



TETRA Interoperability Certificate

Hytera Mobilfunk GmbH, ACCESSNET-T IP, SwMI — Cassidian, TH1n, Terminal

Bad Münder, January 2013

Latest Certified SwMI	PV 08.04.00	Latest Certified Terminal	6.70-a
SW Release:		SW Release:	
Latest Certified SwMI	PV 08.04.00	Latest Certified Terminal	RC-36
HW Release:		HW Release:	

ISCTI (Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione) certifies, that the Hytera Mobilfunk GmbH, ACCESSNET-T IP, SwMI and the Cassidian, TH1n, terminal have been subject to interoperability testing for the "certified" features listed on second page of this certificate, in accordance with the TETRA Interoperability Profiles, TIP compliance Test Plan and related TETRA interoperability requirement tables.

The table lists all the available TETRA interoperability profiles, and summarizes the main functionalities of every profile according to the TETRA interoperability requirement tables.

A feature is "Certified" when it has been successfully tested during the last test session with one of the testing method described in the TETRA process document part 1 (TPD001-01).

A breakdown into the feature details is given in the Feature Compliance Overview section of this certificate.

This certificate has been issued following a multiple test session between Hytera Mobilfunk GmbH and Cassidian on January 2013. Detailed test results are listed in the Test Report associated to this Certificate. Details and explanation about the procedure used to provide verdicts are in the TIC process TPD001-01.

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Date of issue

23 May 2013

v 1

v 1





Certified features

Tetra Association TTR001-01:Core	
Registration	Certified
Group Management	Certified
Group call	Certified
Individual call	Certified
Status messages	Certified
Pre-emptive Priority Call	Certified
Emergency Call	Certified
Cell Re-selection	Certified
PSTN interconnect	Certified
MS-ISDN Numbering	Certified
In Call Signalling	Certified
Subscriber Class Procedures	Certified
Common Secondary Control Channels	Certified
BS Fallback Operation	Certified
Energy Economy Mode	-
Transmit Inhibit	Certified
Mixed band operation	-
Tetra Association TTR001-02:SDS	
SDS Type 1, 2 or 3	-
SDS-TL	Certified
Store and Forward	-





