SLOVENSKI STANDARD
SIST EN 300 392-5 V2.5.1:2016

01-december-2016

Prizemni snopovni radio (TETRA) - Govor in podatki (V+D) in neposredni način zveze (DMO) - 5. del: Vmesnik periferne opreme (PEI)

Terrestrial Trunked Radio (TETRA) - Voice plus Data (V+D) and Direct Mode Operation (DMO) - Part 5: Peripheral Equipment Interface (PEI)

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Ta slovenski standard je istoveten z: **ETSI EN 300 392-5 V2.5.1 (2016-10)**

SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

ICS:

33.070.10	Prizemni snopovni radio (TETRA)	Terrestrial Trunked Radio (TETRA)

SIST EN 300 392-5 V2.5.1:2016 **en**

2003-01.Slovenski inštitut za standardizacijo. Razmnoževanje celote ali delov tega standarda ni dovoljeno.

SIST EN 300 392-5 V2.5.1:2016

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

ETSI EN 300 392-5 V2.5.1 (2016-10)

Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D) and Direct Mode Operation (DMO); Part 5: Peripheral Equipment Interface (PEI)

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

Reference
REN/TCCE-03246

Keywords
data, interface, TETRA, V+D, voice

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4da0e/sist-en-300-392-5-v2-5-1-2016

Important notice

The present document can be downloaded from:
http://www.etsi.org/standards-search

The present document may be made available in electronic versions and/or in print. The content of any electronic and/or print versions of the present document shall not be modified without the prior written authorization of ETSI. In case of any existing or perceived difference in contents between such versions and/or in print, the only prevailing document is the print of the Portable Document Format (PDF) version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status.
Information on the current status of this and other ETSI documents is available at
https://portal.etsi.org/TB/ETSIDeliverableStatus.aspx

If you find errors in the present document, please send your comment to one of the following services:
https://portal.etsi.org/People/CommiteeSupportStaff.aspx

Copyright Notification

No part may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm except as authorized by written permission of ETSI.
The content of the PDF version shall not be modified without the written authorization of ETSI.
The copyright and the foregoing restriction extend to reproduction in all media.

© European Telecommunications Standards Institute 2016.
All rights reserved.

DECT™, **PLUGTESTS**™, **UMTS**™ and the ETSI logo are Trade Marks of ETSI registered for the benefit of its Members.
3GPP™ and **LTE**™ are Trade Marks of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners.
GSM® and the GSM logo are Trade Marks registered and owned by the GSM Association.

SIST EN 300 392-5 V2.5.1:2016

Contents

Intellectual Property Rights 22
Foreword 22
Modal verbs terminology 23
1 Scope 24
2 References 24
2.1 Normative references 24
2.2 Informative references 26
3 Symbols and abbreviations 26
3.1 Symbols 26
3.2 Abbreviations 27
4 Overview of TETRA PEI 30
4.1 Introduction 30
4.2 Protocol architecture 31
4.3 Context model 32
4.4 Void 35
4.5 SDS Message stacks 35
4.5.0 General on SDS Message stacks 35
4.5.1 Status message texts 35
4.5.2 SDS 1 message texts 35
4.5.3 Status and SDS types 1, 2 and 3 35
4.5.4 SDS type 4 36
4.6 Phone books 36
4.7 Reserved status values considerations 36
4.8 SDS-TL considerations 36
4.9 AT commands 37
4.9.1 General on AT commands 37
4.9.2 AT command state 39
4.9.3 AT circuit mode data state 39
4.9.4 TNP1 and packet data state 40
4.9.5 Transitions between states 40
4.9.5.1 Transition from AT command state to AT circuit mode data state 40
4.9.5.2 Transition from AT circuit mode data state to AT command state 40
4.9.5.3 Transition from AT command state to TNP1 or packet data state 41
4.9.5.4 Transition from TNP1 and packet data state to AT command state 41
4.10 TNP1 and IP network layer 41
4.10.1 General operation 41
4.10.2 IP addressing 41
4.10.3 Local mode 42
4.10.4 Wide mode 42
4.11 TNP1 operation 42
4.12 Link start up at the MT 43
5 Physical layer 43
5.1 General on physical layer 43
5.2 Physical layer for V.24/V.28 44
5.2.1 Electrical characteristics for V.24/V.28 44
5.2.2 Physical connection 44
5.2.3 Character format 45
5.2.4 Data transmission rate for V.24/V.28 45
5.3 Wire-line high rate connectivity technologies 45
5.3.1 General 45
5.3.2 Universal Serial Bus 46
5.3.3 USB On-The-Go 47
5.4 Wireless high rate connectivity 47
5.4.1 General 47

