



TETRA SwMI Interoperability Certificate

25 June 2002

Marconi

Telelaboratoriet (TDC Mobil A/S) has witnessed that the Marconi/OTE infrastructure is operating in accordance with

TTR 001-03 v1.0.3 (May 2001), TETRA Interoperability Profile (TIP)
version 3 Part 3: Dynamic Group Number Assignment

for the following features:

Features	Tested(Yes/No)
• Dynamic group assignment	Yes
• Dynamic group de-assignment	Yes

The tests have been performed on Marconi/OTE infrastructure during the period 23th and 26th-28th March 2001 with System Version 2.1.0, hardware release SCN-T774-0117/01, software release TETRA_SCN_7_6_15, and the 1th-5th October 2001 with System Version Tetra 2.1.10 with hardware: SCN_T 774-0117/01 Rel.02, Software: TETRA_SCN_7_7_10.

The test results for the tested features can be found in table 1 and 2 of this certificate.

Authorised IOP test engineer

Telelaboratoriet, TDC Mobil A/S

Preben Raae Hansen

Sven Lundbech

Telelaboratoriet (TDC Mobil A/S) has made every effort to ensure that tests have been made correctly, and in accordance with TIP V3 Dynamic Group Number Assignment. Telelaboratoriet (TDC Mobil A/S) has no liability for the test results, or towards the manufacturers.

TDC Mobil A/S
Telelaboratoriet
Telegade 2
DK 2630 Taastrup

Tlf. +45 43 34 55 01
Fax +45 43 71 59 02

E-mail: info@telelaboratoriet.dk

Web-site: <http://www.telelaboratoriet.dk>

Information about the equipment used for testing

The tests performed on 23th and 26th-28th of March 2001 were performed using the following terminals:

Manufacturer	Terminal Type	Software/Hardware Release No.
Marconi/OTE ¹	PUMA T1	SW: 2.1.M HW: 02.01
Nokia	THR 420E	SW: HY11.03-9 HW: HRU420-02
Teltronic	MDT 400	SW: 01.02.01 HW: 01.03
Simoco Digital Systems	SRP1000	SW: 4313-327-72097 HW: PS3TT001T30000B
Simoco Digital Systems	SRM1000	SW: 4313-327-84999 HW: MS1TT001T20C00000

The tests performed on 1th-5th of October 2001 were performed using the following terminals:

Manufacturer	Terminal Type	Software/Hardware Release No.
Marconi/OTE ¹	PUMA T2	SW: TB23814F HW: 774-0162/01.01
Nokia	THR 850	SW: 2.16-0 HW: JL1-11
Motorola	MTM 300	SW: R35.40.12 HW: M12PCN6TZBN
Motorola	MTP 300	SW: R25.40.12 HW: H12PCH6T25BN
Simoco Digital Systems	SRM1000	SW: 4313-327-73043 HW: MS1TT00T20C0000
Simoco Digital Systems	SRP1000	SW: 4313-327-72142 HW: PS3TT001T30000B

¹ Terminals in their native system have not been targeted by IOP tests.



Additional information about the tests performed

The tests were performed in the 380-400 MHz band. The SwMI was operating with the following configuration:

MCC	238
MNC	5
Colour code	44
LA1 (Høje Tåstrup) carrier frequency (BS Tx)	393.5875 MHz
LA2 (Høje Tåstrup) carrier frequency (BS Tx)	393.6875 MHz
PSTN gateway	43552609
Subscriber classes	FFFF ₁₆

Test Results

The tables indicates whether or not tests addressing a specific requirement of the TIP specification have been performed, whether or the not the requirement is applicable for the combination of the SwMI and the terminal, and the result of the test if executed. Each entry of the table may take one of six values: -: No test performed, N/A: Not applicable, P: Pass, F: Fail, I: Inconclusive or NTA: No test case being available. NTA will only be allocated if both SwMI and terminal has indicated that they support (comply with) the corresponding feature (requirement); if either has indicated the feature (requirement) as not being supported then the entry will be N/A. In case of all entries of a row being N/A it should be assumed that this feature is not supported by the SwMI.

The test results have been derived from examining the behaviour of a live system. The verdicts indicated are based on the log evaluation of the information exchange between the SwMI and the terminals indicated in the table. The verdicts reflect the fact that at the time of the IOP testing it was/was not possible to demonstrate a behaviour that was in accordance with the related requirement.



- 7) The MS accepts the assignment and attachment of the DGNA group, however this is not reflected in the display. When the PTT is pressed the display indicates "no selected group" and the call is not established.

