



IST doc.10

# TETRA Terminal Interoperability Certificate

January 2003

## CLEARTONE CM9000P

| Manufacturer | Terminal | Software/Hardware Release No. | Dates of testing        |
|--------------|----------|-------------------------------|-------------------------|
| CLEARTONE    | CM9000P  | HW: 0.36G4C<br>SW: 1.5        | 20 - 31 January<br>2003 |

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

### *TETRA Interoperability Profile:*

TIP PART 1 CORE: TTR 001- 01 VER 3.0.13, JUNE 2001

TIP PART 4: AUTHENTICATION TTR 001- 04 VER 1.00, NOVEMBER 2000

TIP PART 5: PACKET DATA TTR 001- 05 VER 1.0.0, NOVEMBER 2000

TIP PART 7: FSSN TTR 001- 07 VER 1.0.0, JANUARY 2002

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

**Issue 2** January 8<sup>th</sup> 2004.

This certificate replaces the previous version.

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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.

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## 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 | Software/Hardware Release No.   |
|--------------|----------------|---|
| Nokia        | NTS 3.0        | HW: DXT256 (exchange)<br>SW: w3 6.7-1<br>HW: TBS400 (base station)<br>SW: TBC 6.47-0, TBBM 3.43-0 |

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## 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                  | 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.
- N/A: Not applicable for the SwMI
- NTPA: No Test Plan/case Available
- No : Not supported by Terminal
- P : Pass
- F : Fail
- I : Inconclusive

No test performed (-) is assigned in case of no test case performed during the IOP session.

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 have been made correctly, and in accordance with the relevant TIPs. ISCTI has no liability for the test results, or towards the manufacturers.

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|           | NOKIA SwMI   | ClearTone<br>9000P |
|-----------|--|--------------------|
|           | <b>Table 1. CORE TTR 001-01</b>  |                    |
| <b>6</b>  | <b>Registration</b>  |                    |
| 6.1       | ITSI attach - ITSI attach (without group attachment)<br>1.1  | -                  |
| 6.2       | ITSI attach including group attachment – 1.2   | -                  |
| 6.2       | ITSI attach including group attachment Ms initiated<br>Multiple group attachment during MS registration –<br>2.2.1                                       | -                  |
| 6.3       | Roaming&perioding location updating Cell re-<br>selection without communication activity – 7.1.1   | -                  |
| 6.4       | SwMI initiated location updating SwMI initiated<br>location updating without group reporting – 1.3.1   | -                  |
| 6.4       | SwMI initiated location updating– SwMI initiated<br>location updating with group reporting - 1.3.2   | N/A                |
| 6.5       | De-registration – 1.4  | -                  |
| <b>7</b>  | <b>Individual call</b>   |                    |
| 7.1       | <b>Call set-up</b>   |                    |
| 7.1.1     | Hook signalling Individual hook call set-up – 4.1.1  | -                  |
| 7.1.1     | Hook signalling Individual call set-up, resource<br>queuing – 4.1.3  | -                  |
| 7.1.1     | Hook signalling Duplex call set-up – 4.2.1   | -                  |
