



# TETRA SwMI Interoperability Certificate

19 June 2002

## R&S BICK Mobilfunk GmbH

Telelaboratoriet (TDC Mobil A/S) has witnessed that the R&S BICK Mobilfunk GmbH infrastructure is operating in accordance with

TTR 001-02 v1.0.1 (Aug 2001), TETRA Interoperability Profile (TIP)  
version 3 Part 2: Short Data Service

for the following features:

Features	Tested(Yes/No)
• MS to MS SDS types 1-3	Yes
• MS to Group SDS types 1-3	No
• MS to MS SDS type 4 without using SDS-TL	No
• MS to Group SDS type 4 without using SDS-TL	No
• MS to MS SDS type 4 using SDS-TL	Yes
• MS to Group SDS type 4 using SDS-TL	Yes

The tests have been performed on R&S BICK Mobilfunk GmbH ACCESSNET-T infrastructure during the period 24<sup>th</sup>-28<sup>th</sup> September 2001 with hardware release 1.01.01 and software release 1.51.04.

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 Short Data Service. 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 24<sup>th</sup>-28<sup>th</sup> of September 2001 were performed using the following terminals:

Manufacturer	Terminal Type	Software/Hardware Release No.
Nokia	THR 850	SW: 2.16-0 HW: JL1-11
Marconi/OTE	PUMA T1	SW: 2.1.M HW: 02.01
Marconi/OTE	PUMA T2	SW: TB23817F HW: 774-0162/01.01
Motorola	MTH 300	SW: 50.40.12 HW: H14QCH6TZ5AN
Simoco Digital Systems	SRM1000	SW: 4313-327-73043 HW: MS1TT00T20C0000

## Additional information about the tests performed

### Testing on the 24<sup>th</sup>-28<sup>th</sup> September 2001:

The tests for the Simoco Digital Systems SRM1000 and Marconi/OTE PUMA T1 and PUMA T2 terminals were performed in the 380-400 MHz band. The SwMI was operating with the following configuration:

MCC	238
MNC	6
Colour code	45
LA3 carrier frequency (BS Tx)	391.6125 MHz
LA4 carrier frequency (BS Tx)	392.6125 MHz
PSTN gateway	Hicom PABX, 82xxx
Subscriber classes	FFFF <sub>16</sub>

The tests for the Nokia THR 850 and Motorola MTH 300 terminals were performed in the 410-430 MHz band. The SwMI was operating with the following configuration:

MCC	238
MNC	6
Colour code	45
LA1 carrier frequency (BS Tx)	423.3750 MHz
LA2 carrier frequency (BS Tx)	422.4750 MHz
PSTN gateway	Hicom PABX, 82xxx
Subscriber classes	FFFF <sub>16</sub>

## 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.

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 tables. 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.

## Tests performed during the period 24<sup>th</sup>-28<sup>th</sup> September 2001

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

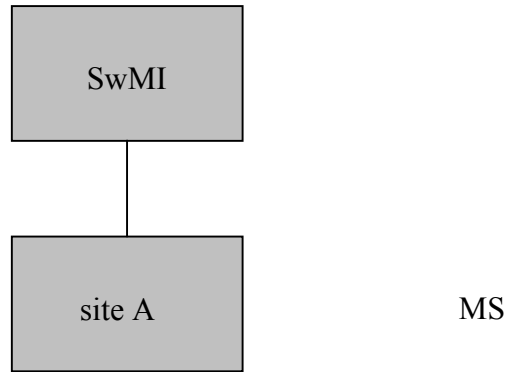
R&S BICK SwMI	Marconi/OTE PUMA T1	Marconi/OTE PUMA T2	Motorola MTH 300	Nokia THR 850	Simoco Digital Systems SRM1000
<b>7 User defined data type 1, 2 and 3</b> (Test case Number index)					
7 Type 1	NTA	NTA	NTA	NTA	NTA
7 Type 2	NTA	NTA	NTA	NTA	NTA
7 Type 3 (5.1)	P <sup>1</sup>	P <sup>1</sup>	N/A	N/A	N/A
<b>8 User defined data type 4 without SDS-TL</b>					
	NTA	NTA	NTA	NTA	NTA
<b>8.1 User defined data type 4 with SDS-TL</b>					
8.1.2 MS to MS, Standard Report	NTA	NTA	NTA	NTA	NTA
8.1.2 MS to MS, Standard Report with Store and Forward	NTA	NTA	NTA	NTA	NTA
8.1.3 MS to MS, Short Report	NTA	NTA	NTA	NTA	NTA
<b>8.2 Text messaging</b>					
8.2.1.4 No acknowledgement requested (5.3)	P	P	N/A	P	P
8.2.2 MS to MS, Short report (5.2)	P	P	P	P <sup>2</sup>	P

### Comments:

- 1) The test is supposed to be performed with mixed terminals (manufacturers) as originating MS and destination MS, but the functionality is only supported by the Marconi/OTE terminals.
- 2) The destination MS is a Nokia terminal.

### 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.