Table 2: Tests performed during the period 1th-5th October 2001

Abbreviations: -: Not performed F: Fail
 N/A: Not applicable I: Inconclusive
 P: Pass NTA: No test case available

Marconi/OTE SwMI	Nokia THR 850	Motorola MTM 300	Motorola MTP 300	Simoco Digital Systems SRM1000	Simoco Digital Systems SRP1000
7 SS-DGNA not supported (Test case Number index)					
7.4 General Reject of SS-DGNA	N/A	N/A	N/A	N/A	N/A
7.5 SS-DGNA specific functions not supported by MS (5.1)	N/A ¹	N/A ¹	N/A ¹	N/A ¹	N/A ¹
7.5 SS-DGNA specific functions not supported by SwMI (5.2)	N/A ²	N/A ²	N/A ²	N/A ²	N/A ²
8 Supported SS-DGNA functions					
8.1 Group assignment					
8.1.1 Assignment of a group without attachment (5.3)	F ³	F ⁴	F ⁴	P	P
8.1.2 Assignment of a group with attachment.					
8.1.2 Assignment of an always-scanned group (CoU = 8)	NTA	NTA	NTA	NTA	NTA
8.1.2 Assignment of group (CoU!= 5 or 8)					
8.1.2 MS required to attach that group after ITSI-ATTACH	NTA	NTA	NTA	NTA	NTA
8.1.2 MS NOT allowed to attach that group after ITSI-ATTACH (5.5)	F ⁵	N/A	N/A	P ⁶	P ⁶
8.1.2 MS NOT allowed to attach that group after ITSI-ATTACH (Single Group Mode MS)	-	N/A	N/A	N/A	N/A
8.1.2 Assignment of a Selected group (CoU = 5)					
8.1.2 MS required to re-attach that group after next location update	NTA	NTA	NTA	NTA	NTA
8.1.2 MS required to attach that group after ITSI-ATTACH (5.4)	N/A	F ⁷	-	N/A	N/A
8.1.2 MS NOT allowed to attach that group after ITSI-ATTACH	NTA	NTA	NTA	NTA	NTA
8.1.2 Assignment of a group which is already in the MS group database(pre-programmed)(5.6)	P	P	P	N/A	N/A
8.2 Group de-assignment (5.7)	P	P	P	P	P

Comments:

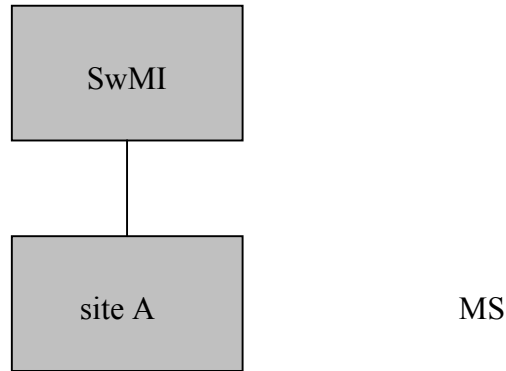
- 1) The SwMI and MS both supports SS-DGNA functions.
- 2) This SS-DGNA function is not supported by the MS.
- 3) The DGNA group assignment is acknowledged correctly by the MS, but the assigned DGNA group can not be found in the group list of the MS.
- 4) When the SwMI assigns a DGNA group without the optional CoU element present, the MS does not acknowledge the assignment, even if the acknowledgement is requested by the SwMI.
- 5) The DGNA group assignment with Group Identity Attachment Mode 'attachment not allowed for next ITSI-attach' is acknowledged correctly by the MS. However, after power cycle, the MS is not capable to remember the Group Identity Attachment Mode 'attachment not allowed for next ITSI-attach' and the user is still able to select the DGNA group.



- 6) The DGNA group assignment with Group Identity Attachment Mode 'attachment not allowed for next ITSI-attach' is acknowledged correctly by the MS. After power cycle, the MS is capable to remember the Group Identity Attachment Mode 'attachment not allowed for next ITSI-attach' and the user is not able to select the DGNA group. After additional power cycle the MS does not support attachment of the DGNA group'
- 7) The MS is a Single Group Mode MS. The DGNA group is assigned with attachment as selected group, but the MS accepts both assignment and attachment. The expected signalling is that the MS may accept the assignment, but shall reject the attachment.

Test setup description

All tests except the cell re-selection test are carried out on a single site system with one carrier using standard antenna configurations.



For the cell re-selection test, an additional site is activated and the roaming MS is connected to the system via RF cables as illustrated below.