Support for group addressed DGNA Tolerance of unsupported DGNA functions Tetra Association TTR001-04:Auth SwMI Initiated (non-mutual) Authentication SwMI Initiated Authentication made Mutual by MS TEI Query Tetra Association TTR001-05:PD Context Management Single Slot Packet Data Multi Slot Packet Data TEDS Mixed band operation Tetra Association TTR001-09:AL Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Certified Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation)	Tetra Association TTR001-03:DGNA	
Tolerance of unsupported DGNA functions Tetra Association TTR001-04:Auth SwMI Initiated (non-mutual) Authentication SwMI Initiated Authentication made Mutual by MS TEI Query Tetra Association TTR001-05:PD Context Management Single Slot Packet Data Multi Slot Packet Data TEDS Mixed band operation Tetra Association TTR001-09:AL Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Gair Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class (other than for Fallback operation) Change of Security Class (other than for Fallback operation)	Support for individually addressed DGNA	Certified
Tetra Association TTR001-04:Auth SwMI Initiated (non-mutual) Authentication SwMI Initiated Authentication made Mutual by MS TEI Query Tetra Association TTR001-05:PD Context Management Single Slot Packet Data Multi Slot Packet Data TEDS Mixed band operation Tetra Association TTR001-09:AL Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Certified Security Class 3 Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation) Change of Security Class (other than for Fallback operation)	Support for group addressed DGNA	-
SwMI Initiated (non-mutual) Authentication SwMI Initiated Authentication made Mutual by MS TEI Query Tetra Association TTR001-05:PD Context Management Single Slot Packet Data Multi Slot Packet Data TEDS Mixed band operation Tetra Association TTR001-09:AL Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class (other than for Fallback operation) Change of Security Class (other than for Fallback operation) Change of Security Class (other than for Fallback operation) Change of Security Class (other than for Fallback operation)	Tolerance of unsupported DGNA functions	-
SwMI Initiated Authentication made Mutual by MS TEI Query Tetra Association TTR001-05:PD Context Management Certified Single Slot Packet Data Certified Multi Slot Packet Data TEDS - Mixed band operation Tetra Association TTR001-09:AL Ambience Listening Certified Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Certified Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Certified Security Class 3 Air Interface Encryption Certified Security Class 3 Gair Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class (other than for Fallback operation) Change of Security Class (other than for Fallback operation) - Change of Security Class (other than for Fallback operation)	Tetra Association TTR001-04:Auth	
TEI Query Tetra Association TTR001-05:PD Context Management Certified Single Slot Packet Data Certified Multi Slot Packet Data - TEDS Mixed band operation - Tetra Association TTR001-09:AL Ambience Listening Certified Interaction with Transmit Inhibit - Tetra Association TTR001-10:E2EE E2EE Voice Call Certified Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Certified Security Class 3 Air Interface Encryption Certified Security Class 3G Air Interface Encryption Certified Change of CMG and GSKO Key Status demand - Change of Security Class for Fallback operation - Change of Security Class (other than for Fallback operation)	SwMI Initiated (non-mutual) Authentication	Certified
Tetra Association TTR001-05:PD Context Management Certified Single Slot Packet Data Certified Multi Slot Packet Data - TEDS - Mixed band operation - Tetra Association TTR001-09:AL Ambience Listening Certified Interaction with Transmit Inhibit - Tetra Association TTR001-10:E2EE E2EE Voice Call Certified Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Certified Security Class 3 Air Interface Encryption Certified Security Class 3 Gair Interface Encryption Certified Security Class 3 Gair Interface Encryption Certified Security Class 3 Gair Interface Encryption - Change of CMG and GSKO - Key Status demand - Change of Security Class for Fallback operation - Change of Security Class (other than for Fallback operation) -	SwMI Initiated Authentication made Mutual by MS	Certified
Context Management Single Slot Packet Data Certified Multi Slot Packet Data TEDS TEDS - Mixed band operation - Tetra Association TTR001-09:AL Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Certified Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Certified Security Class 3 G Air Interface Encryption Change of CMG and GSKO - Key Status demand Change of Security Class for Fallback operation - Change of Security Class (other than for Fallback operation) -	TEI Query	-
Single Slot Packet Data Multi Slot Packet Data TEDS Mixed band operation Tetra Association TTR001-09:AL Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Certified Security Class 3G Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class (other than for Fallback operation) Change of Security Class (other than for Fallback operation)	Tetra Association TTR001-05:PD	
Multi Slot Packet Data TEDS - Mixed band operation Tetra Association TTR001-09:AL Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Certified Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Certified Security Class 3G Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation) - Change of Security Class (other than for Fallback operation)	Context Management	Certified
Mixed band operation Tetra Association TTR001-09:AL Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Certified Security Class 3 Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation)	Single Slot Packet Data	Certified
Mixed band operation Tetra Association TTR001-09:AL Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Certified Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Certified Security Class 3 Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation)	Multi Slot Packet Data	-
Tetra Association TTR001-09:AL Ambience Listening Certified Interaction with Transmit Inhibit - Tetra Association TTR001-10:E2EE E2EE Voice Call Certified Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Certified Security Class 3 Air Interface Encryption Certified Security Class 3G Air Interface Encryption - Change of CMG and GSKO - Key Status demand - Change of Security Class for Fallback operation - Change of Security Class (other than for Fallback operation) -	TEDS	-
Ambience Listening Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Certified Security Class 3G Air Interface Encryption Certified Security Class 3G Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation) -	Mixed band operation	-
Interaction with Transmit Inhibit Tetra Association TTR001-10:E2EE E2EE Voice Call Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Certified Security Class 3G Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation) -	Tetra Association TTR001-09:AL	
Tetra Association TTR001-10:E2EE E2EE Voice Call Certified Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Certified Security Class 3 Air Interface Encryption Certified Security Class 3G Air Interface Encryption - Change of CMG and GSKO - Key Status demand - Change of Security Class for Fallback operation - Change of Security Class (other than for Fallback operation) -	Ambience Listening	Certified
E2EE Voice Call Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Certified Security Class 3G Air Interface Encryption Change of CMG and GSKO Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation)	Interaction with Transmit Inhibit	-
Tetra Association TTR001-11:AIE Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Security Class 3G Air Interface Encryption - Change of CMG and GSKO - Key Status demand - Change of Security Class for Fallback operation - Change of Security Class (other than for Fallback operation) -	Tetra Association TTR001-10:E2EE	
Security Class 2 Air Interface Encryption Security Class 3 Air Interface Encryption Security Class 3G Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation)	E2EE Voice Call	Certified
Security Class 3 Air Interface Encryption Security Class 3G Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation)	Tetra Association TTR001-11:AIE	
Security Class 3G Air Interface Encryption Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation)	Security Class 2 Air Interface Encryption	Certified
Change of CMG and GSKO Key Status demand Change of Security Class for Fallback operation Change of Security Class (other than for Fallback operation)	Security Class 3 Air Interface Encryption	Certified
Key Status demand - Change of Security Class for Fallback operation - Change of Security Class (other than for Fallback operation) -	Security Class 3G Air Interface Encryption	-
Change of Security Class for Fallback operation - Change of Security Class (other than for Fallback operation)	Change of CMG and GSKO	-
Change of Security Class (other than for Fallback operation)	Key Status demand	-
	Change of Security Class for Fallback operation	-
Key Management for Secure Direct Mode Operation	Change of Security Class (other than for Fallback operation)	-
, ,	Key Management for Secure Direct Mode Operation	-