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

5.4.2 Wireless Security 47
5.4.3 Certified Wireless USB 48
5.4.4 Bluetooth 48

6 AT command set 48
6.1 General on AT command set 48
6.2 Limitations 49
6.3 SDS user data 49
6.4 AT command syntax 50
6.4.1 General on AT command syntax 50
6.4.2 Command line 50
6.4.2.0 Command line structure 50
6.4.2.1 Prefix 50
6.4.2.2 Body 50
6.4.2.3 Termination Character 50
6.4.2.4 Concatenating extended commands 50
6.4.2.5 Multiline extended commands 50
6.4.3 Command types 51
6.4.4 Parameters 52
6.4.5 AT command examples 52
6.4.6 Information responses and result codes 53
6.4.6.1 General on information responses and result codes 53
6.4.6.2 Information Responses 53
6.4.6.3 Result Code 53
6.4.6.4 AT result examples in verbose mode 54
6.4.6.5 AT result examples in numeric mode 56
6.4.6.6 Aborting information results and result codes 57
6.4.6.7 Unsolicited nested responses 57
6.4.7 Handling of unknown parameters 59
6.5 Existing V.250 commands for call control 60
6.5.1 Commands 60
6.5.2 Result Codes 60
6.5.3 Dialled string and user identity 60
6.6 Existing V.250 commands for PEI control 61
6.6a Modified V.250 commands for PEI control 61
6.6a.1 General on modified V.250 commands for PEI control 61
6.6a.2 Line termination character: S3 62
6.6a.2.1 General on S3 62
6.6a.2.2 Description 62
6.6a.2.3 S3 set syntax 62
6.6a.2.4 S3 read syntax 62
6.6a.2.5 S3 read result code text 62
6.6a.2.6 S3 test syntax 62
6.6a.2.7 S3 test result syntax 62
6.6a.3 Response formatting character: S4 63
6.6a.3.1 General on S4 63
6.6a.3.2 Description 63
6.6a.3.3 S4 set syntax 63
6.6a.3.4 S4 read syntax 63
6.6a.3.5 S4 read result code text 63
6.6a.3.6 S4 test syntax 63
6.6a.3.7 S4 test result syntax 63
6.6a.4 Line editing character: S5 63
6.6a.4.1 General on S5 63
6.6a.4.2 Description 64
6.6a.4.3 S5 set syntax 64
6.6a.4.4 S5 read syntax 64
6.6a.4.5 S5 read result code text 64
6.6a.4.6 S5 test syntax 64
6.6a.4.7 S5 test result syntax 64
6.6a.5 Echo: E 64
6.6a.5.1 General on E 64

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-b0bcb3b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