| 7.1.1     | Hook signalling Duplex call set-up, resource queuing<br>– 4.2.2  | -                  |
| 7.1.1     | Hook signalling, MS-ISDN Individual call – 9.1   | P                  |
| 7.1.2     | Direct through-connect MS-ISDN Individual call – 9.1   | -                  |
| 7.1.2     | Direct through-connect Individual direct call set-up –<br>4.1.2  | -                  |
| 7.1.2     | Direct through-connect Individual call set-up<br>resource queuing– 4.1.3   | -                  |
| 7.1.3     | <b>Call set-up Modifications</b>   |                    |
| 7.1.3.1.4 | Point to point' to 'point to multipoint' Emergency<br>call set-up, P2P to P2MP call modification – 6.2.2   | -                  |
| 7.1.3.2.3 | Duplex to simplex Call set-up modifications by called<br>party, duplex to semiduplex – 4.3.2   | -                  |
| 7.1.3.2.1 | Direct to hook Call set-up Modification by called party,<br>direct to hook – 4.3.1   | -                  |
| 7.2       | <b>Transmission control</b>  |                    |
| 7.2.1     | End of transmission Individual hook call set-up –<br>4.1.1   | -                  |
| 7.2.1     | End of transmission Individual direct call set-up –<br>4.1.2   | -                  |
| 7.2.2     | Request to transmit Individual hook call set-up – 4.1.1  | -                  |
| 7.2.2     | Request to transmit MS-ISDN Individual call – 9.1  | -                  |
| 7.2.2     | Request to transmit Individual direct call set-up –<br>4.1.2   | -                  |
| 7.2.3     | Request to transmit ( in the presence of an active<br>talker) pre-emptive speech item request, non pre<br>emptive transmission request queuing – 4.1.4   | N/A                |
| 7.2.3     | Request to transmit ( in the presence of an active<br>talker) pre-emptive speech item request, non pre<br>emptive transmission request rejection – 4.1.5 | N/A                |
| 7.3       | Call Maintenance Queuing during Individual call<br>restoration, Transmitting – 7.3.4.1   | -                  |
| 7.3       | Call Maintenance Queuing during individual call<br>restoration, receiving, (Announced Type 3) – 7.3.4.2  | -                  |
| 7.3       | Call Maintenance Queuing during individual call<br>restoration. Receiving (Unannounced) – 7.3.4.3  | -                  |
| 7.3       | Call Maintenance Queuing during individual call<br>restoration. Communication inactivity. (Announced<br>Type 3) – 7.3.5.1                                | -                  |
| 7.3       | Call Maintenance Queuing during Individual call<br>restoration, Communication inactivity (Unannounced) -<br>7.3.5.2                                      | -                  |
| 7.3       | Call Maintenance Queuing during Duplex call<br>restoration (Announced type 3) - 7.4.2  | -                  |
| 7.4       | Call disconnection Individual hook call set-up – 4.1.1   | -                  |
| 7.4       | Call disconnection Individual direct call set-up – 4.1.2   | -                  |
| 7.4       | Call disconnection Duplex call set-up – 4.2.1  | -                  |
| 7.5       | Emergency individual call. Emergency individual call.<br>Resource pre-emption – 6.2.1  | -                  |
| 7.5.1     | Emergency speech item request Emergency<br>individual call. Resource pre-emption – 6.2.1   | -                  |
| 7.5.2     | Emergency individual call modification Emergency<br>call set-up, P2P to P2MP call modification – 6.2.2   | -                  |



