

# TETRA Interoperability Certificate

## Cassidian, Tetra System Rel.6.0, SwMI – Sepura, STP8000, Terminal

Helsinki, October 2012

<b>Latest Certified SwMI SW Release:</b>	M98F (DXTip)	<b>Latest Certified Terminal SW Release:</b>	1697 003 02937
<b>Latest Certified SwMI HW Release:</b>	Rel6.0 SCD2.0	<b>Latest Certified Terminal HW Release:</b>	PSNTW201T300R00R1K

ISCTI (Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione) certifies, that the Cassidian, Tetra System Rel.6.0, SwMI and the Sepura, STP8000, 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.

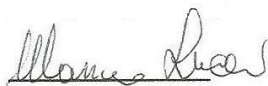
The table lists all the available TETRA interoperability profiles, and summarizes the main functionalities of every profile according to the TETRA interoperability requirement tables.

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 Fully witnessed test session between Cassidian and Sepura on October 2012. 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.

**IOP test engineer**



Massimo Lucenti

**Head of the Procedure**



Ivano Luciani

**Radio Office Manager**



Giuseppe Pierri

ISCTI - V.le America 201, 00144 Rome, Italy  
Ph.: +39 06 5444 2135, Fax: +39 06 5410904  
e-mail: [tetra\\_ctc.iscom@mise.gov.it](mailto:tetra_ctc.iscom@mise.gov.it),  
Web: [www.mise.gov.it](http://www.mise.gov.it)

**Date of issue:  
24 March 2017**

v2

## Certified features

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

<b>Tetra Association TTR001-03:DGNA</b>	
<b>Support for individually addressed DGNA</b>	Certified
<b>Support for group addressed DGNA</b>	-
<b>Tolerance of unsupported DGNA functions</b>	-
<b>Tetra Association TTR001-04:Auth</b>	
<b>SwMI Initiated (non-mutual) Authentication</b>	Certified
<b>SwMI Initiated Authentication made Mutual by MS</b>	Certified
<b>TEI Query</b>	Certified
<b>Tetra Association TTR001-05:PD</b>	
<b>Context Management</b>	Certified
<b>Single Slot Packet Data</b>	Certified
<b>Multi Slot Packet Data</b>	-
<b>TEDS</b>	-
<b>Mixed band operation</b>	Certified
<b>Tetra Association TTR001-11:AIE</b>	
<b>Security Class 2 Air Interface Encryption</b>	Certified
<b>Security Class 3 Air Interface Encryption</b>	Certified
<b>Security Class 3G Air Interface Encryption</b>	-
<b>Change of CMG and GSKO</b>	-
<b>Key Status demand</b>	-
<b>Change of Security Class for Fallback operation</b>	Certified
<b>Change of Security Class (other than for Fallback operation)</b>	-
<b>Key Management for Secure Direct Mode Operation</b>	-
<b>Tetra Association TTR001-12:SI</b>	
<b>MS initiated Service Interaction</b>	Certified
<b>SwMI initiated Service Interaction</b>	Certified
<b>Call Waiting</b>	-

<b>Tetra Association TTR001-13:ED</b>	
<b>Enable and temporary disable of an MS</b>	Certified
<b>Permanent disable of an MS</b>	Certified
<b>Tetra Association TTR001-19:LIP</b>	
<b>Location Information Protocol</b>	Certified

## 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 white background.

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

Outcome	Definition
<b>Certified</b>	All required tests have been performed and passed
<b>Partial</b>	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
<b>Passed</b>	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.
<b>Incomplete</b>	Not all Mandated tests (as per TIC-RT indication) have been executed
<b>Failed</b>	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
<b>Complete</b>	All mandated tests associated to the feature have been executed
<b>Spot</b>	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
<b>Regression</b>	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
<b>Regression on spot</b>	The regression method has been applied on the verdicts based on the spot testing method
<b>Verified</b>	The CB has verified that the identified number of tests were successfully passed based on the log file evaluation. In addition some of the tests may have been witnessed by the CB.

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
<b>Not supported</b>	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 (<https://tandcca.com/interoperability/interoperability-certificates-and-test-reports/>).

The feature results are shown in the tables below.