6.6a.5.2 Description 64
6.6a.5.3 E set syntax 64
6.6a.5.4 E read syntax 65
6.6a.5.5 E read result code text 65
6.6a.5.6 E test syntax 65
6.6a.5.7 E test result syntax 65
6.6a.6 Result code suppression: Q 65
6.6a.6.1 General on Q 65
6.6a.6.2 Description 65
6.6a.6.3 Q set syntax 65
6.6a.6.4 Q read syntax 65
6.6a.6.5 Q read result code text 65
6.6a.6.6 Q test syntax 66
6.6a.6.7 Q test result syntax 66
6.6a.7 MT response format: V 66
6.6a.7.1 General on V 66
6.6a.7.2 Description 66
6.6a.7.3 V set syntax 66
6.6a.7.4 V read syntax 66
6.6a.7.5 V read result code text 66
6.6a.7.6 V test syntax 66
6.6a.7.7 V test result syntax 66
6.6a.8 Circuit 109 (DCD) behavior: &C 67
6.6a.8.1 General on &C 67
6.6a.8.2 Description 67
6.6a.8.3 &C set syntax 67
6.6a.8.4 &C read syntax 67
6.6a.8.5 &C read result code text 67
6.6a.8.6 &C test syntax 67
6.6a.8.7 &C test result syntax 67
6.6a.9 Circuit 108/2 (DTR) behavior: &D 67
6.6a.9.1 General on &D 67
6.6a.9.2 Description 68
6.6a.9.3 &D set syntax 68
6.6a.9.4 &D read syntax 68
6.6a.9.5 &D read result code text 68
6.6a.9.6 &D test syntax 68
6.6a.9.7 &D test result syntax 68
6.6a.10 PEI data rate: +IPR 68
6.6a.10.1 General on +IPR 68
6.6a.10.2 Description 68
6.6a.10.3 +IPR set syntax 68
6.6a.10.4 +IPR read syntax 69
6.6a.10.5 +IPR read result code text 69
6.6a.10.6 +IPR test syntax 69
6.6a.10.7 +IPR test result syntax 69
6.7 Existing V.250 commands for generic MT control 69
6.7a Modified V.250 commands for generic MT control 69
6.7a.1 General on modified V.250 commands for generic MT control 69
6.7a.2 Full factory defaults Z 70
6.7a.2.1 General on full factory defaults Z 70
6.7a.2.2 Description 70
6.7a.2.3 Z execution syntax 70
6.7a.2.4 Z test syntax 70
6.7a.3 Factory defaults &F 70
6.7a.3.1 General on factory defaults &F 70
6.7a.3.2 Description 70
6.7a.3.3 &F execution syntax 71
6.7a.3.4 &F test syntax 71
6.8 Existing Hayes AT commands for PEI control 71
6.9 Existing 3GPP commands for MT and call control 71
6.10 Modified PCCA wireless extended commands 72

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

6.11 Modified Cellular commands for MT control 73
6.11.1 General on cellular commands for MT control 73
6.11.2 MT Capabilities +GCAP 73
6.11.2.1 General on +GCAP 73
6.11.2.2 Description 73
6.11.2.3 GCAP execution syntax 73
6.11.2.4 GCAP execution read syntax 73
6.11.2.5 GCAP execution read and unsolicited result code text 73
6.11.2.6 GCAP test syntax 74
6.11.3 Network registration +CREG 74
6.11.3.1 General on +CREG 74
6.11.3.2 CREG set syntax 74
6.11.3.3 Description of set command 74
6.11.3.4 CREG execution read syntax 74
6.11.3.5 CREG execution read and unsolicited result code text 74
6.11.3.6 CREG test syntax 74
6.11.3.7 CREG test result syntax 75
6.11.4 Get MT TETRA identities +CNUM 75
6.11.4.1 General on +CNUM 75
6.11.4.2 Description 75
6.11.4.3 CNUM execution mode syntax 75
6.11.4.4 CNUM execution read mode syntax 75
6.11.4.5 CNUM execution read result code text 75
6.11.4.6 CNUM test syntax 76
6.11.5 Get MT TETRA Identities (alternative commands) 76
6.11.5.1 Get MT TETRA Fixed identity number(s): ITSI, and Gateway address(es) +CNUMF 76
6.11.5.1.1 General on +CNUMF 76
6.11.5.1.2 Description 76
6.11.5.1.3 CNUMF execution mode syntax 76
6.11.5.1.4 CNUMF execution read mode syntax 76
6.11.5.1.5 CNUMF execution read result code text 76
6.11.5.1.6 CNUMF test syntax 76
6.11.5.2 Get MT static group identities +CNUMS 76
6.11.5.2.1 General on +CNUMS 76
6.11.5.2.2 Description 77
6.11.5.2.3 CNUMS set or execution/set syntax 78
6.11.5.2.4 CNUMS execution read or read syntax 78
6.11.5.2.5 CNUMS execution read or execution/set and unsolicited result code text 78
6.11.5.2.6 CNUMS test syntax 79
6.11.5.2.7 CNUMS test result syntax 79
6.11.5.3 Get MT dynamic group identities +CNUMD 80
6.11.5.3.1 General on +CNUMD 80
6.11.5.3.2 Description 80
6.11.5.3.3 CNUMD set or execution/set syntax 81
6.11.5.3.4 CNUMD execution read or read syntax 81
6.11.5.3.5 CNUMD execution read or execution/set and unsolicited result code text 81
6.11.5.3.6 CNUMD test syntax 82
6.11.5.3.7 CNUMD test result syntax 82
6.12 SDS message stack commands 82
6.12.1 General on SDS message stack commands 82
6.12.2 Delete message +CMGD 83
6.12.2.1 General on +CMGD 83
6.12.2.2 CMGD execution syntax 83
6.12.2.3 Description 83
6.12.2.4 CMGD test syntax 83
6.12.2.5 CMGD test result syntax 83
6.12.3 List messages +CMGL 83
6.12.3.1 General on +CMGL 83
6.12.3.2 CMGL execution syntax 84
6.12.3.3 Description 84
6.12.3.4 CMGL execution result code text 84
6.12.3.5 CMGL test syntax 84

