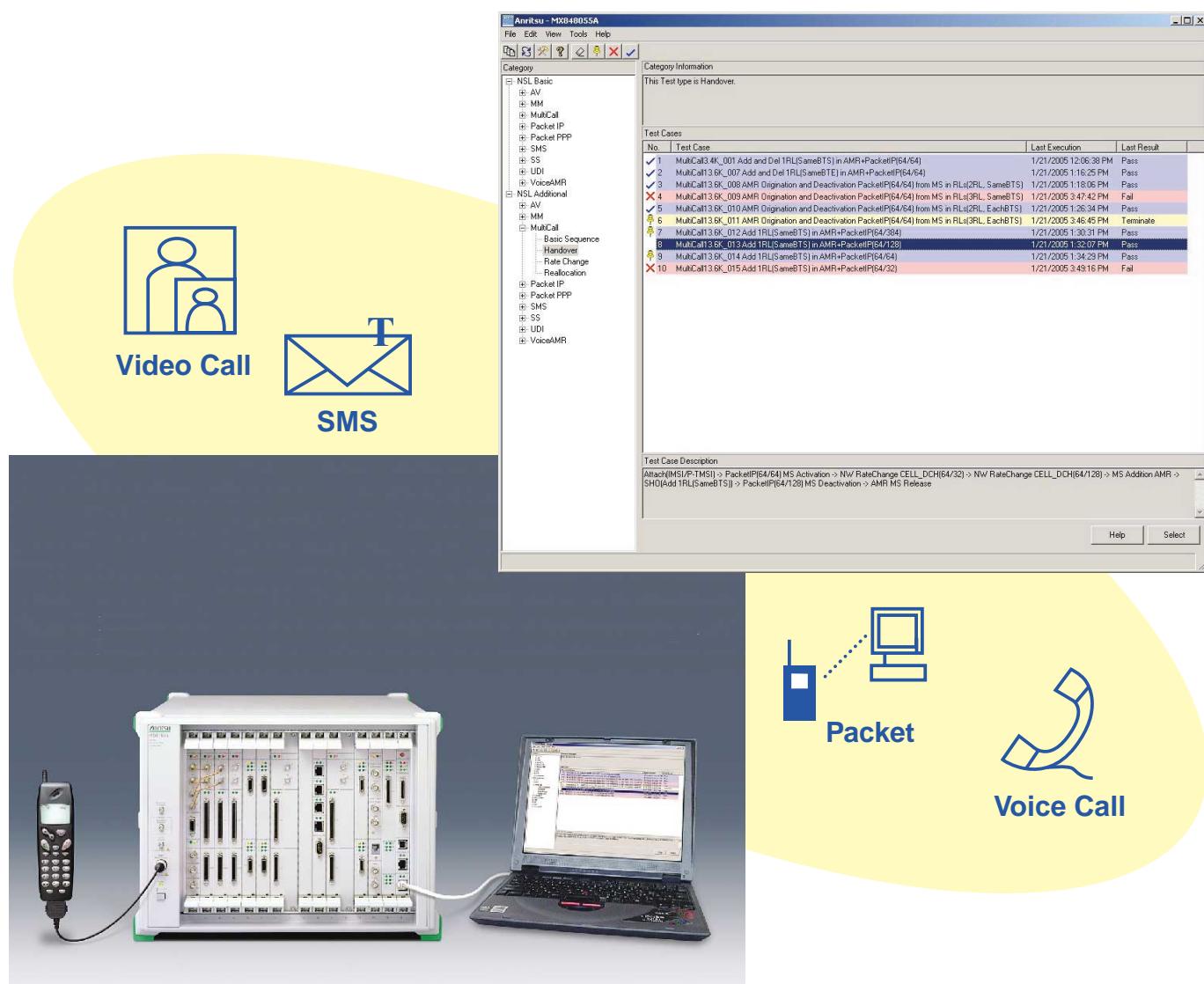


# MX848055A NSL Platform

## MX848055A-01 NSL Scenario Basic Pack

## MX848055A-02 NSL Scenario Advanced Pack

### *Pre-validation of 3G UE Interoperability Testing (IOT)*



### Features

Dramatically reduces the costs for IOT

Created based on operational experience of FOMA<sup>\*1</sup> Services<sup>\*2</sup>

Reliable operation verified by a commercial 3G UE<sup>\*3</sup>

Complies with the March 2003 3GPP Specifications

Supports Voice, Packet, Video, Multicall, and Supplementary services

\*1 FOMA is a registered trademark of NTT DoCoMo, Inc.