## Information on equipment under test and document references

Test Session Date/Place	Cassidian, Helsinki, October 2012		Cassidian Helsinki February 2011			
SwMI Type	Tetra System Rel.6.0		Tetra System Rel 6.0			
SwMI HW Release	Rel6.0 SCD2.0		M98F (DXTip)			
SwMI SW Release	M98F (DXTip)		6.0			
Terminal Type	STP8000		STP8000			
Terminal HW Release	PSNTW201T300R00R1K		PSNTW201T300R00			
Terminal SW Release	1697 003 02937		1678 006 02937			
TIP Specs and TIP Compliance Test Plans						
Core	TTR001-01	v5.1.1	TTR001-01	v5.1.1		
	IOP001-01	v2.6.4	IOP001-01	v2.6.4		
	TIC-RT001-01	v254	TIC-RT001-01	v250		
SDS	TTR001-02	v2.0.1	TTR001-02	v2.0.1		
	IOP001-02	v2.0.0	IOP001-02	v2.0.0		
	TIC-RT001-02	v212	TIC-RT001-02	v211		

DGNA	TTR001-03 IOP001-03 TIC-RT001-03	v2.0.0 v2.0.1 v221	TTR001-03 IOP001-03 TIC-RT001-03	v2.0.0 v2.0.1 v218		
Auth	TTR001-04 IOP001-04 TIC-RT001-04	v3.0.0 v2.0.0 v223	TTR001-04 IOP001-04 TIC-RT001-04	v3.0.0 v2.0.0 v222		
PD	TTR001-05 IOP001-05 TIC-RT001-05	v3.0.0 v3.0.5 v302	TTR001-05 IOP001-05 TIC-RT001-05	v3.0.0 v3.0.2 v300		
AIE	TTR001-11 IOP001-11 TIC-RT001-11	v3.0.3 v3.0.2 v321	TTR001-11 IOP001-11 TIC-RT001-11	v3.0.3 v3.0.2 v316		
SI	TTR001-12 IOP001-12 TIC-RT001-12	v1.0.0 v1.0.0 v127	TTR001-12 IOP001-12 TIC-RT001-12	v1.0.0 v1.0.0 v124		
ED	TTR001-13 IOP001-13 TIC-RT001-13	v2.0.0 v1.0.0 v146	TTR001-13 IOP001-13 TIC-RT001-13	v2.0.0 v1.0.0 v145		
LIP	TTR001-19 IOP001-19 TIC-RT001-19	v1.0.0 v1.0.0 v104	TTR001-19 IOP001-19 TIC-RT001-19	v1.0.0 v1.0.0 v102		



## Feature compliance report

Test Session	Cassidian Helsinki October 2012	Cassidian Helsinki February 2011		
<b>Core</b>				
Registration	PASSED Regression 1_pass_of_5	PASSED Regression 2_pass_of_5		
ITSI attach	Regression 0_pass_of_1	Regression 0_pass_of_1		
SwMI initiated location updating	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
LA timer based Periodic location updating	PASSED Regression 1_pass_of_2	PASSED Regression 1_pass_of_2		
De-registration	Regression 0_pass_of_1	Regression 0_pass_of_1		
Group Management	PASSED Regression 5_pass_of_15	PASSED Regression 2_pass_of_12		
Single group attachment	PASSED Regression 2_pass_of_7	Regression 0_pass_of_6		
Multiple group attachment	PASSED Regression 1_pass_of_6	PASSED Regression 1_pass_of_6		
MS initiated group detachment	PASSED Complete 2_pass_of_2	Not Supported		
SwMI initiated group management	Regression 0_pass_of_2	PASSED Regression 1_pass_of_2		
Group call	PASSED Regression 2_pass_of_12	PASSED Regression 3_pass_of_11		
Normal group call	Regression 0_pass_of_6	PASSED Regression 1_pass_of_6		
Late entry	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
Priority Group scanning	PASSED Regression 1_pass_of_3	Regression 0_pass_of_3		
Call setup modifications	Not Supported	Not Supported		
Resource Queuing based on Call Priority	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
Broadcast Call	Not Supported	Not Supported		

