TETRA ASSOCIATION

ISCTI

TETRA Interoperability Certificate

Motorola, Dimetra IP, SwMI –
Motorola, MTP810 Ex, Terminal

Copenhagen, January 2011

Latest Certified SwMI SW Release:	7.1	**Latest Certified Terminal SW Release:**	MR5.12
Latest Certified SwMI HW Release:	7.1	**Latest Certified Terminal HW Release:**	PT911BLEX

ISCTI (Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione) certifies, that the Motorola, Dimetra IP, SwMI and the Motorola, MTP810 Ex, 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).

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

Detailed test results and explanation about the procedure used to provide verdicts are listed in the Test Report associated to this Certificate.

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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	-
In Call Signalling	Certified
Subscriber Class Procedures	Certified
Common Secondary Control Channels	Certified
BS Fallback Operation	Partial
Energy Economy Mode	Certified
Transmit Inhibit	Certified
Mixed band operation	Certified
Tetra Association TTR001-02:SDS	
SDS Type 1, 2 or 3	-
SDS-TL	Certified
Store and Forward	Certified
Tetra Association TTR001-03:DGNA	
Support for individually addressed DGNA	Certified
Support for group addressed DGNA	Partial
Tolerance of unsupported DGNA functions	-

Tetra Association TTR001-04:Auth	
SwMI Initiated (non-mutual) Authentication	Certified
SwMI Initiated Authentication made Mutual by MS	Certified
TEI Query	-
Tetra Association TTR001-05:PD	
Context Management	Certified
Single Slot Packet Data	Certified
Multi Slot Packet Data	Certified
TEDS	-
Mixed band operation	Certified
Tetra Association TTR001-09:AL	
Ambience Listening	Certified
Interaction with Transmit Inhibit	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	Certified
Key Status demand	Certified
Change of Security Class for Fallback operation	Certified
Change of Security Class (other than for Fallback operation)	Certified
Key Management for Secure Direct Mode Operation	Certified
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	-
Permanent disable of an MS	Certified

Tetra Association TTR001-21: Callout	
Full Callout	Partial
Simple Callout	-
Interaction with other services and events	Certified
Callout Test and Callout Availability	-
Callout Text and Callout Pre-Coded Status	Certified
Storage of Callout Information	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
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 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
Passed (note x)	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. A note can be associated to this result, if further clarification on the behaviour of the equipment is needed
Time_limited	Not all Mandated tests (as per TIC-RT indication) have been executed (ran out of time)

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
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 annex A

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 annex A
Regression on spot	The regression method has been applied on the verdicts based on the spot testing method

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 Association web site
(http://www.tetra-association.com/tetramou.aspx?&id=2636).

The feature results are shown in the tables below

Information on equipment under test and document references

Test Session	Motorola Copenhagen January 2011	Motorola Copenhagen January 2009		
SwMI Type	Dimetra IP	Dimetra IP 6.2SSR		
SwMI HW Release	7.1	Dimetra IP		
SwMI SW Release	7.1	6.2SSR		
Terminal Type	MTP810 Ex	MTP810 Ex		
Terminal HW Release	PT911BLEX	PT911BLEX		
Terminal SW Release	MR5.12	MR8.6.1		
TIP Specs and TIP Compliance Test Plans				
Core	TTR001-01 v5.1.1 IOP001-01 v2.6.4 TIC-RT001-01 v250	TTR001-01 v500 IOP001-01 v260 TIC-RT001-01 v235		
SDS	TTR001-02 v2.0.1 IOP001-02 v2.0.0 TIC-RT001-02 v211	TTR001-02 v201 IOP001-02 v200 TIC-RT001-02 v206		
DGNA	TTR001-03 v2.0.0 IOP001-03 v2.0.1 TIC-RT001-03 v218	TTR001-03 v200 IOP001-03 v201 TIC-RT001-03 v212		
Auth	TTR001-04 v3.0.0 IOP001-04 v2.0.0 TIC-RT001-04 v222	TTR001-04 v300 IOP001-04 v200 TIC-RT001-04 v216		

