

## DMO TETRA Interoperability Certificate

### Sepura, SRG3900, Gateway

Vienna, June 2012

Latest Certified Gateway SW Release:	1678 020 03577
Latest Certified Gateway HW Release:	MSUTW01T2C0G00

ISCTI (Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione) certifies that the Sepura SRG3900 Gateway has been subject to interoperability testing for the "certified" features listed on second page of this certificate with the following DM Terminal Sepura STP8000 and the 3T Communications eXTRAS SwMI 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 single test session between 3T Communications and Sepura on June 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 Proietti

**Radio Office Manager**

Giuseppe Pierri



ISCTI - V.le America 201, 00144 Rome, Italy  
Ph.: +39 06 5444 2663, Fax: +39 06 5410904  
e-mail: [tetra\\_ctc.iscom@sviluppoeconomico.gov.it](mailto:tetra_ctc.iscom@sviluppoeconomico.gov.it),  
Web: [www.sviluppoeconomico.gov.it](http://www.sviluppoeconomico.gov.it)

**Date of issue:**

**16 July 2012**

**v 1**

## Certified features

Gateway Test Session Vienna, June 2012 Sepura SRG3900	3T Communications eXTRAS	Sepura STP8000
<b>Software</b>	eXTRAS 3.4.2	v10.5 [1678 020 02937]
<b>Hardware</b>	eXTRAS R3	PSNTW101T300P 0001
Registration	Certified	Certified
Presence Signal	Certified	Certified
Usage Restriction Types	Certified	Certified
Individual Call	-	-
Group Call	Certified	Certified
Status	Certified	Certified
SDS-TL	Certified	Certified
Pre-emption	Certified	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 results 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 showed 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 test cases 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 the 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 (ran out of time)
<b>Failed</b>	At least one of the required test cases has failed.
<b>No_Equipment</b>	At least one of the required test cases has not been executed due to unavailability of a needed equipment.
	The Result is not relevant (or needed) to verify the SwMI and/or Gateway features

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 annex B.
<b>Regression</b>	Only a selection of the mandatory the test cases associated to the feature is 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 complete tested in a previous test session against the same functionality, see manufacturer declaration in annex B.

<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-feature cannot be tested. The following table describes meaning of the used abbreviation:

<b>Indication</b>	<b>Definition</b>
<b>Not supported</b>	The SwMI and/or MS and/or GW-nr do not support the minimum features required to verify these items

ISCTI has made every effort to ensure that every result have 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 the SwMI, the Gateway and the DM Terminals under test in the test session 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 website (<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 Place/Date	3T Communications, Vienna, June 2012
SwMI Type	3T Communications eXTRAS
SwMI HW Release	eXTRAS R3
SwMI SW Release	eXTRAS R3.4.2
DM Gateway Type	Sepura SRG3900
DM Gateway HW release	MSUTW101T2C0G00
DM Gateway SW release	1678 020 03577
DM Terminal 1 Type	Sepura STP8000
DM Terminal 1 HW release	PSNTW101T300P0001
DM Terminal 1 SW release	v10.5 [1678 020 02937]
TIP Specs and TIP Compliance Test Plans	
Gateway	TTR002-02 v110 IOP002-02 v102 TIC-RT002-02 v109

## Feature compliance report

Gateway Test Session Vienna, June 2012 Sepura SRG3900	3T Communications eXTRAS	Sepura STP8000
Registration	PASSED Verified	PASSED Verified
Registration	PASSED Verified	PASSED Verified
Presence Signal	PASSED Complete	PASSED Complete
Presence Signal	PASSED Complete	PASSED Complete
Usage Restriction Types	PASSED Verified	PASSED Verified
Single Address	PASSED Verified	PASSED Verified
Two Addresses	Not Supported	Not Supported
Three addresses	Not Supported	Not Supported
Single MNI	PASSED Complete	PASSED Complete
Complying with URT Validity Time	PASSED Complete	PASSED Complete
Individual Call		
DMO to TMO individual call	Not Supported	Not Supported
TMO to DMO individual call	Not Supported	Not Supported

Group Call	PASSED Verified	PASSED Verified
DMO to TMO group call	PASSED Complete	PASSED Complete
TMO to DMO group call	PASSED Verified	PASSED Verified
Call Maintenance (including Changeover)	PASSED Verified	PASSED Verified
Status	PASSED Complete	PASSED Complete
Group addressed Status	PASSED Complete	PASSED Complete
Individually addressed Status	PASSED Complete	PASSED Complete
SDS-TL	PASSED Complete	PASSED Complete
Group Addressed SDS-TL	PASSED Complete	PASSED Complete
Individually Addressed SDS-TL	PASSED Complete	PASSED Complete
Pre-emption	PASSED Verified	PASSED Verified
Pre-emption of DMO terminal	PASSED Verified	PASSED Verified
Pre-emption of Gateway	PASSED Complete	PASSED Complete