



TETRA SwMI Interoperability Certificate

4 April 2002

Marconi Communications

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.

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

Authorised IOP test engineer

Telelaboratoriet, TDC Mobil A/S

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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.

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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

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 table indicates whether or not tests addressing a specific requirement of the TIP specification have been performed, whether or 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.

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



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.

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Tests performed during the period 23th and 26th-28th March 2001

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

Marconi/OTE SwMI	Nokia THR 420E	Teltronic MDT 400	Simoco Digital Systems SRM1000	Simoco Digital Systems SRP1000
7 SS-DGNA not supported				
7.4 General Reject of SS-DGNA ¹	N/A	N/A	P ²	P ²
7.5 SS-DGNA specific functions not supported by MS (5.1)	N/A ³	N/A ³	N/A	N/A
7.5 SS-DGNA specific functions not supported by SwMI (5.2)	N/A ⁴	N/A ⁴	N/A ⁴	N/A ⁴
8 Supported SS-DGNA functions				
8.1 Group assignment				
8.1.1 Assignment of a group without attachment (5.3)	F ⁵	P	N/A	N/A
8.1.2 Assignment of a group with attachment.				
8.1.2 Assignment of an always-scanned group (CoU = 8)	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
8.1.2 MS NOT allowed to attach that group after ITSI-ATTACH (5.5)	P	-	N/A	N/A
8.1.2 MS NOT allowed to attach that group after ITSI-ATTACH (Single Group Mode MS)	-	F ⁶	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
8.1.2 MS required to attach that group after ITSI-ATTACH (5.4)	F ⁷	P	N/A	N/A
8.1.2 MS NOT allowed to attach that group after ITSI-ATTACH	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	N/A	N/A
8.2 Group de-assignment (5.7)	P	P	N/A	N/A

Comments:

- 1) The test plan does not specifically contain a test for this feature however the evidence presented in logs does give case to draw a conclusion.
- 2) The MS does not support SS-DGNA. The SwMI assigns a DGNA group and the MS acknowledges with a general rejection.
- 3) The SwMI and MS both supports SS-DGNA functions.
- 4) This SS-DGNA function is not supported by the MS.
- 5) The MS rejects the assignment.
- 6) The MS accepts the assignment of the DGNA group. However just after the MS performs attachment of the DGNA group as selected group, the SwMI changes the attachment lifetime in the acknowledgement to "attachment for next ITSI attach required". Following a power cycle the MS is not able to perform ITSI registration.

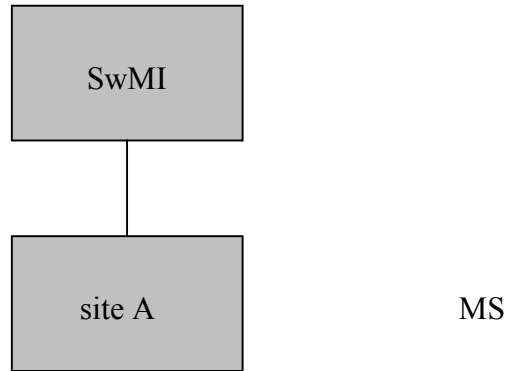
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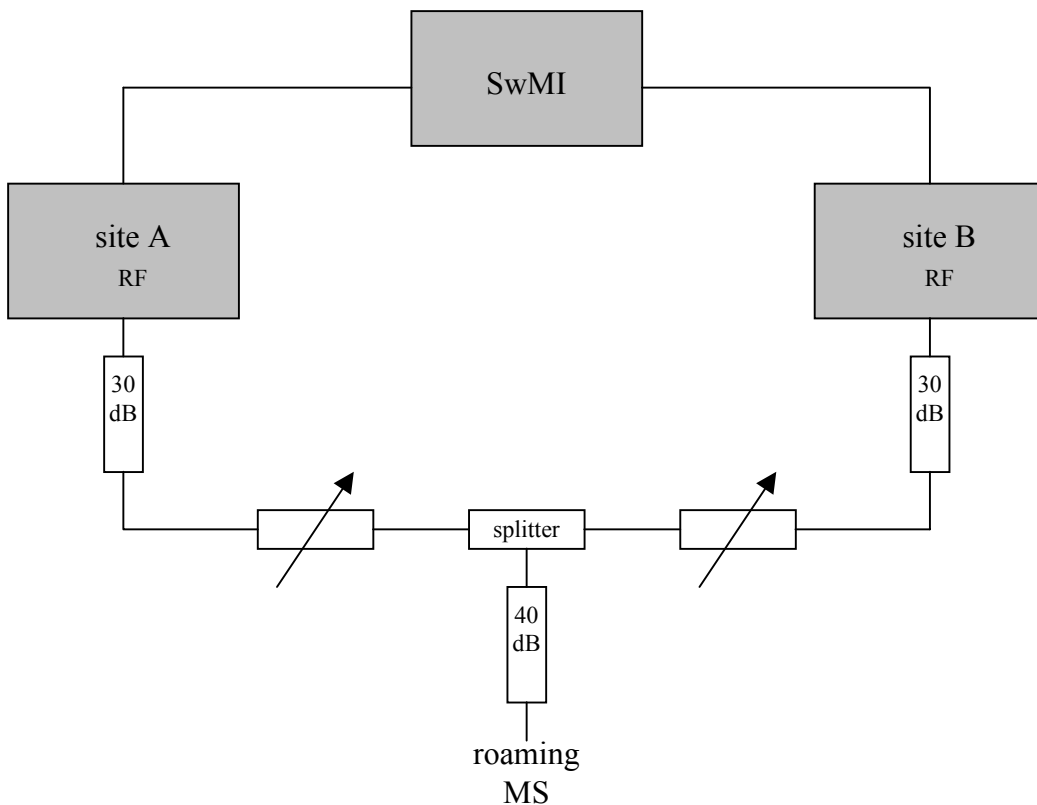
- 7) The MS accepts the assignment and attachment of the DGNA group, however this is not reflected in the display. When the PTT is pressed the display indicates "no selected group" and the call is not established.

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.



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