PD	TTR001-05 v3.0.0 IOP001-05 v3.0.2 TIC-RT001-05 v300	TTR001-05 v200 IOP001-05 v200 TIC-RT001-05 v224		
AL	TTR001-09 v2.0.0 IOP001-09 v1.1.0 TIC-RT001-09 v121	TTR001-09 v200 IOP001-09 v110 TIC-RT001-09 v113		
AIE	TTR001-11 v3.0.0 IOP001-11 v3.0.0 TIC-RT001-11 v3018	TTR001-11 v300 IOP001-11 v300 TIC-RT001-11 v3014		
SI	TTR001-12 v1.0.0 IOP001-12 v1.0.0 TIC-RT001-12 v125	TTR001-12 v100 IOP001-12 v100 TIC-RT001-12 v118		
ED	TTR001-13 v2.0.0 IOP001-13 v1.0.0 TIC-RT001-13 v143	TTR001-13 v200 IOP001-13 v100 TIC-RT001-13 v136		
Callout	TTR001-21 v1.0.0 IOP001-21 v1.0.0 TIC-RT001-21 v101	Not Tested		

Feature compliance report

Test Session	Motorola Copenhagen January 2011	Motorola Copenhagen January 2009		
Core				
Registration	PASSED Spot 1_pass_of_3	Spot 0_pass_of_3		
ITSI attach	PASSED Complete 1_pass_of_1	Spot 0_pass_of_1		
SwMI initiated location updating	Spot 0_pass_of_1	Spot 0_pass_of_1		
LA timer based Periodic location updating	Not Supported	Not supported		
De-registration	Spot 0_pass_of_1	Spot 0_pass_of_1		
Group Management	PASSED Spot 3_pass_of_9	PASSED Spot 2_pass_of_9		
Single group attachment	PASSED Spot 1_pass_of_4	Spot 0_pass_of_4		
Multiple group attachment	PASSED Spot 1_pass_of_3	PASSED Spot 1_pass_of_3		
MS initiated group detachment	PASSED Spot 1_pass_of_2	PASSED Spot 1_pass_of_2		
SwMI initiated group management	Not Supported	Not supported		
Group call	PASSED Spot 1_pass_of_9	PASSED Spot 1_pass_of_8		
Normal group call	PASSED Spot 1_pass_of_3	Spot 0_pass_of_3		
Late entry	Spot 0_pass_of_1	Spot 0_pass_of_1		
Priority Group scanning	Spot 0_pass_of_3	Spot 0_pass_of_3		
Call setup modifications	Spot 0_pass_of_1	Not supported		
Resource Queuing based on Call Priority	Spot 0_pass_of_1	PASSED Complete 1_pass_of_1		
Broadcast Call	Not Supported	-		

Limited coverage notification	Not Supported	-		
Individual call	PASSED Spot 1_pass_of_7	PASSED Spot 2_pass_of_7		
Simplex individual call	PASSED Spot 1_pass_of_3	Spot 0_pass_of_3		
Duplex individual call	Spot 0_pass_of_2	PASSED Spot 1_pass_of_2		
Call setup modifications	Not Supported	Not supported		
Resource Queuing based on Call Priority	Spot 0_pass_of_2	PASSED Spot 1_pass_of_2		
Indication of imminent call disconnection	Not Supported	Not supported		
Status messages	PASSED Complete 1_pass_of_1	Spot 0_pass_of_1		
Individual addressed Status transfer	Not Supported	Not supported		
Group addressed Status transfer	PASSED Complete 1_pass_of_1	Spot 0_pass_of_1		
Pre-emptive Priority Call	Spot 0_pass_of_1	Spot 0_pass_of_1		
Pre-emption of Resources	Spot 0_pass_of_1	Spot 0_pass_of_1		
Pre-emption of Busy Users	Not Supported	Not supported		
Emergency Call	PASSED Spot 1_pass_of_2	PASSED Spot 1_pass_of_2		
Pre-emption of Resources	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
Pre-emption of Busy Users	Spot 0_pass_of_1	Spot 0_pass_of_1		
Call setup modifications	Not Supported	Not supported		
Call disconnection by non-call owner	Not Supported	-		
Cell Re-selection	PASSED Spot 3_pass_of_16	PASSED Spot 4_pass_of_16		
Undeclared	Spot 0_pass_of_1	Spot 0_pass_of_1		
Unannounced	PASSED Spot 1_pass_of_7	PASSED Spot 1_pass_of_7		
Announced - with Call Restoration	PASSED Spot	PASSED Spot 3_pass_of_8		

