TETRA IOP CERTIFICATE

DEKRA
Digital & Product Solutions
Innovating Safety & Security

DMO TETRA Interoperability Certificate

Direct Mode Operation Gateway

Motorola Solutions, MXM600, Gateway

Test Session #1002, hosted by Motorola on BDBOS/Airbus SwMI in Berlin, GER, June 2025

Latest Certified MXM600 SW Release:	MR2025.1
Latest Certified MXM600 HW Release:	MTC953DE

DEKRA certifies, that the Motorola Solutions MXM600 Terminal have been subject to interoperability Gateway testing for the "Certified" features listed on the second page of this certificate in accordance with the TETRA Interoperability Profiles, TIP compliance Test Plan and the related TETRA interoperability requirement tables.
The table lists all the available TETRA interoperability profiles, and summarises 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).

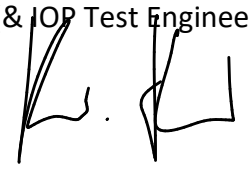
A breakdown into the feature details is given in the Feature Compliance Overview section of this certificate.

The following DMO Terminals have been used:

Motorola MXM600, MXP600 and the Airbus TETRA System Rel.7 SwMI

This certificate has been issued following a single-test session, fully witnessed, between Airbus Defence & Space and Motorola Solutions in Berlin, GER during June 2025.
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.

Authorized CB signatory:
(& IOP Test Engineer):



Karlheinz Salzer
Head of DEKRA TETRA Certification Body

Date of Issue:
December 18 - 2025
version: v0

Certified features

MXM600 Test Session #1002, Berlin June 2025 Motorola MXM600	Airbus TETRA System Rel7.0	Motorola, MXM600	Motorola, MXP600
Hardware	**M98F (DXTip)**	**MTC953DE**	**PTW952HEB**
Software	**Rel. 7**	**MR2025.1**	**MR2025.1**
Feature TTR002-02 Gateway			
Registration	Certified	Certified	Certified
Presence Signal	Certified	Certified	Certified
Usage Restriction Types	Certified	Certified	Certified
Individual Call	Certified	Certified	Certified
Individual Call Release	Certified	Certified	Certified
Group Call	Partial	Partial	Partial
Status	Certified	Certified	Certified
SDS-TL	Certified	Certified	Certified
Pre-emption	Partial	Partial	Partial
Feature TTR002-05 AIE Gateway			
DMO AIE Encryption	-	-	-

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-features, 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 blue background and the associated sub-features (or second level features) have a white background.
The outcome assigned to a 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 or sub-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 or sub-feature

The verdict associated to the feature or sub-feature gives also indication about the method used to test that feature or sub-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 or sub-feature have been executed
Spot	Only a selection of the mandatory test cases associated to the feature or sub-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 or sub-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 (see the previous item) has been applied at this session on the verdicts from the referenced (previous) session where the spot testing method (see above) had been applied.
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

DEKRA has made every effort to ensure that every result has been correctly evaluated in accordance with the relevant TIPs, Test Plans and TIC-RTs. DEKRA has no liability for the test results, or towards the manufacturers.
The tables on the following page list HW and SW releases of SwMI and Terminal under test and the used TIP specifications, Test Plans and TIC-RTs.
This Certificate and Certificates from previous test sessions are available on the TCCA web site
https://tcca.info/interoperability/interoperability-certificates-and-test-reports

The feature results are shown in the tables below.

Information on equipment under test

SwMI Manufacturer	Airbus Defence & Space
SwMI Model	Airbus TETRA System Rel7.0
SwMI HW Release	M98F (DXTip)
SwMI SW Release	Rel 7.0
DM GW Manufacturer	Motorola Solutions
DM GW Model	MXM600
DM GW HW Release	MTC953DE
DM GW SW Release	MR2025.1
DM MS 1 Manufacturer	Motorola Solutions
DM MS 1 Model	MXP600
DM MS 1 HW Release	PTW952HEB
DM MS 1 SW Release	MR2025.1
DM MS 2 Manufacturer	Motorola Solutions
DM MS 2 Model	MXM600
DM MS 2 HW Release	MTC953DE
DM MS 2 SW Release	MR2025.1