Limited coverage notification	PASSED Complete 1_pass_of_1	Not Supported		
Individual call	Regression 0_pass_of_10	PASSED Regression 3_pass_of_10		
Simplex individual call	Regression 0_pass_of_4	Regression 0_pass_of_4		
Duplex individual call	Regression 0_pass_of_2	Regression 0_pass_of_2		
Call setup modifications	Regression 0_pass_of_2	PASSED Complete 2_pass_of_2		
Resource Queuing based on Call Priority	Regression 0_pass_of_2	PASSED Regression 1_pass_of_2		
Indication of imminent call disconnection	Not Supported	Not Supported		
Status messages	Regression 0_pass_of_4	PASSED Regression 1_pass_of_4		
Individual addressed Status transfer	Regression 0_pass_of_1	Regression 0_pass_of_1		
Group addressed Status transfer	Regression 0_pass_of_3	PASSED Regression 1_pass_of_3		
Pre-emptive Priority Call	Regression Incomplete 2_pass_of_6	PASSED Regression 1_pass_of_5		
Pre-emption of Resources	PASSED Regression 1_pass_of_2	PASSED Regression 1_pass_of_2		
Pre-emption of Busy Users	PASSED Regression 1_pass_of_4	Regression 0_pass_of_3		
Emergency Call	PASSED Regression 1_pass_of_5	PASSED Regression 4_pass_of_5		
Pre-emption of Resources	Regression 0_pass_of_2	PASSED Regression 1_pass_of_2		
Pre-emption of Busy Users	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
Call setup modifications	Regression 0_pass_of_2	PASSED Complete 2_pass_of_2		
Call disconnection by non-call owner	Not Supported	Not Supported		
Cell Re-selection	PASSED Regression 10_pass_of_21	PASSED Regression 12_pass_of_21		
Undeclared	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
Unannounced	Regression 0_pass_of_3	PASSED Regression 1_pass_of_3		
Announced - with Call Restoration	PASSED Regression 6_pass_of_11	PASSED Regression 4_pass_of_11		
Announced - without Call Restoration	PASSED Regression 2_pass_of_4	PASSED Complete 4_pass_of_4		
Expedited	PASSED Complete 2_pass_of_2	PASSED Complete 2_pass_of_2		

PSTN interconnect	PASSED Regression 2_pass_of_6	PASSED Regression 3_pass_of_6		
TETRA Originated Call	PASSED Regression 1_pass_of_2	PASSED Complete 2_pass_of_2		
PSTN Originated Call	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
DTMF over-dial	Regression 0_pass_of_1	Regression 0_pass_of_1		
Emergency Telephone Calls	PASSED Regression 1_pass_of_2	Regression 0_pass_of_2		
MS-ISDN Numbering	Regression 0_pass_of_4	PASSED Regression 1_pass_of_4		
MS ISDN - Voice Call	Regression 0_pass_of_2	Regression 0_pass_of_2		
MS-ISDN Status	Regression 0_pass_of_2	PASSED Regression 1_pass_of_2		
In Call Signalling	PASSED Regression 2_pass_of_8	PASSED Regression 2_pass_of_8		
Slow Signalling on Traffic Channel (SACCH)	Regression 0_pass_of_4	PASSED Regression 1_pass_of_4		
Fast Signalling on Traffic Channel (FACCH)	PASSED Regression 2_pass_of_4	PASSED Regression 1_pass_of_4		
Subscriber Class Procedures	PASSED Regression 6_pass_of_10	PASSED Regression 1_pass_of_5		
Cell Selection based on Subscriber Class	PASSED Complete 4_pass_of_4	Regression 0_pass_of_1		
Subscriber Class Delivery during Location Update	PASSED Regression 2_pass_of_3	Regression 0_pass_of_1		
Use of Preferred Subscriber Classes	Regression 0_pass_of_3	PASSED Regression 1_pass_of_3		
Common Secondary Control Channels	PASSED Regression 1_pass_of_7	PASSED Complete 7_pass_of_7		
One C-SCCH per cell	Regression 0_pass_of_4	PASSED Complete 4_pass_of_4		
Two C-SCCH per cell	PASSED Regression 1_pass_of_3	PASSED Complete 3_pass_of_3		
Three C-SCCH per cell	Regression 0_pass_of_2	PASSED Complete 2_pass_of_2		
BS Fallback Operation	PASSED Regression 2_pass_of_10	PASSED Regression 2_pass_of_10		
Switch to/from BS Fallback Operation	PASSED Regression 1_pass_of_2	Regression 0_pass_of_2		
Roaming with BS Fallback Operation	Regression 0_pass_of_2	Regression 0_pass_of_2		
Services with BS Fallback Operation	PASSED Regression 1_pass_of_6	PASSED Regression 2_pass_of_6		