Tetra Association TTR001-12:SI				
MS initiated Service Interaction	Certified			
SwMI initiated Service Interaction	Certified			
Call Waiting	-			
Tetra Association TTR001-13:ED				
Enable and temporary disable of an MS	Certified			
Permanent disable of an MS	Certified			
Tetra Association TTR001-14:TKD				
Delivery of Authentication Data	Certified			
Delivery of SCK	Certified			
Delivery method	Certified			
Tetra Association TTR001-19:LIP				
Location Information Protocol	Certified			
Tetra Association TTR001-20:CF				
Call Forwarding Unconditional	Certified			
Call Forwarding Conditional	Certified			
Call Forwarding Information Displayed	-			





Feature Compliance Overview

The first pages of this certificate provide an indication about the main interoperable TETRA features for each TIP specification (as described in the TIC-RT). The main interoperable TETRA features result depend on a set of sub-feature, the outcomes associated to each sub-feature are directly derived from the analysis of the performed test cases.

The results associated to each feature and sub-feature are shown in the "Feature compliance report" table below. The main features are indicated with grey background and the associated sub-features (or second level features) have light blue background.

The outcome assigned to a sub-feature as shown on page 2, is derived by the Feature compliance report tables.

Outcome	Definition
Certified	All required tests have been performed and passed
Partial	Not all the required tests have been performed but none have failed
-	Feature cannot be certified e.g. it is not supported by at least one product, no tests were performed, or some tests were performed but at least one failed

The outcome is derived from the verdict assigned to a sub feature which is the result of an analysis of the test case results listed in the Test Report. The verdict assigned to each sub-feature is derived from one or several test case results or test steps result, the TETRA Interoperability requirement tables (TIC-RTs) indicate the link between sub-features and test cases for the certified set of equipment capabilities (see Test Report).

Verdict	Definition
Passed	All mandated tests or steps of tests linked to this functionality (as per TIC-RT indication) are compliant with the TIP specification relevant to this feature.
Incomplete	Not all Mandated tests (as per TIC-RT indication) have been executed
Failed	At least one of mandated test or steps of tests linked to this functionality failed to match the TIP specification relevant to this feature.





The verdict associated to the feature gives also indication about the method used to test that feature. The allowed testing Methods are listed in the table below, a complete description of the procedures and constraints associated to each of them can be found in the "TPD001-01 TETRA Interoperability Certification Process Description" document.

Testing Method	Description
Complete	All mandated tests associated to the feature have been executed
Spot	Only a selection of the mandatory test cases associated to the feature has been executed during the test session. These tests are a subset of the tests performed on an equivalent software which has been "completely" tested against the same functionality on a different equipment, see manufacturer declaration in the associated Test Report
Regression	Only a selection of the mandatory test cases associated to the feature has been executed during the test session. These tests are a subset of the tests performed on a previous version of the same software which has been "completely" tested in a previous test session against the same functionality, see manufacturer definition in the associated Test Report
Regression on spot	The regression method has been applied on the verdicts based on the spot testing method
Witnessed	The TIP heading lines in the Feature Compliance Report indicate whether each TIP is partially or fully witnessed by the Certification Body. Additionally, for a partially-witnessed TIP, the number of witnessed test cases that passed is shown for each the feature and sub-feature. There may have been some un-witnessed passed tests and they will have been found to be successful based on the log file evaluation.

