



IST doc.10

# TETRA Terminal Interoperability Certificate

January 2003

## NOKIA THR 850

Manufacturer	Terminal	Software/Hardware Release No.	Dates of testing
Nokia	THR 850	HW: THR-3 SW: 1.02-0	20 - 31 January 2003

ISCTI (Istituto Superiore delle Comunicazioni e delle Tecnologie dell'Informazione) has witnessed that the NOKIA Terminal is operating in accordance with:

### *TETRA Interoperability Profile:*

**TIP Part 11: AI Encryption TTR 001-11 ver 1.0.0, December 2001**

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

Authorised IOP test engineer  
(Ivano Luciani)  
(Franco Pangallo)

Radio Office Manager

(Ing. A. La Padula)

ISCTI has made every effort to ensure that tests have been made correctly, and in accordance with the relevant TIPs. ISCTI has no liability for the test results, or towards the manufacturers.

ISCTI  
V.le America 201  
00144 Rome, Italy

Tlf. +39 06 5444 2663  
Fax +39 06 5410904

E-mail: Web-

site: <http://www.comunicazioni.it>



## Information about the equipment used for testing

### Testing during the January 2003 IOP Test Session:

The tests were performed using the following infrastructure:

Manufacturer	Infrastructure Type	Software/Hardware Release No.
Nokia	NTS 3.0	(exchange) HW: DXT256 SW: w3 6.7-1 (base station) HW: TBS400 SW: TBC 6.47-0, TBBM 3.43-0

### Additional information about the test performed

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

MCC	346
MNC	5
Colour code	35-40
LA1 carrier frequency (BS Tx)	395,1875 MHz
LA2 carrier frequency (BS Tx)	395.4125 MHz
PSTN gateway telephone number	16777184 (FFFFE0)
Subscriber classes	FFFF <sub>16</sub>



## Test Results

The test results are shown in the tables below.

Test results and the certificates from previous IOP test session are available on TETRA MoU web site (<http://www.tetramou.com/interoperability>).

Tables indicate whether or not tests addressing a specific requirement of the TIP specification have been performed, whether or not the requirement is applicable for the SwMI, and the result of the test if executed. Each entry of the table may take one of seven values:

-	No test performed.
<b>N/A</b>	Not applicable for the SwMI
<b>NTPA</b>	No Test Plan/case Available
<b>P</b>	Pass
<b>No</b>	Not supported by Terminal
<b>F</b>	Fail
<b>I</b>	Inconclusive

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 following 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.

ISCTI has made every effort to ensure that tests are in accordance with the relevant TIPs. ISCTI has no liability for the test results, or towards the manufacturers.



	NOKIA SwMI	Nokia THR 850	Nokia THR 880	Clearstone 9000P
<b>Table 6. AIE TIP: TTR 001-11</b>				
<b>Air Interface Encryption functions</b>				
<b>2.3 General Signalling Assumptions</b>				
2.3.5	<b>DCK retrieval supported by SwMI</b> Undeclared cell-reselection (without DCK forwarding request) with clear location updating - 2.2.1.1	P	P	P
2.3.5	<b>DCK retrieval supported by SwMI</b> Undeclared cell-reselection (without DCK forwarding request) with clear location updating without request for CCK - 2.2.1.2	No	No	No
2.3.5	<b>DCK retrieval supported by SwMI</b> Undeclared cell-reselection with DCK forwarding, following by encrypted location update, including request for CCK - 2.2.1.3	N/A	N/A	N/A
2.3.5	<b>DCK retrieval supported by SwMI</b> Undeclared cell-reselection with DCK forwarding, following by encrypted location update, without request for CCK - 2.2.1.4	-	-	No
2.3.5	<b>DCK retrieval supported by SwMI</b> Undeclared cell-reselection (without DCK forwarding request) with clear location updating including request for CCK - 2.2.1.1	P	P	P
2.3.5	<b>DCK retrieval supported by SwMI</b> Undeclared cell-reselection, encrypted location update, using DCK retrieval, including request for CCK - 2.2.1.5	N/A	N/A	N/A
2.3.5	<b>DCK retrieval supported by SwMI</b> Undeclared cell-reselection, encrypted location update, using DCK retrieval, without request for CCK - 2.2.1.6	N/A	N/A	N/A
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, including request for CCK – 2.2.2.1	-	P	P
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, without request for CCK – 2.2.2.2	No	No	No
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.2.3	N/A	N/A	N/A
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.2.4	-	-	No
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, including request for CCK – 2.2.2.5	N/A	N/A	N/A
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, without request for CCK– 2.2.2.6	N/A	N/A	N/A
2.3.5	<b>DCK retrieval supported by SwMI</b> Announced type 3 cell re-selection (without DCK forwarding request) with clear location updating, including request for CCK – 2.2.3.1	P	P	No
2.3.5	<b>DCK retrieval supported by SwMI</b> Announced type 3 cell re-selection (without DCK forwarding request) with clear location updating, without request for CCK – 2.2.3.2	No	No	No
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.3.3	N/A	N/A	N/A



