE APDU in a call PISN FACILITY PDU.....	51
Annex C (informative):	Change requests	53
History		54

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Foreword

This European Standard (Telecommunications series) has been produced by ETSI Technical Committee Terrestrial Trunked Radio (TETRA).

The present document is part 3, sub-part 1 of a multi-part deliverable covering the Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D), Release 2 as identified below:

EN 300 392-1: "General network design";

EN 300 392-2: "Air Interface (AI)";

EN 300 392-3: "Interworking at the Inter-System Interface (ISI)";

EN 300 392-3-1: "General design";

EN 300 392-3-2: "Additional Network Feature Individual Call (ANF-ISIIC)";

EN 300 392-3-3: "Additional Network Feature Group Call (ANF-ISIGC)";

EN 300 392-3-4: "Additional Network Feature Short Data Service (ANF-ISISDS)";

EN 300 392-3-5: "Additional Network Feature for Mobility Management (ANF-ISIMM)";

TS 100 392-3-6: "Speech format implementation for circuit mode transmission";

TS 100 392-3-7: "Speech Format Implementation for Packet Mode Transmission";

TS 100 392-3-8: "Generic Speech Format Implementation";

ETS 300 392-4: "Gateways basic operation";

EN 300 392-5: "Peripheral Equipment Interface (PEI)";

EN 300 392-7: "Security";

EN 300 392-9: "General requirements for supplementary services";

EN 300 392-10: "Supplementary services stage 1";

EN 300 392-11: "Supplementary services stage 2";

EN 300 392-12: "Supplementary services stage 3";

ETS 300 392-13: "SDL model of the Air Interface (AI)";

ETS 300 392-14: "Protocol Implementation Conformance Statement (PICS) proforma specification";

TS 100 392-15: "TETRA frequency bands, duplex spacings and channel numbering";

TS 100 392-16: "Network Performance Metrics";

TR 100 392-17: "TETRA V+D and DMO specifications";

TS 100 392-18: "Air interface optimized applications".

NOTE: 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.

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1 Scope

The present document defines the general aspects of interworking at the Inter-System Interface (ISI) for Terrestrial Trunked Radio (TETRA) system supporting Voice plus Data (V+D). Those specify the general concepts which are the basis of the ISI operation between TETRA systems. It introduces the Additional Network Features (ANFs) used at the ISI, and specifies:

- the general protocol mechanism, called ISI Generic Functional Protocol (ISI GFP), upon which the definition of each ANF is based; and
- the security requirements for the ISI.

The ISI GFP specification applies to any TETRA Switching and Management Infrastructure (SwMI) which supports the ISI. The security requirements for the ISI only apply to SwMIs which support authentication or encryption over the ISI.

Besides the ISI general design, the present sub-part, interworking at the Inter-System Interface comprises the following other sub-parts:

- Additional Network Feature - ISI Individual Call (ANF-ISIIC);
- Additional Network Feature - ISI Group Call (ANF-ISIGC);
- Additional Network Feature - ISI Short Data service (ANF-ISISDS); and
- Additional Network Feature - ISI Mobility Management (ANF-ISIMM).

2 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 <http://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.

2.1 Normative references

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

- [1] ETSI EN 300 392-1: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 1: General network design".
- [2] ETSI EN 300 392-2: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 2: Air Interface (AI)".
- [3] 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)".
- [4] 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)".
- [5] ETSI EN 300 392-3-4: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 3: Interworking at the Inter-System Interface (ISI); Sub-part 4: Additional Network Feature Short Data Service (ANF-ISISDS)".