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

6.12.4 Read message +CMGR 84
6.12.4.1 General on +CMGR 84
6.12.4.2 CMGR execution syntax 84
6.12.4.3 Description 85
6.12.4.4 CMGR execution result code text 85
6.12.4.5 CMGR test syntax 85
6.12.5 Write message +CMGW 85
6.12.5.1 General on +CMGW 85
6.12.5.2 CMGW execution syntax 86
6.12.5.3 Description 86
6.12.5.4 CMGW execution result code text 86
6.12.5.5 CMGW test syntax 87
6.12.6 Message send from store +CMSS 87
6.12.6.1 General on +CMSS 87
6.12.6.2 CMSS execution syntax 87
6.12.6.3 Description 87
6.12.6.4 CMSS execution result code text 88
6.12.6.5 CMSS test syntax 88
6.12.7 New message indication +CMTI 88
6.12.7.1 General on +CMTI 88
6.12.7.2 Description 88
6.12.7.3 CMTI unsolicited result code text 88
6.13 SDS direct commands 89
6.13.1 General on SDS direct commands 89
6.13.2 Send message +CMGS 89
6.13.2.1 General on +CMGS 89
6.13.2.2 CMGS execution syntax 89
6.13.2.3 Description 89
6.13.2.4 CMGS execution and unsolicited result code text 90
6.13.2.5 CMGS test syntax 90
6.13.3 TETRA SDS Receive +CTSDSR 90
6.13.3.1 General on +CTSDSR 90
6.13.3.2 Description 90
6.13.3.3 CTSDSR unsolicited result code text 90
6.14 TETRA MT control commands 91
6.14.1 General on TETRA MT control commands 91
6.14.2 TETRA Broadcast +CTBCT 91
6.14.2.1 General on +CTBCT 91
6.14.2.2 Description 91
6.14.2.3 CTBCT execution read and unsolicited result code text 91
6.14.2.4 CTBCT execution read syntax 91
6.14.2.5 CTBCT test syntax 91
6.14.3 TETRA Status Text Read +CTSTR 92
6.14.3.1 General on +CTSTR 92
6.14.3.2 CTSTR execution syntax 92
6.14.3.3 Description 92
6.14.3.4 CTSTR execution result code text 92
6.14.3.5 CTSTR test syntax 92
6.14.4 TETRA Service Profile +CTSP 92
6.14.4.1 General on +CTSP 92
6.14.4.2 CTSP set syntax 92
6.14.4.3 Description 93
6.14.4.4 CTSP read syntax 94
6.14.4.5 CTSP read result code text 95
6.14.4.6 CTSP test syntax 95
6.14.4.7 CTSP test result syntax 95
6.14.5 TETRA service definition for Circuit Mode services +CTSDC 96
6.14.5.1 General on +CTSDC 96
6.14.5.2 CTSDC set syntax 96
6.14.5.3 Description 96
6.14.5.4 CTSDC read syntax 96
6.14.5.5 CTSDC read result code text 96

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbbbbbbbbbb/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