	NOKIA SwMI	Nokia THR 850	Nokia THR 880	Cleartone 9000P
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.3.4	-	-	P
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced type 3 cell re-selection, encrypted location update, using DCK retrieval, including request for CCK – 2.2.3.5	N/A	N/A	N/A
2.3.5	<b>DCK retrieval supported by SwMI</b> Unannounced type 3 cell re-selection, encrypted location update, using DCK retrieval, without request for CCK – 2.2.3.6	N/A	N/A	N/A
2.3.6	<b>Security Class 2</b> Registration with encryption applied. Authentication not required by SwMI -1.1.1	N/A	N/A	N/A
2.3.6	<b>Security Class 2</b> Registration with encryption applied. Authentication required by SwMI -1.1.2	N/A	N/A	N/A
2.3.6	<b>Security Class 2</b> Registration without encryption applied. Authentication not required by SwMI -1.1.3	N/A	N/A	N/A
2.3.6	<b>Security Class 2</b> Registration without encryption applied. Authentication required by SwMI - 1.1.4	N/A	N/A	N/A
2.3.6	<b>Security Class 2</b> Undeclared cell re-selection -1.2.1	N/A	N/A	N/A
2.3.6	<b>Security Class 2</b> Unannounced cell re-selection -1.2.2	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Class 3 MS Registration with Class ciphering and CCK request, without encryption applied – 2.1.1	P	P	P
2.3.7	<b>Security Class 3</b> Undeclared cell-reselection (without DCK forwarding request) with clear location updating including request for CCK - 2.2.1.1	P	P	P
2.3.7	<b>Security Class 3</b> Undeclared cell-reselection (without DCK forwarding request) with clear location updating without request for CCK - 2.2.1.2	No	No	No
2.3.7	<b>Security Class 3</b> Undeclared cell-reselection with DCK forwarding, following by encrypted location update, including request for CCK - 2.2.1.3	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Undeclared cell-reselection with DCK forwarding, following by encrypted location update, without request for CCK - 2.2.1.4	-	-	No
2.3.7	<b>Security Class 3</b> Undeclared cell-reselection, encrypted location update, using DCK retrieval, including request for CCK - 2.2.1.5	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Undeclared cell-reselection, encrypted location update, using DCK retrieval, without request for CCK - 2.2.1.6	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, including request for CCK – 2.2.2.1	-	P	P
2.3.7	<b>Security Class 3</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, without request for CCK – 2.2.2.2	No	No	No
2.3.7	<b>Security Class 3</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.2.3	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.2.4	-	-	No