Depending on equipment capabilities declared by the manufacturer, some features or sub features cannot be tested. The following table describes meaning of the used abbreviation:

Indication	Definition
Not supported	The SwMI and/or MS do not support the minimum features required to verify these items

ISCTI has made every effort to ensure that every result has been correctly evaluated in accordance





with the relevant TIPs, Test Plans and TIC-RTs. ISCTI has no liability for the test results, or towards the manufacturers.

The table on the following page lists HW and SW releases of SwMI and Terminal under test in the last four test sessions and the used TIP specifications, Test Plans and TIC-RTs.

This Certificate and Certificates from previous test sessions are available on the TETRA + Critical Communications Association web site

(http://www.tandcca.com/interop/page/12476).

The feature results are shown in the tables below.

Information on equipment under test and document references

Test Session Date/Place	Hytera Mobilfunk GmbH, Bad Münder, January 2013		
SwMI Type	ACCESSNET-T IP		
SwMI HW Release	PV 08.04.00		
SwMI SW Release	PV 08.04.00		
Terminal Type	TH1n		
Terminal HW Release	RC-36		
Terminal SW Release	6.70-a		
TIP Specs and TIP Compliance Test Plans			
Core	TTR001-01 v6.0.0 IOP001-01 v3.0.0 TIC-RT001-01 v2.5.4		



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SDS	TTR001-02	v2.1.1	 	
	IOP001-02	v2.0.0		
	TIC-RT001-02	v2.1.2		
	110 111001-02	v		
DGNA	TTR001-03	v2.0.0		
	IOP001-03	v2.0.1		
	TIC-RT001-03	v2.2.1		
	116 111001 05			
Auth	TTR001-04	v3.0.0		
	IOP001-04	v2.0.0		
	TIC-RT001-04	v2.2.3		
PD	TTR001-05	v3.0.0		
	IOP001-05	v3.0.5		
	TIC-RT001-05	v3.0.3		
	TTD004 00	2.0.0		
AL	TTR001-09	v2.0.0		
	IOP001-09	v1.1.0		
	TIC-RT001-09	v1.2.2		
E2EE	TTR001-10	v2.0.0		
CZCC				
	IOP001-10	v1.1.4		
	TIC-RT001-10	v1.2.2		
AIE	TTR001-11	v3.0.3		
/ !! _	IOP001-11	v3.0.2		
	116 1(1001 11			
SI	TTR001-12	v1.0.0		
	IOP001-12	v1.0.0		
	TIC-RT001-12	v1.2.7		
ED				
	IOP001-13	v1.0.0		
	TIC-RT001-13	v1.4.6		
TVD	TTP001 14	v1 0 2		
ואט				
	HC-RT001-14	v.1.16		
LID	TTR001-19	v1.0.0		
LIF				
	110-41001-19	VI.U.5		
CF	TTR001-20	v1.0.1		
	102001-20	v1.0.0		
	TIC-RT001-20	v1.0.7		
SI ED TKD LIP CF	TIC-RT001-11 TTR001-12 IOP001-12 TIC-RT001-12 TTR001-13 IOP001-13 TIC-RT001-14 IOP001-14 TIC-RT001-14 TTR001-19 IOP001-19 TIC-RT001-19 TTR001-20 IOP001-20	v3.2.1 v1.0.0 v1.0.0 v1.2.7 v2.0.0 v1.0.0 v1.4.6 v1.0.3 v1.0.0 v1.16 v1.0.0 v1.0.0 v1.0.0 v1.0.0		