6.14.5.6 CTSDC test syntax 96
6.14.5.7 CTSDC test result syntax 97
6.14.6 TETRA service definition for SDS Service +CTSDS 97
6.14.6.1 General on +CTSDS 97
6.14.6.2 CTSDS set syntax 97
6.14.6.3 Description 97
6.14.6.4 CTSDS read syntax 97
6.14.6.5 CTSDS read result code text 97
6.14.6.6 CTSDS test syntax 98
6.14.6.7 CTSDS test result syntax 98
6.14.7 TETRA operating mode +CTOM 98
6.14.7.1 General on +CTOM 98
6.14.7.2 CTOM set syntax 98
6.14.7.3 Description 98
6.14.7.4 CTOM read syntax 99
6.14.7.5 CTOM read and unsolicited result code text 99
6.14.7.6 CTOM test syntax 99
6.14.7.7 CTOM test result 99
6.14.8 TETRA DM communication type +CTDCT 99
6.14.8.1 General on +CTDCT 99
6.14.8.2 CTDCT set syntax 99
6.14.8.3 Description 99
6.14.8.4 CTDCT read syntax 99
6.14.8.5 CTDCT read and unsolicited result code text 99
6.14.8.6 CTDCT test syntax 100
6.14.8.7 CTDCT test result text 100
6.14.9 TETRA Transient communication type +CTTCT 100
6.14.9.1 General on +CTTCT 100
6.14.9.2 CTTCT set syntax 100
6.14.9.3 Description 100
6.14.9.4 CTTCT unsolicited result code text 100
6.14.9.5 CTTCT read syntax 100
6.14.9.6 CTTCT read result syntax 100
6.14.9.7 CTTCT test syntax 100
6.14.9.8 CTTCT test result syntax 100
6.14.10 TETRA DMO visible gateways/repeaters +CTDGR 101
6.14.10.1 General on +CTDGR 101
6.14.10.2 CTDGR set syntax 101
6.14.10.3 Description 101
6.14.10.4 CTDGR execution read and unsolicited result code text 101
6.14.10.5 CTDGR execution read syntax 101
6.14.10.6 CTDGR test syntax 101
6.14.11 TETRA DM Carrier Selection +CTDCS 102
6.14.11.1 General on +CTDCS 102
6.14.11.2 CTDCS set syntax 102
6.14.11.3 Description 102
6.14.11.4 CTDCS read and unsolicited result code text 102
6.14.11.5 CTDCS read syntax 102
6.14.11.6 CTDCS test syntax 102
6.14.12 MT Reboot R 102
6.14.12.1 General on MT Reboot R 102
6.14.12.2 Description 103
6.14.12.3 R execution syntax 103
6.14.12.4 R test syntax 103
6.14.13 TETRA Broadcast +CTBCF 103
6.14.13.1 General on +CTBCF 103
6.14.13.2 Description 103
6.14.13.3 CTBCF set syntax 103
6.14.13.4 CTBCF execute syntax 103
6.14.13.5 CTBCF execute and unsolicited result code text 103
6.14.13.6 CTBCF read syntax 104
6.14.13.7 CTBCF test syntax 104

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

6.14.13.8 CTBCF test result text 104
6.14.14 TETRA radio frequency sensitive area mode +CTRFSA 104
6.14.14.1 General on +CTRFSA 104
6.14.14.2 Description 104
6.14.14.3 CTRFSA set syntax 104
6.14.14.4 CTRFSA read syntax 105
6.14.14.5 CTRFSA read and unsolicited result code text 105
6.14.14.6 CTRFSA test syntax 105
6.14.14.7 CTRFSA test result text 105
6.15 New TETRA call handling commands 105
6.15.1 General on new TETRA call handling commands 105
6.15.2 TETRA Call Connect +CTCC 105
6.15.2.1 General on +CTCC 105
6.15.2.2 Description 105
6.15.2.3 CTCC unsolicited result code text 105
6.15.3 TETRA Call Release +CTCR 106
6.15.3.1 General on +CTCR 106
6.15.3.2 Description 106
6.15.3.3 CTCR unsolicited result code text 106
6.15.4 TETRA Incoming Call Notification +CTICN 106
6.15.4.1 General on +CTICN 106
6.15.4.2 Description 106
6.15.4.3 CTICN unsolicited result code text 106
6.15.5 TETRA outgoing Call progress notification +CTOCP 107
6.15.5.1 General on +CTOCP 107
6.15.5.2 Description 107
6.15.5.3 CTOCP unsolicited result code text 107
6.15.6 TETRA Group Set up +CTGS 107
6.15.6.1 General on +CTGS 107
6.15.6.2 CTGS set syntax 107
6.15.6.3 Description 108
6.15.6.4 CTGS read syntax 108
6.15.6.5 CTGS read and unsolicited result code text 108
6.15.6.6 CTGS test syntax 108
6.15.6.7 CTGS test result syntax 108
6.15.7 Void 108
6.15.8 Transmit Demand +CTXD 108
6.15.8.1 General on +CTXD 108
6.15.8.2 CTXD execution syntax 108
6.15.8.3 Description 109
6.15.8.4 CTXD test syntax 109
6.15.8.5 CTXD test result syntax 109
6.15.9 Up Transmit Ceased +CUTXC 109
6.15.9.1 General +CUTXC 109
6.15.9.2 CUTXC execution syntax 109
6.15.9.3 Description 109
6.15.9.4 CUTXC test syntax 109
6.15.10 Transmission Grant +CTXG 109
6.15.10.1 General on +CTXG 109
6.15.10.2 Description 110
6.15.10.3 CTXG unsolicited result code text 110
6.15.11 Down Transmission Ceased +CDTXC 110
6.15.11.1 General on +CDTXC 110
6.15.11.2 Description 110
6.15.11.3 CDTXC unsolicited result code text 110
6.15.12 Transmission Continue +CTXN 110
6.15.12.1 General on +CTXN 110
6.15.12.2 Description 110
6.15.12.3 CTXN unsolicited result code text 110
6.15.13 Transmission Interrupt +CTXI 110
6.15.13.1 General on +CTXI 110
6.15.13.2 Description 111