	NOKIA SwMI	Nokia THR 850	Nokia THR 880	Cleartone 9000P
2.3.7	<b>Security Class 3</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, including request for CCK – 2.2.2.5	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, without request for CCK – 2.2.2.6	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Announced type 3 cell re-selection (without DCK forwarding request) with clear location updating, including request for CCK – 2.2.3.1	P	P	No
2.3.7	<b>Security Class 3</b> Announced type 3 cell re-selection (without DCK forwarding request) with clear location updating, without request for CCK – 2.2.3.2	No	No	No
2.3.7	<b>Security Class 3</b> [Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.3.3	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.3.4	-	-	P
2.3.7	<b>Security Class 3</b> Unannounced type 3 cell re-selection, encrypted location update, using DCK retrieval, including request for CCK – 2.2.3.5	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Unannounced type 3 cell re-selection, encrypted location update, using DCK retrieval, without request for CCK – 2.2.3.6	N/A	N/A	N/A
2.3.7	<b>Security Class 3</b> Announced cell re-selection with Preferred Neighbour Selected and with Call Restoration, Transmitting encrypted group call, with OTAR of CCK – 2.2.4.1	No	No	No
2.3.7	<b>Security Class 3</b> Announced cell re-selection with Preferred Neighbour Selected and with Call Restoration, Transmitting encrypted group call, without OTAR of CCK – 2.2.4.2	No	No	No
2.3.7	<b>Security Class 3</b> SwMI initiated change of CCK on the serving Cell before group call-Future CCK known to MS – 2.5.3	-	-	P
2.3.8	<b>DCK Forwarding using announced type 1 cell re-selection</b> SwMI initiated change of CCK on serving cell before group call - Future CCK known to MS - 2.5.3	N/A	N/A	N/A
2.3.9	<b>DCK Forwarding using announced type 2 cell re-selection</b> Announced cell re-selection with Preferred Neighbour Selected and with Call Restoration, Transmitting encrypted group call, with OTAR of CCK – 2.2.4.1	No	No	No
2.3.9	<b>DCK Forwarding using announced type 2 cell re-selection</b> Announced cell re-selection with Preferred Neighbour Selected and with Call Restoration, Transmitting encrypted group call, without OTAR of CCK – 2.2.4.2	No	No	No
2.3.10	<b>DCK forwarding using OTAR PREPARE and OTAR NEW CELL</b> Undeclared cell-reselection with DCK forwarding, following by encrypted location update, including request for CCK - 2.2.1.3	N/A	N/A	N/A
2.3.10	<b>DCK forwarding using OTAR PREPARE and OTAR NEW CELL</b> Undeclared cell-reselection with DCK forwarding, following by encrypted location update, without request for CCK - 2.2.1.4	-	-	No



	<b>NOKIA SwMI</b>	<b>Nokia THR 850</b>	<b>Nokia THR 880</b>	<b>Clearstone 9000P</b>
2.3.10	<b>DCK forwarding using OTAR PREPARE and OTAR NEW CELL</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.2.3	N/A	N/A	N/A
2.3.10	<b>DCK forwarding using OTAR PREPARE and OTAR NEW CELL</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.2.4	-	-	No
2.3.10	<b>DCK forwarding using OTAR PREPARE and OTAR NEW CELL</b> Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.3.3	N/A	N/A	N/A
2.3.10	<b>DCK forwarding using OTAR PREPARE and OTAR NEW CELL</b> Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.3.4	-	-	P
2.3.11	<b>Change of Security Class or Cipher Key on the serving cell</b> SwMI initiated change of CCK on the serving cell before group call-Future CCK unknown to MS – 2.5.1	-	-	P
2.3.11	<b>Change of Security Class or Cipher Key on the serving cell</b> SwMI initiated change of CCK on the serving cell during group call-Future CCK unknown to MS – 2.5.2	P	P	P
2.3.11	<b>Change of Security Class or Cipher Key on the serving cell</b> SwMI initiated change of CCK on the serving Cell before group call-Future CCK known to MS – 2.5.3	-	-	P
2.3.11.4	<b>D-CK CHANGE DEMAND Change of Chipper Key – Absolute IV)</b> SwMI initiated change of CCK on the serving cell before group call-Future CCK unknown to MS – 2.5.1	-	-	P
2.3.11.4	<b>D-CK CHANGE DEMAND Change of Chipper Key – Absolute IV)</b> SwMI initiated change of CCK on the serving cell during group call-Future CCK unknown to MS – 2.5.2	P	P	P
2.3.11.4	<b>D-CK CHANGE DEMAND Change of Chipper Key – Absolute IV)</b> SwMI initiated change of CCK on the serving Cell before group call-Future CCK known to MS – 2.5.3	P	-	P
2.3.11.5	<b>D-CK CHANGE DEMAND Change of Chipper Key – Immediate)</b> SwMI initiated change of CCK on the serving cell before group call-Future CCK unknown to MS – 2.5.1	-	-	P
2.3.11.5	<b>D-CK CHANGE DEMAND Change of Chipper Key – Immediate)</b> SwMI initiated change of CCK on the serving cell during group call-Future CCK unknown to MS – 2.5.2	P	P	P
2.3.11.5	<b>D-CK CHANGE DEMAND Change of Chipper Key – Immediate)</b> SwMI initiated change of CCK on the serving Cell before group call-Future CCK known to MS – 2.5.3	P	-	P
2.3.15.1	<b>MS CCK Management</b> SwMI initiated change of CCK on the serving cell during group call-Future CCK unknown to MS – 2.5.2	P	P	P
2.3.16	<b>Call Related Signalling</b> Call from class 2 MS to Class 2 MS - 1.3.1.1	N/A	N/A	N/A
2.3.16	<b>Call Related Signalling</b> Call from class 2 MS to Class 1 MS - 1.3.1.2	N/A	N/A	N/A
2.3.16	<b>Call Related Signalling</b> Call from class 1 MS to Class 2 MS - 1.3.1.3	N/A	N/A	N/A