|          |  |     |
|----------|--|-----|
| <b>8</b> | <b>Group management</b>  |     |
| 8.2.5    | <b>Class of usage values 101<sub>2</sub>, 011<sub>2</sub>, 010<sub>2</sub>, High, normal, low priority scanned.</b> Status to scanned group – 5.1.2.3              | –   |
| 8.2.7    | <b>Selected group and SwMI initiated attachment/detachments</b> Roaming outside and back inside of group area of the selected group – 2.4.2                        | –   |
| 8.2.7    | <b>Selected group and SwMI initiated attachment/detachments</b> Roaming outside and back inside of group area of an attached non-selected group – 2.4.3            | –   |
| 8.4      | <b>Attachment of the selected group</b> MS initiated single group attachment of the selected group, accepted – 2.1.1 (by an MS, which can have no selected group)  | –   |
| 8.4      | <b>Attachment of the selected group</b> MS initiated single group attachment of the selected group, rejection – 2.1.3 (by an MS, which can have no selected group) | –   |
| 8.4      | <b>Attachment of the selected group</b> Null group attachment as the selected group – 2.1.5  | –   |
| 8.4      | <b>Attachment of the selected group</b> Change of selected group – 2.1.6   | –   |
| 8.5      | <b>Multiple group attachment</b> MS initiated single group attachment of other than selected group, accepted – 2.1.2   | –   |
| 8.5      | <b>Multiple group attachment</b> MS initiated single attachment of other than selected group, rejection – 2.1.4  | –   |
| 8.5      | <b>Multiple group attachment</b> MS initiated Multiple group attachment, rejection of some of the attached groups – 2.2.5  | –   |
| 8.5      | <b>Multiple group attachment</b> MS initiated Multiple group attachment with attachment to selected group – 2.2.2  | –   |
| 8.5      | <b>Multiple group attachment</b> MS initiated Multiple group attachment during MS registration – 2.2.1   | –   |
| 8.5      | <b>Multiple group attachment</b> Ms initiated Multiple group attachment with no selected group – 2.2.3   | –   |
| 8.5      | <b>Multiple group attachment</b> MS initiated Multiple group attachment, only the attachment of the selected group is accepted – 2.2.4                             | N/A |
| 8.6      | <b>MS initiated detachment</b> MS initiated detachment of the selected group – 2.3.1   | –   |
| 8.6      | <b>MS initiated detachment</b> MS initiated group detachment of the selected group and an attached group – 2.3.2   | –   |
| 8.7      | <b>SwMI initiated group attachment and detachment</b>  |     |
| 8.7.1    | <b>SwMI initiated detachment</b> SwMI initiated group detachment with another value than Temporary 1 detachment and attachment – 2.4.1                             | N/A |
| 8.7.1    | <b>SwMI initiated detachment</b> Roaming outside and back inside of group area of the selected group – 2.4.2   | –   |
| 8.7.1    | <b>SwMI initiated detachment</b> Roaming outside and back inside of group area of an attached non/selected group – 2.4.3   | –   |
| 8.7.2    | <b>SwMI initiated attachment</b> SwMI initiated group detachment with another value than Temporary 1 detachment and attachment – 2.4.1                             | N/A |
| 8.7.2    | <b>SwMI initiated attachment</b> Roaming outside and back inside of group area of an attached non/selected group – 2.4.3   | –   |
| 8.7.2    | <b>SwMI initiated attachment</b> Roaming outside and back inside of group area of the selected group – 2.4.2   | –   |
| 8.7.4    | <b>SwMI initiated location updating with group report request</b> SwMI initiated location updating with group reporting – 1.3.2                                    | N/A |
| 8.7.5    | <b>SwMI initiated registration without group report request</b> SwMI initiated location updating without group reporting – 1.3.1                                   | –   |