Feature compliance report

Test Session	Hytera Mobilfunk GmbH Bad Münder January 2013		
	Core		
Registration	PASSED Complete 5_pass_of_5		
ITSI attach	PASSED Complete 2_pass_of_2		
SwMI initiated location updating	PASSED Complete 2_pass_of_2		
LA timer based Periodic location updating	Not Supported		
De-registration	PASSED Complete 1_pass_of_1		
Group Management	PASSED Complete 13_pass_of_13		
Single group attachment	PASSED Complete 6_pass_of_6		
Multiple group attachment	PASSED Complete 5_pass_of_5		
MS initiated group detachment	PASSED Complete 2_pass_of_2		
SwMI initiated group management	PASSED Complete 1_pass_of_1		
Group call	PASSED Complete 9_pass_of_9		
Normal group call	PASSED Complete 4_pass_of_4		
Late entry	PASSED Complete 1_pass_of_1		
Priority Group scanning	PASSED Complete 3_pass_of_3		
Call setup modifications	PASSED Complete 1_pass_of_1		
Resource Queuing based on Call Priority	Not Supported		
Broadcast Call	Not Supported		





Limited coverage notification	Not Supported		
Individual call	PASSED Complete 9_pass_of_9		
Simplex individual call	PASSED Complete 4_pass_of_4		
Duplex individual call	PASSED Complete 2_pass_of_2		
Call setup modifications	PASSED Complete 3_pass_of_3		
Resource Queuing based on Call Priority	Not Supported		
Indication of imminent call disconnection	Not Supported		
Status messages	PASSED Complete 4_pass_of_4		
Individual addressed Status transfer	PASSED Complete 1_pass_of_1		
Group addressed Status transfer	PASSED Complete 3_pass_of_3		
Pre-emptive Priority Call	PASSED Complete 5_pass_of_5		
Pre-emption of Resources	Not Supported		
Pre-emption of Busy Users	PASSED Complete 5_pass_of_5		
Emergency Call	PASSED Complete 4_pass_of_4		
Pre-emption of Resources	PASSED Complete 2_pass_of_2		
Pre-emption of Busy Users	PASSED Complete 1_pass_of_1		
Call setup modifications	PASSED Complete 1_pass_of_1		
Call disconnection by non-call owner	Not Supported		
Cell Re-selection	PASSED Complete 16_pass_of_16		
Undeclared	PASSED Complete 1_pass_of_1		
Unannounced	PASSED Complete 3_pass_of_3		
Announced - with Call Restoration	PASSED Complete 12_pass_of_12		
Announced - without Call Restoration	Not Supported		
Expedited	Not Supported	 	





PASSED Complete 6_pass_of_6			
PASSED Complete 2_pass_of_2			
PASSED Complete 1_pass_of_1			
PASSED Complete 1_pass_of_1			
PASSED Complete 2_pass_of_2			
PASSED Complete 4_pass_of_4			
PASSED Complete 2_pass_of_2			
PASSED Complete 2_pass_of_2			
PASSED Complete 6_pass_of_6			
PASSED Complete 2_pass_of_2			
PASSED Complete 4_pass_of_4			
PASSED Complete 9_pass_of_9			
PASSED Complete 3_pass_of_3			
PASSED Complete 3_pass_of_3			
PASSED Complete 3_pass_of_3			
PASSED Complete 6_pass_of_6			
PASSED Complete 3_pass_of_3			
PASSED Complete 3_pass_of_3			
PASSED Complete 2_pass_of_2			
PASSED Complete 11_pass_of_11			
PASSED Complete 2_pass_of_2			
PASSED Complete 2_pass_of_2			
PASSED Complete 7_pass_of_7			
	6_pass_of_6 PASSED Complete 2_pass_of_2 PASSED Complete 1_pass_of_1 PASSED Complete 1_pass_of_1 PASSED Complete 2_pass_of_2 PASSED Complete 4_pass_of_4 PASSED Complete 2_pass_of_2 PASSED Complete 2_pass_of_2 PASSED Complete 6_pass_of_6 PASSED Complete 2_pass_of_2 PASSED Complete 4_pass_of_4 PASSED Complete 3_pass_of_3 PASSED Complete 3_pass_of_2 PASSED Complete 2_pass_of_2 PASSED Complete 2_pass_of_2 PASSED Complete 2_pass_of_2 PASSED Complete	6_pass_of_6 PASSED Complete 2_pass_of_2 PASSED Complete 1_pass_of_1 PASSED Complete 1_pass_of_1 PASSED Complete 2_pass_of_2 PASSED Complete 4_pass_of_4 PASSED Complete 2_pass_of_2 PASSED Complete 2_pass_of_2 PASSED Complete 6_pass_of_6 PASSED Complete 4_pass_of_4 PASSED Complete 4_pass_of_4 PASSED Complete 4_pass_of_4 PASSED Complete 4_pass_of_3 PASSED Complete 3_pass_of_3 PASSED Complete 2_pass_of_2 PASSED Complete	6_pass_of_6 PASSED Complete 2_pass_of_2 PASSED Complete 1_pass_of_1 PASSED Complete 1_pass_of_1 PASSED Complete 2_pass_of_2 PASSED Complete 4_pass_of_4 PASSED Complete 2_pass_of_2 PASSED Complete 2_pass_of_2 PASSED Complete 2_pass_of_2 PASSED Complete 6_pass_of_6 PASSED Complete 4_pass_of_4 PASSED Complete 4_pass_of_4 PASSED Complete 4_pass_of_4 PASSED Complete 4_pass_of_3 PASSED Complete 3_pass_of_3 PASSED Complete 1_pass_of_1 PASSED Complete 2_pass_of_2 PASSED Complete 11_pass_of_11 PASSED Complete 2_pass_of_2 PASSED Complete