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

6.15.13.3 CTXI unsolicited result code text 111
6.15.14 Transmission Wait +CTXW 111
6.15.14.1 General on +CTXW 111
6.15.14.2 Description 111
6.15.14.3 CTXW unsolicited result code text 111
6.15.15 Key Status +CTKST 111
6.15.15.1 General on +CTKST 111
6.15.15.2 CTKST set syntax 111
6.15.15.3 Description 111
6.16 MT errors 112
6.16.1 General on MT errors 112
6.16.2 Report MT error +CMEE 112
6.16.2.1 General on +CMEE 112
6.16.2.2 CMEE set syntax 112
6.16.2.3 Description 112
6.16.2.4 CMEE set result code text 112
6.16.2.5 CMEE read syntax 112
6.16.2.6 CMEE read result code text 112
6.16.2.7 CMEE test syntax 112
6.16.3 MT error result code +CME ERROR 113
6.16.3.1 General on +CME ERROR 113
6.16.3.2 Description 113
6.16.3.3 CME ERROR unsolicited result code text 113
6.16.4 MT result code +CME PARAMETER 113
6.16.4.1 General on +CME PARAMETER 113
6.16.4.2 Description 113
6.16.4.3 CME PARAMETER unsolicited result code text 113
6.17 Parameter description and values 113
6.17.1 General on parameters 113
6.17.2 Access Priority 114
6.17.3 AI service 114
6.17.4 AI mode 114
6.17.5 Alpha 115
6.17.5a Ancillary ID 115
6.17.6 Area 115
6.17.6a Baud rate 116
6.17.7 BS service 116
6.17.8 Call status 117
6.17.9 Called party identity 117
6.17.10 Calling party identity 117
6.17.11 Called party identity type 117
6.17.12 Calling party identity type 117
6.17.13 CC instance 118
6.17.13a Cell load CA 118
6.17.13b Cell load CA control 118
6.17.13c Cell load DA TCH 118
6.17.13d Cell load DA TCH control 118
6.17.13e Cell load DA PDCH 119
6.17.13f Cell load DA PDCH control 119
6.17.13g Cell load DA CCH/SDS 119
6.17.13h Cell load DA CCH/SDS control 119
6.17.14 Class of MS 119
6.17.14a Circuit 108/2 behaviour 121
6.17.14b Circuit 109 behaviour 122
6.17.15 CLIR control 122
6.17.15a Command line echo 122
6.17.16 Comms type 122
6.17.17 CT unsolic 123
6.17.18 Disconnect cause 123
6.17.19 DM carrier 124
6.17.20 DM communication type 124
6.17.21 End to end encryption 124