	2_pass_of_8			
Announced - without Call Restoration	Not Supported	Not supported		
Expedited	Not Supported	-		
PSTN interconnect	PASSED Spot 1_pass_of_4	PASSED Spot 1_pass_of_3		
TETRA Originated Call	PASSED Spot 1_pass_of_2	Spot 0_pass_of_2		
PSTN Originated Call	Spot 0_pass_of_1	PASSED Complete 1_pass_of_1		
DTMF over-dial	Spot 0_pass_of_1	Not supported		
Emergency Telephone Calls	Not Supported	Not supported		
MS-ISDN Numbering				
MS ISDN - Voice Call	Not Supported	Not supported		
MS-ISDN Status	Not Supported	Not supported		
In Call Signalling	Spot 0_pass_of_5	PASSED Spot 1_pass_of_5		
Slow Signalling on Traffic Channel (SACCH)	Spot 0_pass_of_4	PASSED Spot 1_pass_of_4		
Fast Signalling on Traffic Channel (FACCH)	Spot 0_pass_of_1	Spot 0_pass_of_1		
Subscriber Class Procedures	Spot 0_pass_of_4	PASSED Spot 1_pass_of_4		
Cell Selection based on Subscriber Class	Spot 0_pass_of_1	Spot 0_pass_of_1		
Subscriber Class Delivery during Location Update	Not Supported	Not supported		
Use of Preferred Subscriber Classes	Spot 0_pass_of_3	PASSED Spot 1_pass_of_3		
Common Secondary Control Channels	Spot 0_pass_of_7			
One C-SCCH per cell	Spot 0_pass_of_4	Not supported		
Two C-SCCH per cell	Spot	Not supported		

	0_pass_of_3			
Three C-SCCH per cell	Spot 0_pass_of_2	Not supported		
BS Fallback Operation	PASSED Spot No_Equipment 2_pass_of_12	PASSED Spot 2_pass_of_12		
Switch to/from BS Fallback Operation	PASSED Spot 1_pass_of_2	Spot 0_pass_of_2		
Roaming with BS Fallback Operation	Spot No_Equipment 0_pass_of_6	Spot 0_pass_of_6		
Services with BS Fallback Operation	PASSED Spot 1_pass_of_4	PASSED Spot 2_pass_of_4		
Energy Economy Mode	PASSED Spot 1_pass_of_3			
Energy Economy Mode Operation	PASSED Spot 1_pass_of_3	Not supported		
Transmit Inhibit	PASSED Spot 2_pass_of_5	PASSED Spot 1_pass_of_5		
TXI Activation & De-Activation without Status message	PASSED Complete 1_pass_of_1	Not supported		
TXI Activation & De-Activation with Status message	Spot 0_pass_of_3	Spot 0_pass_of_4		
Receipt of group addressed service during TXI	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
Mixed band operation	PASSED Spot 1_pass_of_4	-		
Mixed band operation, inter-cell	PASSED Spot 1_pass_of_4	-		
Mixed band operation, intra-cell	PASSED Spot 1_pass_of_3	-		
Mixed band operation, Full	PASSED Spot 1_pass_of_4	-		