Energy Economy Mode				
Energy Economy Mode Operation	Not Supported	Not Supported		
Transmit Inhibit	PASSED Regression 1_pass_of_5	PASSED Regression 1_pass_of_6		
TXI Activation & De-Activation without Status message	Regression 0_pass_of_1	Regression 0_pass_of_1		
TXI Activation & De-Activation with Status message	PASSED Regression 1_pass_of_3	PASSED Regression 1_pass_of_4		
Receipt of group addressed service during TXI	Regression 0_pass_of_1	Regression 0_pass_of_1		
Mixed band operation	PASSED Regression 1_pass_of_4	PASSED Complete 4_pass_of_4		
Mixed band operation, inter-cell	PASSED Regression 1_pass_of_4	PASSED Complete 4_pass_of_4		
Mixed band operation, intra-cell	Not Supported	Not Supported		
Mixed band operation, Full	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
<b>Short Data Service (SDS)</b>				
SDS Type 1, 2 or 3				
SDS Type 1	Not Supported	Not Supported		
SDS Type 2	Not Supported	Not Supported		
SDS Type 3	Not Supported	Not Supported		
SDS-TL	PASSED Regression 1_pass_of_11	PASSED Regression 5_pass_of_12		
Individually Addressed	Regression 0_pass_of_2	PASSED Regression 1_pass_of_2		
Group Addressed	PASSED Regression 1_pass_of_2	PASSED Regression 1_pass_of_2		
Using MS-ISDN dialling	Regression 0_pass_of_2	Regression 0_pass_of_2		
Using UCS2 coding scheme	Regression 0_pass_of_3	PASSED Regression 3_pass_of_4		
Using 7-bit coding scheme	Regression 0_pass_of_2	Regression 0_pass_of_2		
Store and Forward	PASSED Regression 1_pass_of_4	PASSED Regression 2_pass_of_4		
Individually Addressed	PASSED Regression 1_pass_of_3	PASSED Regression 1_pass_of_3		

Group Addressed	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
<b>Dynamic Group Number Assignment (DGNA)</b>				
Support for individually addressed DGNA	PASSED Regression 2_pass_of_6	PASSED Regression 2_pass_of_6		
Support for individually addressed DGNA assignment without attachment	Not Supported	Not Supported		
Support for individually addressed DGNA assignment with attachment as selected group	Not Supported	Not Supported		
Support for individually addressed DGNA assignment with attachment as scanned group	PASSED Regression 1_pass_of_4	PASSED Regression 1_pass_of_4		
Support for individually addressed DGNA assignment with rejected attachment	Not Supported	Not Supported		
Support for individually addressed assignment for pre-programmed group	PASSED Regression 1_pass_of_3	PASSED Regression 2_pass_of_3		
Support for group addressed DGNA				
Support for group addressed DGNA assignment	Not Supported	Not Supported		
Management of 'group assignment lifetime'	Not Supported	Not Supported		
Support for group addressed DGNA deassignment	Not Supported	Not Supported		
Tolerance of unsupported DGNA functions				
MS tolerance of unsupported individual addressed DGNA signalling	Not Supported	Not Supported		

MS tolerance of unsupported group addressed DGNA signalling	Not Supported	Not Supported		
<b>Authentication</b>				
SwMI Initiated (non-mutual) Authentication	PASSED Regression 1_pass_of_3	PASSED Regression 1_pass_of_3		
Attach with authentication	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
Roaming with authentication	Regression 0_pass_of_1	Regression 0_pass_of_1		
SwMI rejects MS during authentication	Regression 0_pass_of_1	Regression 0_pass_of_1		
MS rejects SwMI during authentication	Not Supported	Not Supported		
SwMI Initiated Authentication made Mutual by MS	PASSED Regression 1_pass_of_2	Regression 0_pass_of_2		
Attach with authentication	PASSED Complete 1_pass_of_1	Regression 0_pass_of_1		
Roaming with authentication	Regression 0_pass_of_1	Regression 0_pass_of_1		
TEI Query	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
TEI Query Operation	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
<b>TETRA Packet Data</b>				
Context Management	PASSED Regression 4_pass_of_13	PASSED Complete 13_pass_of_13		
Context Activation	PASSED Regression 3_pass_of_9	PASSED Complete 9_pass_of_9		
User authentication	PASSED Regression 1_pass_of_4	PASSED Complete 4_pass_of_4		

