



# TETRA Terminal Interoperability Certificate

9 September 2002

## Teltronic

Manufacturer	Terminal Type	Software/Hardware Release No.
Teltronic	MDT-400	SW: 01.02.01 HW: 01.03

Telelaboratoriet has witnessed that the Teltronic terminal 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 2 infrastructures. Details concerning the used infrastructures and the dates when the testing were performed can be found on page 2 of the certificate.

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

Authorised IOP test engineer

Preben Raae Hansen

Telelaboratoriet, TDC Mobil A/S

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.

Telelaboratoriet  
TDC Mobil A/S  
Telegade 2  
DK 2630 Taastrup

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

E-mail: [info@telelaboratoriet.dk](mailto:info@telelaboratoriet.dk)

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



## Information about the equipment used for testing

### Testing during the March 2001 IOP test session:

The tests were performed using the following infrastructures:

Manufacturer	Infrastructure	Software/Hardware Release No.	Dates of testing
Nokia	NTS 2.1	SW: DXT64: W2 2.17-0 CD2, TBS400: TBCPGM 5.23-0 HW: DXT 64	19-21 March 2001
Marconi/OTE	System Version 2.1.0	System Version 2.1.0 SW: TETRA_SCN_7_6_15. HW: SCN-T774-0117/01.	23 and 26-28 March 2001

### Additional information about the tests performed

The tests were performed in the 380-400 MHz band.

### Test Results

#### Table 1 Test results from the March 2001 IOP test session:

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 terminal.

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 SwMIs and the terminal indicated in table 1. 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.

**Table 1: Tests performed during the in March 2001 test session**

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

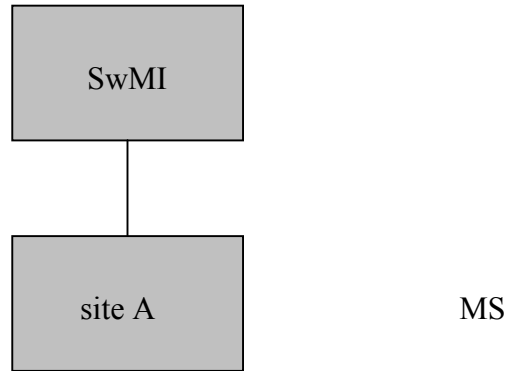
Teltronic MDT-400 Terminal	Marconi/OTE System Version 2.1.0	Nokia NTS 2.1
<b>7 SS-DGNA not supported</b> (Test case Number index)		
7.4 General Reject of SS-DGNA	N/A	N/A
7.5 SS-DGNA specific functions not supported by MS (5.1)	N/A <sup>1</sup>	N/A <sup>1</sup>
7.5 SS-DGNA specific functions not supported by SwMI (5.2)	N/A	N/A
<b>8 Supported SS-DGNA functions</b>		
8.1 Group Assignment		
8.1.1 Assignment of a group without attachment (5.3)	P	N/A
8.1.2 Assignment of a group with attachment.		
8.1.2 Assignment of an always-scanned group (CoU = 8)	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
8.1.2 MS NOT allowed to attach that group after ITSI-ATTACH (5.5)	-	-
8.1.2 MS NOT allowed to attach that group after ITSI-ATTACH (Single Group Mode MS)	F <sup>2</sup>	P <sup>3</sup>
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	N/A
8.1.2 MS required to attach that group after ITSI-ATTACH (5.4)	P	N/A
8.1.2 MS NOT allowed to attach that group after ITSI-ATTACH	NTA	N/A
8.1.2 Assignment of a group which is already in the MS group database(pre-programmed) (5.6)	P	P
8.2 Group de-assignment (5.7)	P	P

**Comments:**

- 1) The SwMI and MS both supports SS-DGNA functions.
- 2) 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.
- 3) The assignment and attachment of the DGNA group is correctly accepted and rejected respectably by the MS. Just after the MS selects the DGNA group to initiate a call, but the SwMI rejects the attachment. This is according to the specification. However, to test if the MS is capable to remember the DGNA group assignment with the Group Identity Attachment Mode 'attachment not allowed for next ITSI-attach' after power cycle is not performed.

### 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.

