

# TETRA Interoperability Certificate

**Cassidian, Tetra System Rel6.0, SwMI A—  
Cassidian, Tetra System Rel6.0, SwMI B**

Helsinki, Helsinki, May 2012

Latest Certified SwMI A SW Release:	SCD2.0	Latest Certified SwMI B SW Release:	SCD2.0
Latest Certified SwMI A HW Release:	M92	Latest Certified SwMI B HW Release:	M92

ISCTI (Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione) certifies, that the Cassidian, Tetra System Rel6.0, SwMI and the Cassidian Tetra System Rel6.0 SwMI 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.

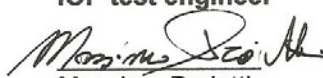
The table lists all the available TETRA interoperability profiles, and summarizes the main functionalities of every profile according to the TETRA interoperability requirement tables.

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).

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

This certificate has been issued following a single test session (with 100% witnessed testing) between Cassidian and Cassidian on May 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.

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**Date of issue:**

**25 May 2012**

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## Certified features

<b>Tetra Association, TTR003-01: IMM</b>	
ISI Migration Service	Certified
<b>Tetra Association, TTR003-02: IIC</b>	
ISI Individual Call	Certified
Resource Allocation Policy	Certified
MS-ISDN	Certified
<b>Tetra Association, TTR003-03: ISD</b>	
Individually addressed ISI Short Data Service	Certified
Group addressed ISI Short Data Service	Certified
<b>Tetra Association, TTR003-06: IGC</b>	
Normal ISI Group Call	Certified
Transmission Control	Certified
Emergency Group Call	Certified
Abnormal Cases	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 verdicts 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 verdict assigned to a sub-feature as shown on page 2, is derived by the Feature compliance report tables.

Verdict	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 verdict assigned to a sub feature 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 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 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 Association

web site  
 (<http://www.tetra-association.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	Cassidian, Cassidian Helsinki, Helsinki, May 2012			
SwMIA Type	Tetra System Rel6.0			
SwMIA HW Release	M92			
SwMIA SW Release	SCD2.0			
SwMIB Type	Tetra System Rel6.0			
SwMIB HW Release	M92			
SwMIB SW Release	SCD2.0			
TIP Specs and TIP Compliance Test Plans				
IMM	TTR003-01 v200 IOP003-01 v100 TIC-RT003-01 v103			
IIC	TTR003-02 v212 IOP003-02 v101 TIC-RT003-02 v110			
ISD	TTR003-03 v141 IOP003-03 v106 TIC-RT003-03 v110			
IGC	TTR003-06 v202 IOP003-06 v100 TIC-RT003-06 v100			

# Feature compliance report

Test Session	Cassidian, Cassidian Helsinki, Helsinki May 2012			
<b>TTR003-01 Mobility Management</b>				
<b>ISI Migration Service</b>	PASSED Complete 18_pass_of_18			
ISI Migration Service without Authentication	PASSED Complete 6_pass_of_6			
ISI Migration Service with Authentication	PASSED Complete 4_pass_of_4			
ISI Re-Authentication of Migrated MS	PASSED Complete 4_pass_of_4			
ISI Deregistration and return to Home SwMI	PASSED Complete 4_pass_of_4			
<b>TTR003-02 Individual Call</b>				
<b>ISI Individual Call</b>	PASSED Complete 14_pass_of_14			
ISI Individual Simplex Call	PASSED Complete 4_pass_of_4			
ISI Individual Duplex Hook Call	PASSED Complete 8_pass_of_8			
Handling of Call Establishment Failures	PASSED Complete 2_pass_of_2			
<b>Resource Allocation Policy</b>	PASSED Complete 6_pass_of_6			
Permanent Resource Allocation	PASSED Complete 6_pass_of_6			
Temporary Resource Allocation	Not Supported			
Mixed Resource Allocation	Not Supported			
<b>MS-ISDN</b>	PASSED Complete 2_pass_of_2			
MS-ISDN as CPI in PSTN originated calls over ISI	PASSED Complete 2_pass_of_2			

<b>TTR003-03 SDS</b>				
<b>Individually addressed ISI short data service</b>	PASSED Complete 50_pass_of_50			
Individual Status message over ISI	PASSED Complete 16_pass_of_16			
Individual SDS-TL message over ISI	PASSED Complete 16_pass_of_16			
Individual Status message over ISI, forwarding to a third SwMI	PASSED Complete 8_pass_of_8			
Individual SDS-TL message over ISI, forwarding to a third SwMI	PASSED Complete 8_pass_of_8			
Individual SDS-TL message over ISI, using MS-ISDN as CPI	PASSED Complete 2_pass_of_2			
<b>Group addressed ISI short data service</b>	PASSED Complete 36_pass_of_36			
Group addressed Status message over ISI	PASSED Complete 18_pass_of_18			
Group addressed SDS message over ISI	PASSED Complete 18_pass_of_18			
<b>TTR003-06 Group Call</b>				
<b>Normal ISI Group Call</b>	PASSED Complete 8_pass_of_8			
Normal ISI Group Call	PASSED Complete 8_pass_of_8			
Delayed ISI Group Call setup	Not Supported			
Late entry triggered by a timer	PASSED Complete 4_pass_of_4			
Late entry triggered by PTT	Not Supported			
<b>Transmission control</b>	PASSED Complete 4_pass_of_4			
Transmission queuing management	PASSED Complete 4_pass_of_4			
Transmission pre-emption management	PASSED Complete 4_pass_of_4			
<b>Emergency Group Call</b>	PASSED Complete 8_pass_of_8			
Emergency Group Call	PASSED Complete 8_pass_of_8			
<b>Abnormal Cases</b>	PASSED Complete 10_pass_of_10			
Abnormal Cases	PASSED Complete 10_pass_of_10			