|             |   |            |
|-------------|---|------------|
| <b>9</b>    | <b>Group call</b>   |            |
| 9.1         | <b>Call set-up</b> Normal Group call – 3.1  | –          |
| 9.1         | <b>Call set-up</b> Group Call set-up, resource queuing – 3.3  | –          |
| 9.1         | <b>Call set-up</b> MS-ISDN group call – 9.2   | <b>P</b>   |
| 9.1         | <b>Call set-up</b> Group scanning – 3.8   | –          |
| 9.1.2       | <b>Call set-up modifications</b> Group call-SwMI changes requested call priority – 3.7  | <b>N/A</b> |
| 9.1.2       | <b>End of transmission</b> Normal Group call – 3.1  | –          |
| 9.2.1       | <b>End of transmission</b> Group scanning – 3.8   | –          |
| 9.2.2       | <b>Request to transmit</b> Normal Group call – 3.1  | –          |
| 9.2.2       | <b>Request to transmit</b> MS-ISDN group call – 9.2   | <b>P</b>   |
| 9.2.2       | <b>Request to transmit</b> Pre-emptive speech item request, non pre-emptive transmission request queuing – 3.4  | <b>N/A</b> |
| 9.2.2       | <b>Request to transmit</b> Group scanning – 3.8   | –          |
| 9.2.2       | <b>Request to transmit</b> Pre-emptive speech item request, non pre-emptive transmission request rejection – 3.5  | <b>N/A</b> |
| 9.3         | <b>Call disconnection</b> Normal Group call – 3.1   | –          |
| 9.3         | <b>Call disconnection</b> Group call disconnection by call owner MS – 3.6   | <b>N/A</b> |
| 9.4         | <b>Late entry</b> – 3.2   | –          |
| <b>9.6</b>  | <b>Emergency group call</b>   |            |
| 9.6         | <b>Emergency group call</b> Emergency call set-up to busy group, speech item interruption – 6.1.1   | –          |
| 9.6         | <b>Emergency group call</b> Pre-emption during group call restoration. Transmitting (Announced Type 3) – 7.2.5  | <b>N/A</b> |
| 9.6         | <b>Emergency group call</b> Emergency group call resource pre-emption – 6.1.2   | –          |
| 9.6.1       | <b>Emergency speech item request</b> Emergency call set-up to busy group speech item interruption – 6.1.1   | –          |
| 9.6.2       | <b>Emergency group call modification</b> Emergency call set-up, P2MP to P2P call modification – 6.1.3   | –          |
| <b>10</b>   | <b>Cell re-selection</b>  |            |
| 10.1        | <b>Undeclared cell re-selection</b> Cell re-selection without communication activity – 7.1.1  | –          |
| <b>10.2</b> | <b>Unannounced cell re-selection with call restoration</b>  |            |
| 10.2.1      | <b>Unannounced cell re-selection</b> Group call restoration. Receiving (Unannounced) – 7.2.2  | –          |
| 10.2.1      | <b>Unannounced cell re-selection</b> Queuing during group call restoration., Receiving (Unannounced) – 7.2.4  | –          |
| 10.2.1      | <b>Unannounced cell re-selection</b> Queuing during individual call restoration. Receiving (Unannounced) – 7.3.4.3  | –          |
| 10.2.1      | <b>Unannounced cell re-selection</b> Queuing during individual call restoration, Communication inactivity (Unannounced) – 7.3.5.2   | –          |
| 10.2.1      | <b>Unannounced cell re-selection</b> individual call restoration. Receiving (Unannounced) – 7.3.2.2   | –          |
| 10.2.1      | <b>Unannounced cell re-selection</b> individual call restoration, Communication inactivity (Unannounced) - 7.3.3.2  | –          |
| 10.2.2      | <b>Announced cell re-selection Type without Preferred Neighbour Selected</b> Group call restoration, Transmitting. (Announced Type 3) – 7.2.1                                   | –          |
| 10.2.2      | <b>Announced cell re-selection without Preferred Neighbour Selected</b> Queuing, during group call restoration, Transmitting (Announced Type 3) – 7.2.3                         | –          |
| 10.2.2      | <b>Announced cell re-selection Type without Preferred Neighbour Selected</b> Pre-emption during group call restoration. Transmitting. (Announced Type 3) – 7.2.5                | <b>N/A</b> |
| 10.2.2      | <b>Announced cell re-selection Type without Preferred Neighbour Selected</b> Individual call restoration. Transmitting party – 7.3.1  | –          |
| 10.2.2      | <b>Announced cell re-selection Type without Preferred Neighbour Selected</b> Individual call restoration. Receiving (Announced Type 3) – 7.3.2.1                                | –          |
| 10.2.2      | <b>Announced cell re-selection Type without Preferred Neighbour Selected</b> Queuing during individual call restoration. Communication inactivity. (Announced Type 3) – 7.3.5.1 | –          |
| 10.2.2      | <b>Announced cell re-selection Type without Preferred Neighbour Selected</b> Queuing during individual call restoration. Transmitting. – 7.3.4.1                                | –          |
| 10.2.2      | <b>Announced cell re-selection Type without Preferred Neighbour Selected</b> Queuing during individual call restoration. Receiving (Announced Type 3) – 7.3.4.2                 | –          |