Energy Economy Mode Operation	Not Supported		
Transmit Inhibit	PASSED Complete 6_pass_of_6		
TXI Activation & De-Activation without Status message	PASSED Complete 2_pass_of_2		
TXI Activation & De-Activation with Status message	PASSED Complete 3_pass_of_3		
Receipt of group addressed service during TXI	PASSED Complete 1_pass_of_1		
Mixed band operation			
Mixed band operation, inter-cell	Not Supported		
Mixed band operation, intra-cell	Not Supported		
Mixed band operation, Full	Not Supported		
	Short Data Service	e (SDS)	
SDS Type 1, 2 or 3			
SDS Type 1	Not Supported		
SDS Type 2	Not Supported		
SDS Type 3	Not Supported		
SDS-TL	PASSED Complete 5_pass_of_5		
Individually Addressed	PASSED Complete 1_pass_of_1		
Group Addressed	PASSED Complete 2_pass_of_2		
Using MS-ISDN dialling	PASSED Complete 2_pass_of_2		
Using UCS2 coding scheme	Not Supported		
Using 7-bit coding scheme	PASSED Complete 1_pass_of_1		
Store and Forward			
Individually Addressed	Not Supported		
Group Addressed	Not Supported		





Dynamic	Group Number Ass	ignment (DGNA)	
Support for individually addressed	PASSED Complete		
DGNA Support for individually addressed DGNA assignment without attachment	12_pass_of_12 PASSED Complete 3_pass_of_3		
Support for individually addressed DGNA assignment with attachment as selected group	PASSED Complete 3_pass_of_3		
Support for individually addressed DGNA assignment with attachment as scanned group	PASSED Complete 3_pass_of_3		
Support for individually addressed DGNA assignment with rejected attachment	PASSED Complete 1_pass_of_1		
Support for individually addressed assigment for pre-programmed group	PASSED Complete 5_pass_of_5		
Support for group addressed DGNA			
Support for group addressed DGNA assignment	Not Supported		
Management of 'group assignment lifetime'	Not Supported		
Support for group addressed DGNA deassignment	Not Supported		
Tolerance of unsupported DGNA functions			
MS tolerance of unsupported individual addressed DGNA signalling	Not Supported		
MS tolerance of unsupported group addressed DGNA signalling	Not Supported		





	Authentication	on		
Cuttl Initiated (non mutual)				
SwMI Initiated (non-mutual) Authentication	PASSED Complete			
Authentication	3_pass_of_3			
Attach with authentication	PASSED Complete			
	1_pass_of_1			
Roaming with authentication	PASSED Complete			
C. M. voiente M.C. duning	1_pass_of_1			
SwMI rejects MS during	PASSED Complete			
authentication	1_pass_of_1			
MS rejects SwMI during authentication	Not Supported			
SwMI Initiated Authentication	PASSED Complete			
made Mutual by MS	2_pass_of_2			
Attach with authentication	PASSED Complete			
Attach with authentication	1_pass_of_1			
December with a substitution	PASSED Complete			
Roaming with authentication	1_pass_of_1			
TEI Query				
TEI Query Operation	Not Supported			
	TETRA Packet I	Data		
	PASSED Complete			
Context Management	13_pass_of_13			
	PASSED Complete			
Context Activation	9_pass_of_9			
	PASSED Complete			
User authentication	4_pass_of_4			
	PASSED Complete			
Single Slot Packet Data	9_pass_of_9			
	PASSED Complete			
Data Transfer	6_pass_of_6			
	PASSED Complete			
Cell re-selection	3_pass_of_3			
Multi Slot Packet Data	<u> </u>			
Data Transfer	Not Supported			
	rr	i	1	