Short Data Service (SDS)				
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 Spot 1_pass_of_10	PASSED Spot 1_pass_of_5		
Individually Addressed	Spot 0_pass_of_2	Spot 0_pass_of_1		
Group Addressed	PASSED Spot 1_pass_of_2	Spot 0_pass_of_2		
Using MS-ISDN dialling	Not Supported	Not supported		
Using UCS2 coding scheme	Spot 0_pass_of_4	PASSED Spot 1_pass_of_2		
Using 7-bit coding scheme	Spot 0_pass_of_2	Not supported		
Store and Forward	PASSED Spot 1_pass_of_7			
Individually Addressed	PASSED Spot 1_pass_of_7	Not supported		
Group Addressed	Not Supported	Not supported		
Dynamic Group Number Assignment (DGNA)				
Support for individually addressed DGNA	PASSED Spot 2_pass_of_6	PASSED Spot 1_pass_of_6		
Support for individually addressed DGNA assignment without attachment	PASSED Spot 2_pass_of_4	PASSED Spot 1_pass_of_4		
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	Not Supported	Not supported		
Support for individually addressed DGNA assignment with rejected attachment	Not Supported	Not supported		
Support for individually addressed assigment for pre-programmed group	Spot 0_pass_of_4	Spot 0_pass_of_4		

Support for group addressed DGNA	Spot No_Equipment 0_pass_of_6	FAILED Spot 1_pass_of_5		
Support for group addressed DGNA assignment	Spot No_Equipment 0_pass_of_3	Spot 0_pass_of_2		
Management of 'group assignment lifetime'	Spot No_Equipment 0_pass_of_2	FAILED Spot 0_pass_of_2		
Support for group addressed DGNA deassignment	Spot 0_pass_of_1	PASSED Complete 1_pass_of_1		
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		
Authentication				
SwMI Initiated (non-mutual) Authentication	Spot 0_pass_of_3	Spot 0_pass_of_3		
Attach with authentication	Spot 0_pass_of_1	Spot 0_pass_of_1		
Roaming with authentication	Spot 0_pass_of_1	Spot 0_pass_of_1		
SwMI rejects MS during authentication	Spot 0_pass_of_1	Spot 0_pass_of_1		
MS rejects SwMI during authentication	Not Supported	Not supported		
SwMI Initiated Authentication made Mutual by MS	PASSED Spot 1_pass_of_2	PASSED Spot 1_pass_of_2		
Attach with authentication	Spot 0_pass_of_1	Spot 0_pass_of_1		

Roaming with authentication	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
TEI Query				
TEI Query Operation	Not Supported	Not supported		
TETRA Packet Data				
Context Management	PASSED Spot 2_pass_of_11	PASSED Spot 1_pass_of_11		
Context Activation	PASSED Spot 2_pass_of_7	PASSED Spot 1_pass_of_7		
User authentication	Spot 0_pass_of_4	Spot 0_pass_of_4		
Single Slot Packet Data	PASSED Spot 2_pass_of_10	PASSED Spot 1_pass_of_10		
Data Transfer	PASSED Spot 1_pass_of_7	PASSED Spot 1_pass_of_7		
Cell re-selection	PASSED Spot 1_pass_of_3	Spot 0_pass_of_3		
Multi Slot Packet Data	PASSED Spot 1_pass_of_4	PASSED Spot 3_pass_of_4		
Data Transfer	PASSED Spot 1_pass_of_4	PASSED Spot 3_pass_of_4		
TEDS		-		
TEDS with Context Activation	Not Supported	-		
TEDS Data Transmission	Not Supported	-		
TEDS Cell Reselection	Not Supported	-		
Mixed band operation	PASSED Spot 1_pass_of_2	-		
Mixed band operation, inter-cell	PASSED Spot 1_pass_of_2	-		
Mixed band operation, intra-cell	PASSED Spot 1_pass_of_2	-		
Mixed band operation, Full	PASSED Spot 1_pass_of_2	-		