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

6.17.22 Extended error report 124
6.17.23 Extended error report codes 125
6.17.24 Gateway/repeater address 126
6.17.24a Gateway/repeater type 126
6.17.25 Group type 126
6.17.26 GR unsolic 127
6.17.27 Hook 127
6.17.28 Ident unsolic 127
6.17.29 Importance factor 127
6.17.29a Key name 127
6.17.29b Key status 128
6.17.30 LA 128
6.17.31 Length 128
6.17.31a Line editing character 128
6.17.31b Line termination character 128
6.17.32 Link identifier 129
6.17.33 Lower range Limit 129
6.17.34 Message index 129
6.17.35 Message reference 129
6.17.36 MNI 129
6.17.37 Number of groups 129
6.17.38 Num type 129
6.17.39 Parameter number 130
6.17.40 Void 130
6.17.41 Presence information 130
6.17.42 Priority 130
6.17.43 Priority level 131
6.17.44 Proprietary 131
6.17.45 Proprietary element owner 131
6.17.46 Reg stat 131
6.17.47 Reg unsolic 131
6.17.47a RF SA mode 132
6.17.47b RF SA unsolic 132
6.17.47c Response format mode 132
6.17.47d Response formatting character 132
6.17.47e Result code suppression 132
6.17.48 RqTx 133
6.17.49 SDS instance 133
6.17.50 SDS-TL addressing 133
6.17.51 SDS Status 133
6.17.52 Security information 133
6.17.53 Service profile 134
6.17.54 Service layer1 134
6.17.55 Service layer2 134
6.17.56 Serviced GSSI 135
6.17.57 Simplex 135
6.17.58 Slots/Codec 135
6.17.59 Stack full 136
6.17.60 Stack present 136
6.17.61 TPI (Transmitting Party Identity) 136
6.17.62 TPI (Transmitting Party Identity) type 136
6.17.63 Transient communication type 136
6.17.64 TxCont 137
6.17.65 TxDemandPriority 137
6.17.66 TxGrant 137
6.17.67 TxRqPrmsn 137
6.17.68 Upper range limit 137
6.17.69 User data 137
6.17.70 Version number 137
6.18 Outgoing call set up methodology 138
6.18.1 General on outgoing call set up methodology 138
6.18.2 Voice calls 138

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

6.18.3 Circuit mode data calls 139
6.18.4 Sending of SDS messages 140
6.18.4.1 General on sending of SDS messages 140
6.18.4.2 Send via Stack 140
6.18.4.3 Direct Send 140
6.19 Incoming call set up methodology 140
6.19.1 General on incoming call set up methodology 140
6.19.2 Voice calls 140
6.19.3 Circuit mode data calls 141
6.19.4 Reception of SDS messages 141
6.19.4.1 Received via Stack 141
6.19.4.2 Direct Received 141
6.20 Voice and circuit mode data call maintenance commands 141
6.21 Call clear down commands 142
6.21.1 General on call clear down commands 142
6.21.2 TE Initiated clear 142
6.21.3 Network and MT Initiated clear 142
6.22 MEX layer support 142
6.22.0 General on support of MEX layer commands 142
6.22.1 MEX Capability +CTMCAP 142
6.22.1.1 General on +CTMCAP 142
6.22.1.2 CTMCAP execution syntax 142
6.22.1.3 CTMCAP execution result code text 143
6.22.1.4 CTMCAP test syntax 143
6.22.2 MEX Connect +CTMCON 143
6.22.2.1 General on +CTMCON 143
6.22.2.2 CTMCON execution syntax 143
6.22.2.3 CTMCON execution result code text 143
6.22.2.4 CTMCON test syntax 143
6.22.3 MEX End +CTMEND 143
6.22.3.1 General on +CTMEND 143
6.22.3.2 CTMEND execution syntax 143
6.22.3.3 CTMEND execution and unsolicited result code text 143
6.22.3.4 CTMEND test syntax 144
6.22.4 MEX Handle +CTMHDL 144
6.22.4.1 General on +CTMHDL 144
6.22.4.2 CTMHDL execution syntax 144
6.22.4.3 CTMHDL execution result code text 144
6.22.4.4 CTMHDL test syntax 144
6.22.5 MEX Modify +CTMMOD 144
6.22.5.1 General on +CTMMOD 144
6.22.5.2 CTMMOD execution syntax 144
6.22.5.3 CTMMOD result code text 144
6.22.5.4 CTMMOD unsolicited result code syntax 144
6.22.5.5 CTMMOD test syntax 145
6.22.6 MEX QOS Class +CTMQC 145
6.22.6.1 General on +CTMQC 145
6.22.6.2 CTMQC execution syntax 145
6.22.6.3 CTMQC execution result code text 145
6.22.6.4 CTMQC test syntax 145
6.22.7 Request new logical PEI Connection +CTPCON 145
6.22.7.1 General on +CTPCON 145
6.22.7.2 CTPCON execution syntax 145
6.22.7.3 CTPCON execution result code text 145
6.22.7.4 CTPCON test syntax 146
6.22.8 MEX related parameters 146
6.22.8.1 CONTEXT_READY timer 146
6.22.8.2 Data class 146
6.22.8.3 Data importance 146
6.22.8.4 Data priority 147
6.22.8.5 DCOMP 147
6.22.8.6 Delay class 147