	NOKIA SwMI	Nokia THR 850	Nokia THR 880	Clearstone 9000P
2.3.16	<b>Call Related Signalling</b> Call from class 2 MS to Class 2 Group -1.3.2.1	N/A	N/A	N/A
2.3.16	<b>Call Related Signalling</b> Call from class 2 MS to Class 1 Group -1.3.2.2	N/A	N/A	N/A
2.3.16	<b>Call Related Signalling</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, including request for CCK – 2.2.2.1	-	P	P
2.3.16	<b>Call Related Signalling</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, without request for CCK – 2.2.2.2	No	No	No
2.3.16	<b>Call Related Signalling</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.2.3	N/A	N/A	N/A
2.3.16	<b>Call Related Signalling</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.2.4	-	-	No
2.3.16	<b>Call Related Signalling</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, including request for CCK – 2.2.2.5	N/A	N/A	N/A
2.3.16	<b>Call Related Signalling</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, without request for CCK – 2.2.2.6	N/A	N/A	N/A
2.3.16	<b>Call Related Signalling</b> encrypted individual call from Class 3 MS to Class 3 MS – 2.3.1.1	P	P	P
2.3.16	<b>Call Related Signalling</b> Individual call from Class 3 MS to Class 1 MS – 2.3.1.2	P	P	P
2.3.16	<b>Call Related Signalling</b> individual call from Class 1 MS to Class 3 MS – 2.3.1.3	P	P	P
2.3.16	<b>Call Related Signalling</b> group call from Class 3 MS to Class 3 Group – 2.3.2.1	P	P	P
2.3.16	<b>Call Related Signalling</b> encrypted group call from Class 3 MS to Class 1 Group – 2.3.2.2	P	P	P
2.3.17	<b>Call Unrelated Signalling</b> Status from Class 2 MS in Class 1 Group call to idle Class 2 MS – 1.4.1	N/A	N/A	N/A
2.3.17	<b>Call Unrelated Signalling</b> Status from idle Class 2 MS to Class 2 MS in Class 1 Group call – 1.4.2	N/A	N/A	N/A
2.3.17	<b>Call Unrelated Signalling</b> Status from Class 3 MS in Class 1 group call to Class 3 MS – 2.4.1	F6	F6	P
2.3.17	<b>Call Unrelated Signalling</b> Status from Class 3 MS to Class 3 MS in Class 1 group call – 2.4.2	-	-	-
2.3.20	<b>AI Signalling Protection</b> Registration with encryption applied. Authentication not required by SwMI - 1.1.1	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Registration with encryption applied. Authentication required by SwMI -1.1.2	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Registration without encryption applied. Authentication not required by SwMI -1.1.3	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Registration without encryption applied. Authentication required by SwMI - 1.1.4	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Undeclared cell-reselection - 1.2.1	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Unannounced cell re-selection - 1.2.2	N/A	N/A	N/A