TETRA Ambience Listening (SS-AL)				
Ambience Listening	PASSED Spot 1_pass_of_5	PASSED Spot 1_pass_of_5		
SS-AL Call Setup	Spot 0_pass_of_2	Spot 0_pass_of_2		
MS initiated SS-AL disconnection	PASSED Spot 1_pass_of_3	PASSED Spot 1_pass_of_3		
No Indication to affected user	PASSED Spot 1_pass_of_5	PASSED Spot 1_pass_of_5		
Interaction with Transmit Inhibit	Spot 0_pass_of_1	-		
AL can override TxI	Not Supported	-		
AL cannot override TxI	Spot 0_pass_of_1	-		
Air Interface Encryption				
Security Class 2 Air Interface Encryption	PASSED Spot 5_pass_of_18	PASSED Spot 4_pass_of_19		
Location Updating and AI Signalling Protection	PASSED Spot 2_pass_of_7	PASSED Spot 1_pass_of_8		
TM-SCK provisioning during location updating	PASSED Spot 1_pass_of_2	Spot 0_pass_of_2		
Communications between parties using encryption	Spot 0_pass_of_2	Spot 0_pass_of_2		
Communications between clear and encrypted parties	PASSED Spot 1_pass_of_3	PASSED Spot 1_pass_of_3		
Communications between encrypted parties on a channel designated to operate in clear	PASSED Spot 1_pass_of_2	PASSED Spot 1_pass_of_2		
OTAR and Change of TM-SCK	PASSED Spot 1_pass_of_4	PASSED Spot 1_pass_of_4		
Security Class 3 Air Interface Encryption	PASSED Spot 6_pass_of_19	PASSED Spot 6_pass_of_19		
Location Updating and AI Signalling Protection	PASSED Spot 3_pass_of_9	PASSED Spot 5_pass_of_9		

DCK Forwarding at MS request	Not Supported	Not supported		
DCK Forwarding by SwMI (without MS request)	Spot 0_pass_of_1	PASSED Complete 1_pass_of_1		
DCK Retrieval	PASSED Spot 1_pass_of_4	PASSED Complete 4_pass_of_4		
CCK provisioning during location updating	PASSED Spot 2_pass_of_4	Spot 0_pass_of_4		
Communications between parties using encryption	Spot 0_pass_of_2	Spot 0_pass_of_2		
Communications between clear and encrypted parties	PASSED Spot 1_pass_of_3	Spot 0_pass_of_3		
Communications between encrypted parties on a channel designated to operate in clear	PASSED Spot 1_pass_of_2	Spot 0_pass_of_2		
OTAR and Change of CCK	PASSED Spot 1_pass_of_4	PASSED Spot 1_pass_of_4		
Security Class 3G Air Interface Encryption	PASSED Spot 1_pass_of_9	Spot Time_Limited 0_pass_of_9		
GCK Key Association setting	Spot 0_pass_of_3	Spot 0_pass_of_3		
Communications between parties using encryption	Spot 0_pass_of_2	Spot 0_pass_of_2		
Communications between clear and encrypted parties	Spot 0_pass_of_1	Spot 0_pass_of_1		
OTAR and Change of GCK	PASSED Spot 1_pass_of_3	Spot Time_Limited 0_pass_of_3		
Change of CMG and GSKO	PASSED Spot 1_pass_of_5	PASSED Spot 1_pass_of_5		
OTAR and change of CMG and GSKO	PASSED Spot 1_pass_of_5	PASSED Spot 1_pass_of_5		
Key Status demand	Spot 0_pass_of_4	Spot 0_pass_of_4		
SCK Key Status demand	Spot 0_pass_of_2	Spot 0_pass_of_2		