Single Slot Packet Data	PASSED Regression 2_pass_of_9	PASSED Complete 9_pass_of_9		
Data Transfer	PASSED Regression 1_pass_of_6	PASSED Complete 6_pass_of_6		
Cell re-selection	PASSED Regression 1_pass_of_3	PASSED Complete 3_pass_of_3		
Multi Slot Packet Data				
Data Transfer	Not Supported	Not Supported		
TEDS				
TEDS with Context Activation	Not Supported	Not Supported		
TEDS Data Transmission	Not Supported	Not Supported		
TEDS Cell Reselection	Not Supported	Not Supported		
Mixed band operation	PASSED Regression 2_pass_of_3	PASSED Complete 3_pass_of_3		
Mixed band operation, inter-cell	PASSED Regression 2_pass_of_3	PASSED Complete 3_pass_of_3		
Mixed band operation, intra-cell	Not Supported	Not Supported		
Mixed band operation, Full	Not Supported	Not Supported		
<b>Air Interface Encryption</b>				
Security Class 2 Air Interface Encryption	PASSED Complete 2_pass_of_2	PASSED Complete 1_pass_of_1		
Location Updating and AI Signalling Protection	PASSED Complete 1_pass_of_1	Not Supported		
TM-SCK provisioning during location updating	Not Supported	Not Supported		
Communications between parties using encryption	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
Communications between clear and encrypted parties	Not Supported	Not Supported		
Communications between encrypted parties on a channel designated to operate in clear	Not Supported	Not Supported		
OTAR and Change of TM-SCK	Not Supported	Not Supported		



Packet Data with Class 2 Air Interface Encryption	Not Supported	Not Supported		
Security Class 3 Air Interface Encryption	PASSED Regression 9_pass_of_22	PASSED Complete 21_pass_of_21		
Location Updating and AI Signalling Protection	PASSED Regression 5_pass_of_13	PASSED Complete 10_pass_of_10		
DCK Forwarding at MS request	Regression 0_pass_of_6	PASSED Complete 6_pass_of_6		
DCK Forwarding by SwMI (without MS request)	PASSED Regression 1_pass_of_2	Not Supported		
DCK Retrieval	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
CCK provisioning during location updating	PASSED Regression 1_pass_of_7	PASSED Complete 6_pass_of_6		
Communications between parties using encryption	PASSED Complete 2_pass_of_2	PASSED Complete 2_pass_of_2		
Communications between clear and encrypted parties	Regression 0_pass_of_3	PASSED Complete 3_pass_of_3		
Communications between encrypted parties on a channel designated to operate in clear	PASSED Regression 1_pass_of_2	PASSED Complete 2_pass_of_2		
OTAR and Change of CCK	Regression 0_pass_of_3	PASSED Complete 3_pass_of_3		
Packet Data with Class 3 Air Interface Encryption	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
Security Class 3G Air Interface Encryption				
GCK Key Association setting	Not Supported	Not Supported		
Communications between parties using encryption	Not Supported	Not Supported		
Communications between clear and encrypted parties	Not Supported	Not Supported		
OTAR and Change of GCK	Not Supported	Not Supported		