	NOKIA SwMI	Nokia THR 850	Nokia THR 880	Clearstone 9000P
2.3.20	<b>AI Signalling Protection</b> Class 3 MS Registration with Class ciphering and CCK request, without encryption applied – 2.1.1	P	P	P
2.3.20	<b>AI Signalling Protection</b> Undeclared cell re-selection (without DCK forwarding request) with clear location updating including request for CCK including request for CCK - 2.2.1.1	P	P	P
2.3.20	<b>AI Signalling Protection</b> Undeclared cell re-selection (without DCK forwarding request) with clear location updating without request for CCK - 2.2.1.2	No	No	No
2.3.20	<b>AI Signalling Protection</b> Undeclared cell re-selection with DCK forwarding, following by encrypted location update, including request for CCK - 2.2.1.3	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Undeclared cell re-selection with DCK forwarding, following by encrypted location update, without request for CCK - 2.2.1.4	-	-	No
2.3.20	<b>AI Signalling Protection</b> Undeclared cell-reselection, encrypted location update, using retrieval, including request for CCK - 2.2.1.5]	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Undeclared cell-reselection, encrypted location update, using DCK retrieval, without request for CCK - 2.2.1.6	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, including request for CCK – 2.2.2.1	-	P	P
2.3.20	<b>AI Signalling Protection</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, without request for CCK – 2.2.2.2	No	No	No
2.3.20	<b>AI Signalling Protection</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.2.3	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.2.4	-	-	No
2.3.20	<b>AI Signalling Protection</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, including request for CCK – 2.2.2.5	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, without request for CCK – 2.2.2.6	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Announced type 3 cell re-selection (without DCK forwarding request) with clear location updating, including request for CCK – 2.2.3.1	P	P	No
2.3.20	<b>AI Signalling Protection</b> Announced type 3 cell re-selection (without DCK forwarding request) with clear location updating, without request for CCK – 2.2.3.2	No	No	No
2.3.20	<b>AI Signalling Protection</b> Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.3.3	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.3.4	-	-	P



	NOKIA SwMI	Nokia THR 850	Nokia THR 880	Clearstone 9000P
2.3.20	<b>AI Signalling Protection</b> Unannounced type 3 cell re-selection, encrypted location update, using DCK retrieval, including request for CCK – 2.2.3.5	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Unannounced type 3 cell re-selection, encrypted location update, using DCK retrieval, without request for CCK – 2.2.3.6	N/A	N/A	N/A
2.3.20	<b>AI Signalling Protection</b> Announced cell re-selection with Preferred Neighbour Selected and with Call Restoration, Transmitting encrypted group call, with OTAR of CCK – 2.2.4.1	No	No	No
2.3.20	<b>AI Signalling Protection</b> Announced cell re-selection with Preferred Neighbour Selected and with Call Restoration, Transmitting encrypted group call, without OTAR of CCK – 2.2.4.2	No	No	No
2.6	<b>Signalling Scenarios</b>			
2.6.2	<b>MS-initiated location updating with SCK ciphering, no SCK request, no authentication</b> Registration with encryption applied. Authentication not required by SwMI - 1.1.1	N/A	N/A	N/A
2.6.2	<b>MS-initiated location updating with SCK ciphering, no SCK request, no authentication</b> Registration without encryption applied. Authentication not required by SwMI - 1.1.3	N/A	N/A	N/A
2.6.3	<b>MS-initiated location updating with SCK ciphering, and authentication</b> Registration with encryption applied. Authentication required by SwMI - 1.1.2	N/A	N/A	N/A
2.6.3	<b>MS-initiated location updating with SCK ciphering, and authentication</b> Registration without encryption applied. Authentication required by SwMI - 1.1.4	N/A	N/A	N/A
2.6.6	<b>MS-initiated location updating with DCK ciphering, CCK request and authentication</b> Class 3 MS Registration with Class ciphering and CCK request, without encryption applied – 2.1.1	P	P	P
2.6.6	<b>MS-initiated location updating with DCK ciphering, CCK request and authentication</b> Undeclared cell-reselection (without DCK forwarding request) with clear location updating including request for CCK - 2.2.1.1	P	P	P
2.6.6	<b>MS-initiated location updating with DCK ciphering, CCK request and authentication</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, including request for CCK – 2.2.2.1	-	P	P
2.6.6	<b>MS-initiated location updating with DCK ciphering, CCK request and authentication</b> Announced type 3 cell re-selection (without DCK forwarding request) with clear location updating, including request for CCK – 2.2.3.1	P	P	No
2.6.7	<b>MS-initiated location updating with DCK ciphering (no CCK request, no authentication)</b> Undeclared cell-reselection with DCK forwarding, following by encrypted location update, without request for CCK - 2.2.1.4	-	-	No
2.6.7	<b>MS-initiated location updating with DCK ciphering (no CCK request, no authentication)</b> Undeclared cell-reselection, encrypted location update, using DCK retrieval, without request for CCK - 2.2.1.6	N/A	N/A	N/A