Document references

DGW	TTR002-02 v1.2.0 IOP002-02 v1.4.0 TIC-RT002-02 v124
DAIE GW	TTR002-05 v2.0.0 IOP002-05 v2.0.0 TIC-RT002-05-2 v200

Feature compliance report

MXM600 Session #1002, Berlin June 2025 GW IOP with Motorola MXM600	DMO GW MXM600 via Airbus TETRA Rel7.0	Terminal 1 Motorola, MXP600	Terminal 2 Motorola, MXM600
Feature TTR002-02 Gateway - Fully Witnessed Testing			
Registration	PASSED Complete 3_pass_of_3	PASSED Complete 3_pass_of_3	PASSED Complete 3_pass_of_3
Registration	PASSED Complete 3_pass_of_3	PASSED Complete 3_pass_of_3	PASSED Complete 3_pass_of_3
Presence Signal	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Presence Signal	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Usage Restriction Types	PASSED Complete 4_pass_of_4	PASSED Complete 4_pass_of_4	PASSED Complete 4_pass_of_4
Single Address	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Two Addresses	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Three addresses	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
single MNI	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Complying with URT Validity Time	Not Supported	Not Supported	Not Supported
Individual Call	PASSED Complete 7_pass_of_7	PASSED Complete 7_pass_of_7	PASSED Complete 7_pass_of_7
DMO to TMO individual call	PASSED Complete 3_pass_of_3	PASSED Complete 3_pass_of_3	PASSED Complete 3_pass_of_3
TMO to DMO individual call	PASSED Complete 4_pass_of_4	PASSED Complete 4_pass_of_4	PASSED Complete 4_pass_of_4
Individual Call Release	PASSED Complete 2_pass_of_2	PASSED Complete 2_pass_of_2	PASSED Complete 2_pass_of_2
Individual call release with DM-GATE as DMO slave	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Individual call release with DM-GATE as DMO master	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Group Call	Incomplete 14_pass_of_16	Incomplete 14_pass_of_16	Incomplete 14_pass_of_16
DMO to TMO group call	Incomplete 5_pass_of_6	Incomplete 5_pass_of_6	Incomplete 5_pass_of_6
TMO to DMO group call	PASSED Complete 3_pass_of_3	PASSED Complete 3_pass_of_3	PASSED Complete 3_pass_of_3
Call Maintenance (including Changeover)	Incomplete 6_pass_of_7	Incomplete 6_pass_of_7	Incomplete 6_pass_of_7
Status	PASSED Complete 10_pass_of_10	PASSED Complete 10_pass_of_10	PASSED Complete 10_pass_of_10
Group addressed Status	PASSED Complete 8_pass_of_8	PASSED Complete 8_pass_of_8	PASSED Complete 8_pass_of_8
Individually addressed Status	PASSED Complete 2_pass_of_2	PASSED Complete 2_pass_of_2	PASSED Complete 2_pass_of_2
SDS-TL	PASSED Complete 10_pass_of_10	PASSED Complete 10_pass_of_10	PASSED Complete 10_pass_of_10

Group Addressed intra-MNI SDS-TL, unacknowledged, no reports	PASSED Complete 7_pass_of_7	PASSED Complete 7_pass_of_7	PASSED Complete 7_pass_of_7
Open TSI Addressed SDS-TL, unacknowledged, no reports	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Individually Addressed intra-MNI SDS-TL, unacknowledged	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Individually Addressed inter-MNI SDS-TL, unacknowledged	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1	PASSED Complete 1_pass_of_1
Multipart SDS-TL	Not Supported	Not Supported	Not Supported
Pre-emption	Incomplete 5_pass_of_6	Incomplete 5_pass_of_6	Incomplete 5_pass_of_6
Pre-emption of DMO terminal	PASSED Complete 2_pass_of_2	PASSED Complete 2_pass_of_2	PASSED Complete 2_pass_of_2
Pre-emption of Gateway	Incomplete 3_pass_of_4	Incomplete 3_pass_of_4	Incomplete 3_pass_of_4
Feature TTR002-05 AIE Gateway - Fully Witnessed Testing			
DMO AIE Encryption	Incomplete 0_pass_of_11	Incomplete 0_pass_of_11	Incomplete 0_pass_of_11
Encrypted Group Calls	Incomplete 0_pass_of_2	Incomplete 0_pass_of_2	Incomplete 0_pass_of_2
Encrypted Individual Calls	Incomplete 0_pass_of_1	Incomplete 0_pass_of_1	Incomplete 0_pass_of_1
Encrypted Status messages	Incomplete 0_pass_of_1	Incomplete 0_pass_of_1	Incomplete 0_pass_of_1
Pre-emption of encrypted activity	Incomplete 0_pass_of_1	Incomplete 0_pass_of_1	Incomplete 0_pass_of_1
Handling mismatched keys	Incomplete 0_pass_of_4	Incomplete 0_pass_of_4	Incomplete 0_pass_of_4
Encrypted SDS-TL messages	Incomplete 0_pass_of_2	Incomplete 0_pass_of_2	Incomplete 0_pass_of_2

Document History

Date	Version	Comment
14.11.2025	0	Published version
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