GCK Key Status demand	Spot 0_pass_of_1	Spot 0_pass_of_1		
GSKO Key Status demand	Spot 0_pass_of_1	Spot 0_pass_of_1		
Change of Security Class for Fallback operation	PASSED Spot 2_pass_of_12	PASSED Spot 3_pass_of_12		
Seamless change to Security Class 2 for BS Fallback operation	PASSED Spot 2_pass_of_10	PASSED Spot 3_pass_of_10		
Non-seamless change to Security Class 2 for BS Fallback operation	Not Supported	Not supported		
Provisioning of TM-SCK for fallback to Security Class 2 operation	Spot 0_pass_of_2	Spot 0_pass_of_2		
Change to Security Class 1 for BS Fallback operation	Not Supported	Not supported		
Change of Security Class (other than for Fallback operation)	PASSED Spot 1_pass_of_5	PASSED Spot 1_pass_of_5		
Change between Security Class 3 and Security Class 3G	Spot 0_pass_of_2	Spot 0_pass_of_2		
Change between Security Class 2 and Security Class 3	Spot 0_pass_of_2	Spot 0_pass_of_2		
Change from Security Class 3G to Security Class 2	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1		
Key Management for Secure Direct Mode Operation	PASSED Spot 1_pass_of_3	PASSED Spot 1_pass_of_3		
OTAR and change of DM-SCK	PASSED Spot 1_pass_of_3	PASSED Spot 1_pass_of_3		
Service Interaction				
MS initiated Service Interaction	PASSED Spot 1_pass_of_3	Spot 0_pass_of_3		
MS initiated Circuit Mode Call during another Circuit Mode Call	PASSED Complete 1_pass_of_1	Spot 0_pass_of_1		

MS initiated Circuit Mode Call during Packet Mode Transfer	Spot 0_pass_of_2	Spot 0_pass_of_2		
MS initiated Packet Mode Transfer during Circuit Mode Call	Not Supported	Not supported		
SwMI initiated Service Interaction	PASSED Spot 2_pass_of_6	PASSED Spot 2_pass_of_6		
SwMI initiated Circuit Mode Call during another Circuit Mode Call	PASSED Spot 1_pass_of_4	PASSED Spot 1_pass_of_4		
SwMI initiated Circuit Mode Call during Packet Mode Transfer	PASSED Spot 1_pass_of_2	PASSED Spot 1_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	-		
Call Waiting in Group Call	Not Supported	-		
Enable Disable				
Enable and temporary disable of an MS	FAILED Spot 2_pass_of_8	FAILED Spot 0_pass_of_8		
Enable and temporary disable of an MS without authentication	PASSED Spot 1_pass_of_2	Spot 0_pass_of_2		
Enable and temporary disable of an MS with authentication	Not Supported	Not supported		
Registration of a temporary disabled MS	PASSED Spot 1_pass_of_2	Spot 0_pass_of_2		
Rejection of applicable invalid enable/disable requests	Spot 0_pass_of_3	Spot 0_pass_of_3		
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	FAILED Complete 0_pass_of_1	FAILED Complete 0_pass_of_1		
Permanent disable of an MS	Spot 0_pass_of_2	PASSED Spot 1_pass_of_2		