	NOKIA SwMI	Nokia THR 850	Nokia THR 880	Clearstone 9000P
2.6.7	<b>MS-initiated location updating with DCK ciphering (no CCK request, no authentication)</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.2.4	-	-	No
2.6.7	<b>MS-initiated location updating with DCK ciphering (no CCK request, no authentication)</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, without request for CCK – 2.2.2.6	N/A	N/A	N/A
2.6.7	<b>MS-initiated location updating with DCK ciphering (no CCK request, no authentication)</b> Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, without request for CCK – 2.2.3.4	-	-	P
2.6.7	<b>MS-initiated location updating with DCK ciphering (no CCK request, no authentication)</b> Unannounced type 3 cell re-selection, encrypted location update, using DCK retrieval, without request for CCK – 2.2.3.6	N/A	N/A	N/A
2.6.7	<b>MS-initiated location updating with DCK ciphering (no CCK request, no authentication)</b> Announced cell re-selection with Preferred Neighbour Selected and with Call Restoration, Transmitting encrypted group call, with OTAR of CCK – 2.2.4.1	No	No	No
2.6.8	<b>MS-initiated location updating with DCK ciphering, and authentication</b> Undeclared cell-reselection (without DCK forwarding request) with clear location updating without request for CCK -2.2.1.2	No	No	No
2.6.8	<b>MS-initiated location updating with DCK ciphering, and authentication</b> Unannounced cell re-selection (without DCK forwarding request) with clear location updating, without request for CCK – 2.2.2.2	No	No	No
2.6.8	<b>MS-initiated location updating with DCK ciphering, and authentication</b> Announced type 3 cell re-selection (without DCK forwarding request) with clear location updating, without request for CCK – 2.2.3.2	No	No	No
2.6.9	<b>MS-initiated location updating with DCK ciphering, and CCK request</b> Undeclared cell-reselection with DCK forwarding, following by encrypted location update, including request for CCK -2.2.1.3	N/A	N/A	N/A
2.6.9	<b>MS-initiated location updating with DCK ciphering, and CCK request</b> Undeclared cell-reselection, encrypted location update, using DCK retrieval, including request for CCK - 2.2.1.5	N/A	N/A	N/A
2.6.9	<b>MS-initiated location updating with DCK ciphering, and CCK request</b> Unannounced cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.2.3	N/A	N/A	N/A
2.6.9	<b>MS-initiated location updating with DCK ciphering, and CCK request</b> Unannounced cell re-selection, encrypted location update, using DCK retrieval, including request for CCK – 2.2.2.5	N/A	N/A	N/A



	NOKIA SwMI	Nokia THR 850	Nokia THR 880	Clearstone 9000P
2.6.9	<b>MS-initiated location updating with DCK ciphering, and CCK request</b> Unannounced type 3 cell re-selection with DCK forwarding followed by encrypted location update, including request for CCK – 2.2.3.3	N/A	N/A	N/A
2.6.9	<b>MS-initiated location updating with DCK ciphering, and CCK request</b> Unannounced type 3 cell re-selection, encrypted location update, using DCK retrieval, including request for CCK – 2.2.3.5	N/A	N/A	N/A
2.6.9	<b>MS-initiated location updating with DCK ciphering, and CCK request</b> Announced cell re-selection with Preferred Neighbour Selected and with Call Restoration, Transmitting encrypted group call, without OTAR of CCK – 2.2.4.2	No	No	No

**NOKIA Comment:**

**F6** Nokia MS sends clear U-STATUS PDU to clear group, but SwMI fails and it does not forward D-STATUS PDU to group