TEDS			
TEDS with Context Activation	Not Supported		
TEDS Data Transmission	Not Supported		
TEDS Cell Reselection	Not Supported		
Mixed band operation			
Mixed band operation, inter-cell	Not Supported		
Mixed band operation, intra-cell	Not Supported		
Mixed band operation, Full	Not Supported		
TE	TRA Ambience Liste	ning (SS-AL)	
Ambience Listening	PASSED Complete 5_pass_of_5		
SS-AL Call Setup	PASSED Complete 2_pass_of_2		
MS initiated SS-AL disconnection	PASSED Complete 3_pass_of_3		
No Indication to affected user	PASSED Complete 5_pass_of_5		
Interaction with Transmit Inhibit			
AL can override TxI	Not Supported		
AL cannot override TxI	Not Supported		
	End to End Encry	ption	
E2EE Voice Call	PASSED Complete		
Individual (P2P) call	6_pass_of_6 PASSED Complete 4_pass_of_4		
Group (P2MP) call	PASSED Complete 2_pass_of_2		
Clear Voice Override (CVO): Acceptance	Not Supported		
Clear Voice Override (CVO): User Initiated	Not Supported		
Clear Voice Override (CVO): Automatic	Not Supported		
	Air Interface Encr	yption	



TETRA + Critical Communications Association

Security Class 2 Air Interface	PASSED Complete		
Encryption	12_pass_of_12		
Location Updating and AI	PASSED Complete		
Signalling Protection	4_pass_of_4		
TM-SCK provisioning during location updating	Not Supported		
Communications between parties	PASSED Complete		
using encryption	2_pass_of_2		
Communications between clear	PASSED Complete		
and encrypted parties	3_pass_of_3		
Communications between			
encrypted parties on a channel	PASSED Complete		
designated to operate in clear	2_pass_of_2		
OTAR and Change of TM-SCK	Not Supported		
Packet Data with Class 2 Air	PASSED Complete		
Interface Encryption	1_pass_of_1		
Security Class 3 Air Interface	PASSED Complete		
Encryption	11_pass_of_11		
Location Updating and Al	PASSED Complete		
Signalling Protection	3_pass_of_3		
DCK Forwarding at MS request	Not Supported		
DCK Forwarding by SwMI (without MS request)	Not Supported		
DCK Retrieval	Not Supported		
CCK provisioning during location	PASSED Complete		
updating	3_pass_of_3		
Communications between parties	PASSED Complete		
using encryption	2_pass_of_2		
Communications between clear	PASSED Complete		
and encrypted parties	3_pass_of_3		
Communications between	PASSED Complete		
encrypted parties on a channel designated to operate in clear	2_pass_of_2		





OTAR and Change of CCK	Not Supported		
Packet Data with Class 3 Air	PASSED Complete		
Interface Encryption	1_pass_of_1		
Security Class 3G Air Interface			
Encryption			
GCK Key Association setting	Not Supported		
Communications between parties using encryption	Not Supported		
Communications between clear and encrypted parties	Not Supported		
OTAR and Change of GCK	Not Supported		
Change of CMG and GSKO			
OTAR and change of CMG and GSKO	Not Supported		
Key Status demand			
SCK Key Status demand	Not Supported		
GCK Key Status demand	Not Supported		
GSKO Key Status demand	Not Supported		
Change of Security Class for Fallback operation			
Seamless change to Security Class 2 for BS Fallback operation	Not Supported		
Non-seamless change to Security Class 2 for BS Fallback operation	Not Supported		
Provisioning of TM-SCK for fallback to Security Class 2 operation	Not Supported		
Change to Security Class 1 for BS Fallback operation	Not Supported		
Change of Security Class (other			
than for Fallback operation)			