Permanent disable of an MS with authentication	Spot 0_pass_of_1	PASSED Complete 1_pass_of_1		
Permanently Disabled MS cannot send air interface signalling	Spot 0_pass_of_1	Spot 0_pass_of_1		
Callout				
Full Callout	Spot Time_Limited 2_pass_of_16			
Individually Addressed Full Callout with request for Terminal Receipt message and with request for User Receipt message	Spot 0_pass_of_2	-		
Group Addressed Full Callout without request for Terminal Receipt message and without request for User Receipt message	Spot Time_Limited 0_pass_of_2	-		
Using current selected group during Full Callout	Time_Limited 0_pass_of_1	-		
Full Callout with immediate change to Callout Group	Spot 0_pass_of_2	-		
Full Callout with change to Callout Group on non-rejecting user response	Spot 0_pass_of_1	-		
Full Callout with rejecting User Receipt message	Spot 0_pass_of_1	-		
Full Callout with timeout for User Receipt message	PASSED Complete 1_pass_of_1	-		
Callout Incident Information messages	Spot 0_pass_of_2	-		
Group Call to Callout Group	Spot 0_pass_of_4	-		
End of Full Callout	Spot Time_Limited 1_pass_of_4	-		
Simple Callout				
Individually Addressed Callout with request for Terminal Receipt message and with request for User Receipt message	Not Supported	-		
Individually Addressed Callout with request for Terminal Receipt message and without request for User Receipt message	Not Supported	-		
Group Addressed Callout without request for Terminal Receipt message and without request for User Receipt message	Not Supported	-		
Group Addressed Callout without request for Terminal Receipt message and with request for User Receipt message	Not Supported	-		

Simple Callout with rejecting User Receipt message	Not Supported	-		
Simple Callout with timeout for User Receipt message	Not Supported	-		
Interaction with other services and events	PASSED Spot 6_pass_of_23			
Interaction with previous Callout	PASSED Spot 1_pass_of_2	-		
Interaction with emergency call	Spot 0_pass_of_3	-		
Interaction with non-emergency call	PASSED Spot 3_pass_of_7	-		
Interaction with data and status	PASSED Spot 2_pass_of_11	-		
Interaction with local services	Not Supported	-		
Manual exit	Spot 0_pass_of_1	-		
Callout Test and Callout Availability				
Callout Test	Not Supported	-		
Callout Availability	Not Supported	-		
Callout Text and Callout Pre-Coded Status	PASSED Spot 2_pass_of_7			
Callout Text	PASSED Spot 2_pass_of_4	-		
Concatenated Callout Text	Spot 0_pass_of_3	-		
Callout Pre-Coded Status	Not Supported	-		
Storage of Callout Information	Spot 0_pass_of_2			
Viewing Callout information from previous Callout(s)	Spot 0_pass_of_1	-		
Deletion of Callout information from previous Callout(s)	Spot 0_pass_of_1	-		

Annex A: Statement of Commonality

TETRA MoU
IOP Testing and Certification

Statement of Commonality

Reference product	Software Release	Hardware Release
Motorola MTP850 S	MR5.12	PT912BS

Motorola Solutions Danmark A/S, Sydvestvej 15, DK2600 Glostrup, Denmark

Declare that for IOP testing, the following products are equivalent to the reference product:

Product	Software Release	Hardware Release
Motorola MTP850 Ex	MR5.12	PT911BSEX
Motorola MTP810 Ex	MR5.12	PT911BLEX

This declaration is made due to these three products having identical software code for implementing the upper and lower MAC, layer 2, and layer 3 protocols in accordance with EN 300 392-2 with reference to IOP testing, having only differences related to them supporting different hardware platforms.

MTP850 Ex and MTP810 Ex do **not** support **End to End Encryption (E2EE) and Radio User Assignment (RUA)** features due to market differentiation.

We therefore request spot testing of the Motorola MTP850 Ex and MTP810 Ex terminals during the official Motorola IOP test session that took place from Jan 19th to April 19th, 2011, where full testing of the Motorola MTP850 S terminal was performed.

Functionalities to be spot tested are listed in the relevant TIC-RT declaration.

For and on behalf of Motorola
Authorised signatory:

10th June, 2011 .....

Ole Hammer

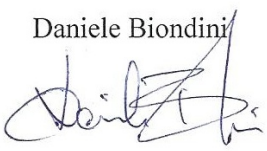
Annex B

List of Revisions of the Certificate

Date	Ver.	Modification
24 June 2011	1	First published version
5 Jul 2011	2	updating: - editorial changes regarding the name of the terminal - addition of the Callout feature

IOP Test Engineer

Daniele Biondini



Radio Office Manager

Giuseppe Pierri