|           |  |     |
|-----------|--|-----|
| 10.2.2    | <b>Announced cell re-selection Type without Preferred Neighbour Selected</b> individual call restoration. Communication inactivity (Announced Type 3) – 7.3.3.1  | -   |
| 10.2.2    | <b>Announced cell re-selection</b> Queuing during Duplex call restoration (Announced Type 3) – 7.4.2   | -   |
| 10.2.2    | <b>Announced cell re-selection</b> Duplex call restoration (Announced Type 3) – 7.4.1  | -   |
| 10.2.3    | <b>Announced cell re-selection Type with Preferred Neighbour Selected</b> Group call announced cell-reselection with preferred neighbour selected and with call restoration. Transmitting – 7.2.7                                | -   |
| 10.2.3    | <b>Announced cell re-selection Type with Preferred Neighbour</b> Individual call, Announced cell re-reselection with preferred neighbour selected and with call restoration Transmitting – 7.3.6                                 | -   |
| 10.3.1    | <b>Announced Type with Preferred Neighbour Selected and without Forward Registration</b> Group call Announced cell re-selection without call restoration, (seamless hand-over) without forward registration transmitting – 7.2.6 | -   |
| 10.3.1    | <b>Announced Type with Preferred Neighbour Selected and without Forward Registration</b> Duplex call, Announced cell-re-selection without call restoration without forward registration – 7.4.3                                  | -   |
| 10.3.2    | <b>Announced Type with Preferred Neighbour Selected and with Forward Registration</b> Individual call. Announced cell re-selection without call restoration with forward registration . Transmitting – 7.3.7                     | -   |
| 10.3.2    | <b>Preferred Neighbour Selected and without Forward Registration Forward Registration</b> Group call. Announced cell re-selection without call restoration with forward registration . Transmitting – 7.2.8                      | -   |
| <b>11</b> | <b>Short data service</b>  |     |
| 11.1.1    | <b>Service Overview</b> MS-ISDN addressed individual status message – 9.3  | P   |
| 11.1.1    | <b>Service Overview</b> MS-ISDN addressed group status message – 9.4   | -   |
| 11.1.3.1  | <b>MS to Wireline Dispatcher with Status Acknowledge</b> Status transfer to dispatcher - 5.1.2.2   | -   |
| 11.1.3.2  | <b>MS to MS/Group with General Status Acknowledge)</b> Status transfer to group – 5.1.2.1  | -   |
| 11.1.3.2  | <b>MS to MS/Group with General Status Acknowledge</b> Individual addressed status transfer (Dispatcher) – 5.1.1  | -   |
| 11.1.3.2  | <b>MS to MS/Group with General Status Acknowledge</b> Status to scanned group - 5.1.2.3  | -   |
| 11.1.3.2  | <b>MS to MS/Group with General Status Acknowledge</b> MS-ISDN addressed group status message – 9.4   | -   |
| 11.1.3.2  | <b>MS to MS/Group with General Status Acknowledge</b> MS-ISDN addressed individual status message – 9.3  | P   |
| <b>12</b> | <b>Telephone call</b>  |     |
| 12.2      | <b>Call Set-up</b>   |     |
| 12.1      | <b>Gateway addresses</b> TETRA-originated call set-up – 8.1  | P   |
| 12.2.1    | <b>MS Originated, Late Through-Connect</b> TETRA-originated call set-up – 8-1  | P   |
| 12.2.1    | <b>MS Originated, early Through-Connect</b> TETRA-originated call set-up – 8-1   | -   |
| 12.2.3    | <b>MS Originated, Call Queued</b> TETRA-originated call set-up queuing – 8.2   | P   |
| 12.2.4    | <b>MS terminated</b> PSTN originated call – 8.3  | P   |
| 12.4      | <b>DTMF Over dial</b> TETRA-originated successful DTMF over-dial – 8.4   | P   |
| 12.4      | <b>DTMF Over dial</b> TETRA-originated unsuccessful DTMF over-dial – 8.5   | N/A |
| 12.5      | <b>Disconnect Causes</b> TETRA-originated call set-up – 8.1  | P   |
| 12.5      | <b>Disconnect Causes</b> TETRA-originated call set-up queuing – 8.2  | P   |
| 12.5      | <b>Disconnect Cause</b> PSTN originated call – 8.3   | P   |
| 12.6      | <b>Emergency telephone call</b> Emergency call to emergency number – 6.3.1   | -   |
| <b>14</b> | <b>Layer 2 operation</b>   |     |
| 14.1.1.4  | <b>Up-link FACCH and down-link TCH.</b> Sending SDS-TL message in FACCH during group call – 10.1   | -   |
| 14.1.1.2  | <b>Traffic channel (TCH).</b> Sending SDS-TL message in SACCH during group call – 10.2   | -   |
| 14.1.1.2  | <b>Traffic channel (TCH).</b> Sending SDS-TL message in SACCH during individual call – 10.4  | -   |
| 14.1.1.4  | <b>Up-link FACCH and down-link TCH.</b> Sending SDS-TL message in FACCH during individual call – 10.3  | -   |