Change of CMG and GSKO				
OTAR and change of CMG and GSKO	Not Supported	Not Supported		
Key Status demand				
SCK Key Status demand	Not Supported	Not Supported		
GCK Key Status demand	Not Supported	Not Supported		
GSKO Key Status demand	Not Supported	Not Supported		
Change of Security Class for Fallback operation	PASSED Regression 1_pass_of_4	PASSED Complete 4_pass_of_4		
Seamless change to Security Class 2 for BS Fallback operation	Not Supported	Not Supported		
Non-seamless change to Security Class 2 for BS Fallback operation	PASSED Regression 1_pass_of_3	PASSED Complete 3_pass_of_3		
Provisioning of TM-SCK for fallback to Security Class 2 operation	Not Supported	Not Supported		
Change to Security Class 1 for BS Fallback operation	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
Change of Security Class (other than for Fallback operation)				
Change between Security Class 3 and Security Class 3G	Not Supported	Not Supported		
Change between Security Class 2 and Security Class 3	Not Supported	Not Supported		
Change from Security Class 3G to Security Class 2	Not Supported	Not Supported		
Key Management for Secure Direct Mode Operation				
OTAR and change of DM-SCK	Not Supported	Not Supported		

Service Interaction				
MS initiated Service Interaction	PASSED Regression 2_pass_of_7	PASSED Complete 5_pass_of_5		
MS initiated Circuit Mode Call during another Circuit Mode Call	PASSED Regression 1_pass_of_5	PASSED Complete 3_pass_of_3		
MS initiated Circuit Mode Call during Packet Mode Transfer	PASSED Regression 1_pass_of_2	PASSED Complete 2_pass_of_2		
MS initiated Packet Mode Transfer during Circuit Mode Call	Not Supported	Not Supported		
SwMI initiated Service Interaction	PASSED Regression 1_pass_of_6	PASSED No_Equipment 6_pass_of_7		
SwMI initiated Circuit Mode Call during another Circuit Mode Call	PASSED Regression 1_pass_of_4	PASSED No_Equipment 4_pass_of_5		
SwMI initiated Circuit Mode Call during Packet Mode Transfer	Regression 0_pass_of_2	PASSED Complete 2_pass_of_2		
SwMI initiated Packet Mode Transfer during Circuit Mode Call	Not Supported	Not Supported		
Call Waiting				
Call Waiting in Individual Call	Not Supported	Not Supported		
Call Waiting in Group Call	Not Supported	Not Supported		
Enable Disable				
Enable and temporary disable of an MS	PASSED Regression 3_pass_of_12	FAILED Complete 11_pass_of_12		
Enable and temporary disable of an MS without authentication	Not Supported	Not Supported		
Enable and temporary disable of an MS with authentication	PASSED Regression 2_pass_of_4	PASSED Complete 4_pass_of_4		
Registration of a temporary disabled MS	Regression 0_pass_of_2	PASSED Complete 2_pass_of_2		
Rejection of applicable invalid enable/disable requests	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
Removable SIMs do not affect the subscriber or equipment that has been enabled/disabled	Not Supported	Not Supported		

Disabling of an MS during a call or while on the PDCH	PASSED Regression 1_pass_of_5	FAILED Complete 4_pass_of_5		
Permanent disable of an MS	PASSED Regression 4_pass_of_5	PASSED Complete 2_pass_of_2		
Permanent disable of an MS with authentication	PASSED Complete 4_pass_of_4	PASSED Complete 1_pass_of_1		
Permanently Disabled MS cannot send air interface signalling	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
<b>LIP</b>				
Location Information Protocol	PASSED Regression 4_pass_of_17	PASSED Complete 17_pass_of_17		
LIP over SDS	PASSED Regression 2_pass_of_10	PASSED Complete 10_pass_of_10		
LIP over Packet Data	Not Supported	Not Supported		
Time based reporting	Regression 0_pass_of_5	PASSED Complete 5_pass_of_5		
Distance based reporting - NOT TESTABLE	Not Supported	Not Supported		
Reporting using Long reports	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
Reporting Enable & Disable	PASSED Regression 1_pass_of_2	PASSED Complete 2_pass_of_2		
Temporary reporting control	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
Trigger modification	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		
Immediate Location Reporting	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
Reporting Lifetimes	Not Supported	Not Supported		
Error Reporting	Regression 0_pass_of_1	PASSED Complete 1_pass_of_1		

## Annex A

### Annex A

#### List of Revisions of the Certificate

Date	Ver.	Modification
23 November 2012	1	First published version
24 March 2017	2	Removed A2G features due to a not supported associated mandatory capability

**IOP test engineer**



Ivano Luciani

**Radio Office Manager**

Giuseppe Pierri