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/73f56c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016

SIST EN 300 392-5 V2.5.1:2016

6.22.8.7 Device address 147
6.22.8.8 Endpoint address 147
6.22.8.9 Maximum transmission unit 147
6.22.8.10 Mean active throughput 148
6.22.8.11 Mean throughput 148
6.22.8.12 MEX capability 148
6.22.8.13 MEX connect reject cause 149
6.22.8.14 MEX connect report 150
6.22.8.15 MEX data importance 150
6.22.8.16 MEX data priority 150
6.22.8.17 MEX deactivation type 150
6.22.8.18 MEX escalate DSCP5 Flag Enable 151
6.22.8.19 MEX escalate DSCP5 Flag Reset 151
6.22.8.20 MEX filter 151
6.22.8.21 MEX filter operation 151
6.22.8.22 MEX filter type 151
6.22.8.23 MEX handle 151
6.22.8.24 MEX mode 152
6.22.8.25 MEX modify reject cause 152
6.22.8.26 MEX modify report 152
6.22.8.27 MEX NSAPI usage 153
6.22.8.28 MEX PDP address 153
6.22.8.29 MEX PDP type 153
6.22.8.30 MEX PDU priority max 153
6.22.8.31 MEX precedence 153
6.22.8.32 MEX precedence rank 154
6.22.8.33 MEX precedence supported 154
6.22.8.34 MEX peer IP filter 154
6.22.8.35 MEX QoS 154
6.22.8.36 MEX QoS class 154
6.22.8.37 MEX QoS class access 154
6.22.8.38 MEX QoS class upper/lower (Downlink) 154
6.22.8.39 MEX QoS class upper/lower (Uplink) 155
6.22.8.40 MEX QoS filter 155
6.22.8.41 MEX transaction type 155
6.22.8.42 Minimum peak throughput 155
6.22.8.43 Mobile IPv4 information 156
6.22.8.44 NSAPI 156
6.22.8.45 NSAPI data priority 156
6.22.8.46 NSAPI QoS negotiation 156
6.22.8.47 PCOMP 156
6.22.8.48 PCON result 157
6.22.8.49 PDU priority 157
6.22.8.50 PDU priority max 157
6.22.8.51 Reliability class 157
6.22.8.52 Schedule availability 157
6.22.8.53 Scheduled access 157
6.22.8.54 Scheduled number of N-PDUs per grant 158
6.22.8.55 Scheduled N-PDU size 158
6.22.8.56 Schedule repetition period 158
6.22.8.57 Schedule timing error 158
6.22.8.58 Share response flag 159

7 TNP1 service description 159
7.1 Service primitives at the TNP1A-SAP 159
7.2 Service primitives at the TNP1B-SAP 159
7.3 Service primitives at TNP1A-SAP and TNP1B-SAP 159
7.4 Primitive descriptions 160
7.4.1 TNP1-Services CAPABILITY 160
7.4.2 TNP1-SDS-TL CAPABILITY 160
7.4.3 TNP1-IDENTIFICATION 160
7.4.4 TNP1-IDENTITIES 161

iTeh STANDARD PREVIEW
(standards.iteh.ai)
SIST EN 300 392-5 V2.5.1:2016
https://standards.iteh.ai/catalog/standards/sist/7356c3cb-7745-4bd8-a3ea-bbbeb5b4dade/sist-en-300-392-5-v2-5-1-2016