Change between Security Class 3 and Security Class 3G Change between Security Class 2 and Security Class 3 Change from Security Class 3G to Security Class 2 Key Management for Secure	Not Supported Not Supported Not Supported		
Direct Mode Operation			
OTAR and change of DM-SCK	Not Supported		
	Service Interact	tion	
MS initiated Service Interaction	PASSED Complete 4_pass_of_4		
MS initiated Circuit Mode Call during another Circuit Mode Call	PASSED Complete 2_pass_of_2		
MS initiated Circuit Mode Call during Packet Mode Transfer	PASSED Complete 2_pass_of_2		
MS initiated Packet Mode Transfer during Circuit Mode Call	Not Supported		
SwMI initiated Service Interaction	PASSED Complete 6_pass_of_6		
SwMI initiated Circuit Mode Call during another Circuit Mode Call	PASSED Complete 4_pass_of_4		
SwMI initiated Circuit Mode Call during Packet Mode Transfer	PASSED Complete 2_pass_of_2		
SwMI initiated Packet Mode Transfer during Circuit Mode Call	Not Supported		
Call Waiting			
Call Waiting in Individual Call	Not Supported		
Call Waiting in Group Call	Not Supported		





	Enable Disab	le	
Enable and temporary disable of	PASSED Complete		
an MS	17_pass_of_17		
Enable and temporary disable of	PASSED Complete		
an MS without authentication	6_pass_of_6		
Enable and temporary disable of	PASSED Complete		
an MS with authentication	6_pass_of_6		
Registration of a temporary	PASSED Complete		
disabled MS	2_pass_of_2		
Rejection of applicable invalid	PASSED Complete		
enable/disable requests	1_pass_of_1		
Removable SIMs do not affect the			
subscriber or equipment that has	Not Supported		
been enabled/disabled			
Disabling of an MS during a call or	PASSED Complete		
while on the PDCH	2_pass_of_2		
Permanent disable of an MS	PASSED Complete		
	4_pass_of_4		
Permanent disable of an MS with	PASSED Complete		
authentication	3_pass_of_3		
Permanently Disabled MS cannot	PASSED Complete		
send air interface signalling	1_pass_of_1		
	Key Delivery	/	
	PASSED Complete		
Delivery of Authentication Data	1_pass_of_1		
	PASSED Complete		
Authentication Key Delivery	1_pass_of_1		
ITSI Delivery	Not Supported		
- II	PASSED Complete		
Delivery of SCK	1_pass_of_1		
SCK Delivery to SCK delivery	Not Supported		
SCK Delivery to SwMI	Not Supported		
	PASSED Complete		
SCK Delivery to SCK loading	1_pass_of_1		





Delivery method	PASSED Complete		
	1_pass_of_1		
Plain text on physical media	PASSED Complete		
Plain text on physical media	1_pass_of_1		
Encrypted text on physical media	Not Supported		
Electronic transfer	Not Supported		
	LIP		
	PASSED Complete		
Location Information Protocol	9_pass_of_9		
LIP over SDS	PASSED Complete		
LIP OVEI 3D3	5_pass_of_5		
LIP over Packet Data	Not Supported		
Time based reporting	PASSED Complete		
Time based reporting	3_pass_of_3		
Distance based reporting - NOT TESTABLE	Not Supported		
TESTABLE	PASSED Complete		
Reporting using Long reports	1_pass_of_1		
	PASSED Complete		
Reporting Enable & Disable	1_pass_of_1		
Temporary reporting control	Not Supported		
Trigger modification	Not Supported		
	PASSED Complete		
Immediate Location Reporting	1_pass_of_1		
Reporting Lifetimes	Not Supported		
	PASSED Complete		
Error Reporting	1_pass_of_1		
	Call Forwardin	g	
	PASSED Complete		
Call Forwarding Unconditional	3_pass_of_3		
Call Forwarding Unconditional	PASSED Complete		
Individual Call	1_pass_of_1		





Call Forwarding Unconditional SDS	PASSED Complete 1_pass_of_1		
Call Forwarding Unconditional	PASSED Complete		
Status	1_pass_of_1		
Call Forwarding Conditional	PASSED Complete 3_pass_of_3		
Call Forwarding Conditional	PASSED Complete		
Individual Call	3_pass_of_3		
Call Forwarding Information			
Displayed			
Call Forwarding Information	Not Supported		
Displayed			i

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