| <b>Table 4. AUTHENTICATION TTR 001-04</b> |   |          |
|---|---|----------|
| <b>7</b>                                  | <b>Authentication functions</b>   |          |
|   | <b>SwMI initiated authentication</b>  |          |
| 7.1                                       | <b>General</b> Successful ITSI attach with authentication – 1.1.1   | –        |
| 7.1                                       | <b>General</b> Rejected registration, authentication failure – 1.1.2  | <b>P</b> |
| 7.1                                       | <b>General</b> Successful roaming location update with authentication – 1.1.3   | –        |
| <b>Table 5. PACKET DATA TTR 001 - 05</b>  |   |          |
| <b>7</b>                                  | <b>Packet Data functions</b>  |          |
| 7.1                                       | <b>Context Activation (Test case Number index)</b>  |          |
| 7.1.1                                     | <b>TE IPCP Initiated, Static Address (TE supplied)</b> Packet Data Context Activation, static IP address – 1.1.1                      | –        |
| 7.1.2                                     | <b>TE IPCP Initiated, Dynamic Address</b> Packet Data Context Activation, dynamic IP address – 1.1.2                                  | –        |
| 7.1.3                                     | <b>User Authentication using PAP</b> Packet Data context Activation, with PAP user authentication – 1.1.3                             | –        |
| 7.1.3                                     | <b>User Authentication using PAP</b> Packet Data context Activation, APN index selected – 1.1.5                                       | –        |
| 7.1.4                                     | <b>User Authentication using CHAP</b> Packet Data context Activation, with CHAP user authentication – 1.1.4                           | –        |
| 7.1.5                                     | <b>Failed user authentication</b> Packet Data context activation rejected, PAP user authentication – 1.1.7                            | –        |
| 7.1.5                                     | <b>Failed user authentication</b> Packet Data context activation rejected, CHAP user authentication – 1.1.8                           | –        |
| 7.1.6                                     | <b>Provisioning Reject</b> Packet Data context activation, activation rejected – 1.1.6  | –        |
| 7.1.6                                     | <b>Provisioning Reject</b> Packet Data context Activation rejected, invalid APN index selected – 1.1.9                                | –        |
| 7.1.6                                     | <b>Provisioning Reject</b> Packet Data context activation rejected, PAP user authentication – 1.1.7                                   | –        |
| 7.1.6                                     | <b>Provisioning Reject</b> Packet Data context Activation rejected, CHAP user authentication – 1.1.8                                  | –        |
| 7.2                                       | <b>Context Deactivation</b>   |          |
| 7.2.1                                     | <b>MS initiated deactivation</b> Packet Data context deactivation, MS initiated, AL established – 1.2.4                               | <b>P</b> |
| 7.2.1                                     | <b>MS initiated deactivation</b> Packet Data context deactivation, MS initiated, AL not established – 1.2.3                           | –        |
| 7.2.1.1                                   | <b>Explicit on SwMI PDCH access</b> Data transmission, SwMI initiated PDCH access, MS reject - 1.3.7                                  | –        |
| 7.2.2                                     | <b>SwMI initiated deactivation</b> Packet Data context deactivation, SwMI initiated, AL not established – 1.2.1                       | –        |
| 7.2.2                                     | <b>SwMI initiated deactivation</b> Packet Data context deactivation, SwMI initiated, AL established – 1.2.2                           | –        |
| 7.3                                       | <b>PDCH Access</b>  |          |
| 7.3.1                                     | <b>MS Initiated access on the MCCH</b> Data transmission MS Initiated PDCH access, AL not established, no ALQoS negotiation – 1.3.1   | –        |
| 7.3.1                                     | <b>MS Initiated access on the MCCH</b> Data transmission MS Initiated PDCH access, AL established – 1.3.3                             | –        |
| 7.3.1                                     | <b>MS Initiated access on the MCCH</b> Data transmission, MS Initiated PDCH access, AL not established, AL QoS re-negotiation - 1.3.2 | –        |
| 7.3.2                                     | <b>SwMI initiated access on the MCCH</b> Data transmission, SwMI initiated PDCH access, AL not established – 1.3.4                    | –        |
| 7.3.3                                     | <b>MS Initiated Access Reject</b> Data transmission, MS initiated PDCH access, SwMI reject – 1.3.6                                    | –        |
| 7.4                                       | <b>SN Data transfer</b>   |          |
| 7.4                                       | <b>SN-DATA transfer</b> Data transmission MS Initiated PDCH access, AL not established, no ALQoS re-negotiation – 1.3.1               | –        |
| 7.4                                       | <b>SN-DATA transfer</b> PDCH Access, Data transmission, MS initiated PDCH access, AL not established, AL QoS re-negotiation - 1.3.2   | –        |
| 7.4                                       | <b>SN-DATA transfer</b> Data transmission MS Initiated PDCH access, AL established – 1.3.3  | –        |
| 7.4                                       | <b>SN-DATA transfer</b> Data transmission, SwMI initiated PDCH access, AL established – 1.3.5   | –        |
| 7.4                                       | <b>SN-DATA transfer</b> Data transmission, SwMI initiated PDCH access, AL not established – 1.3.4                                     | –        |





|                                 |   |   |
|---------------------------------|---|---|
| 7.5                             | <b>End of Data</b>  |   |
| 7.5.1                           | <b>Normal</b> Data transmission MS Initiated PDCH access, AL not established, no ALQoS re-negotiation - 1.3.1                   | - |
| 7.5.1                           | <b>Normal</b> Data transmission MS Initiated PDCH access, AL not established, ALQoS re-negotiation - 1.3.2                      | - |
| 7.5.1                           | <b>Normal</b> Data transmission, MS Initiated PDCH access, AL established -1.3.3  | - |
| 7.5.1                           | <b>Data transmission</b> SwMI Initiated PDCH access, AL not established -1.3.4  | - |
| 7.5.1                           | <b>Normal</b> Data transmission, SwMI initiated PDCH access, AL established - 1.3.5   | - |
| 7.5.1                           | <b>Normal</b> Roaming during data transmission – 1.4.1  | - |
| 7.5.1                           | <b>Normal</b> Roaming without data transmission at MS side, READY state – 1.4.2   | - |
| 7.5.1                           | <b>Normal</b> Roaming without data transmission, STANDBY state – 1.4.3  | - |
| 7.6                             | <b>Advanced Link Set-up</b>   |   |
| 7.6.1                           | <b>MS Initiated AL Set-up</b> Data transmission MS Initiated PDCH access, AL not established, ALQoS re-negotiation - 1.3.2      | - |
| 7.6.1                           | <b>MS initiated AL Set-up</b> PDCH Access, SwMI Initiated PDCH access, AL not established – 1.3.4                               | - |
| 7.6.1                           | <b>MS initiated AL Set-up</b> Data transmission, MS initiated PDCH access, AL not established, no AL QoS re-negotiation – 1.3.1 | - |
| 7.6.2                           | <b>MS Initiated AL Reset</b> Roaming during data transmission – 1.4.1   | - |
| 7.7                             | <b>Advanced Link Data Transfer</b>  |   |
| 7.7.1                           | <b>Normal Down-link</b> Data transmission, SwMI initiated PDCH access, AL not established - 1.3.4                               | - |
| 7.7.1                           | <b>Normal Down-link</b> Data transmission, SwMI initiated PDCH access, AL established - 1.3.5                                   | - |
| 7.7.4                           | <b>Normal Up-link</b> Data transmission MS Initiated PDCH access, AL not established, no ALQoS re-negotiation – 1.3.1           | - |
| 7.7.4                           | <b>Normal Up-link</b> Data transmission MS Initiated PDCH access, AL established – 1.3.3  | - |
| 7.7.4                           | <b>Normal Up-link</b> Data transmission MS Initiated PDCH access, AL not established, ALQoS re-negotiation – 1.3.2              | - |
| 7.7.4                           | <b>Normal Up-link</b> Roaming without data transmission, STANDBY state –1.4.3   | - |
| 7.8                             | <b>Advanced Link Disconnection</b>  |   |
| 7.8.1                           | <b>MS initiated Context Deactivation</b> Packet Data context deactivation, MS initiated, AL established – 1.2.4                 | P |
| 7.8.2                           | <b>SwMI initiated Context Deactivation</b> Packet Data context deactivation, SwMI initiated, AL established – 1.2.2             | - |
| 7.10                            | <b>Link Reconnect</b>   |   |
| 7.8.2                           | <b>BS Data</b> Roaming without data transmission at MS side, READY state –1.4.2   | - |
| 7.10.2                          | <b>MS Data</b> Roaming during data transmission - 1.4.1   | - |
| <b>Table 7. FSSN TTR 001-07</b> |   |   |
| 2.6.1                           | <b>Individual call using FSSN</b> Individual intra FSSN call within a fleet - 1.1   | - |
| 2.6.1                           | <b>Individual call using FSSN</b> Individual intra FSSN call between two fleet - 1.2  | - |
| 2.6.2                           | <b>Group call within single FSSN domain using FSSN for CPI/TPI</b> Group call within single FSSN domain - 1.3                   | P |
| 2.6.3                           | <b>Group call maintenance using FSSN for TPI</b> Group call within single FSSN domain - 1.3                                     | - |
| 2.6.4                           | <b>Individually and group addressed status messages</b> Individually addressed FSSN status messages - 1.4                       | - |
| 2.6.4                           | <b>Individually and group addressed status messages</b> FSSN as a CPI in group addressed status message - 1.5                   | - |
| 2.6.5                           | <b>Individually and group addressed SDS text status messages</b> Individually addressed FSSN SDS-TL messages - 1.6              | - |
| 2.6.5                           | <b>Individually and group addressed SDS text status messages</b> Group addressed FSSN SDS-TL messages - 1.7                     | - |

Comments:  
No comment