\*2 This does not assure connectivity with a real BTS.

\*3 The UE was designed for NTT DoCoMo, Inc.

# Pre-validation of 3G UE Interoperability Testing (IOT)

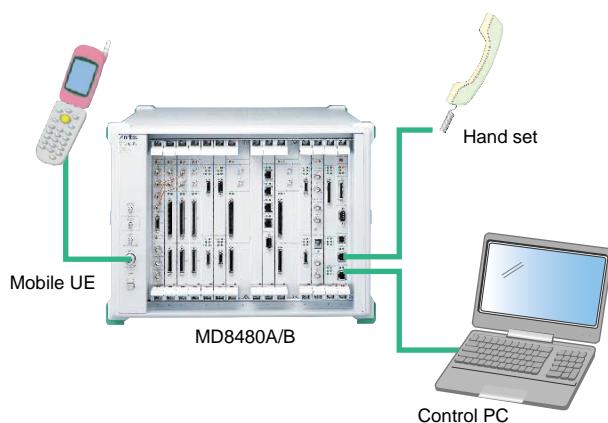
## Overview

The NSL (Network Simulation Library) is a PC software product that offers pre-validation of interoperability testing (IOT) between a 3G UE and a 3G network when it is used in combination with the MD8480A/B W-CDMA Signalling Tester functioning as a BTS simulator.

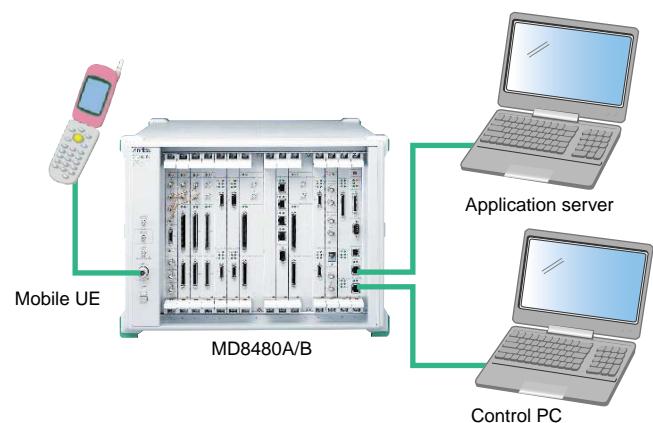
**The MX848055A NSL Platform** enables execution of test cases provided in the optional NSL Scenario Basic Pack (MX848055A-01) or NSL Scenario Advanced Pack (MX848055A-02) using a GUI (Graphical User Interface) execution environment with an easy-to-view display of test items and results.

**The MX848055A-01 NSL Scenario Basic Pack** enables simulation of the basic overall operation of various services such as Voice, Packet (IP/PPP), Video Call, SMS, and MultiCall. **The MX848055A-02 NSL Scenario Advanced Pack** enables simulation of more complex overall operation of these services, such as a handover test and rate change. Thus, tests can be performed while considering actual operation status.

### Configuration of Voice testing



### Configuration of Packet testing



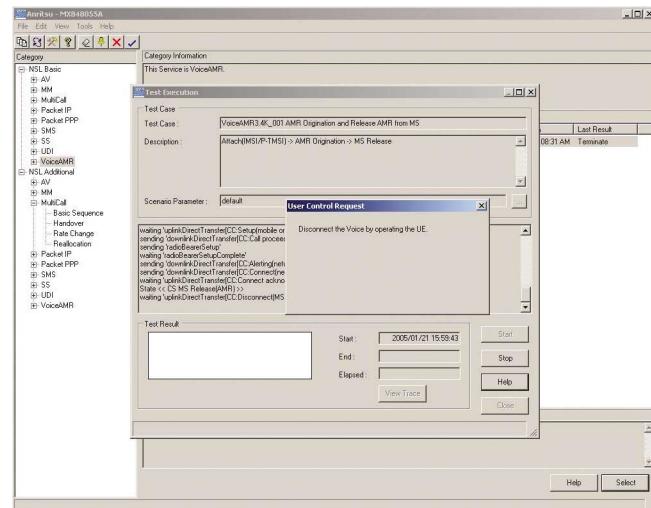
## Supported Test Cases

|                                      |                         |   |
|--------------------------------------|-------------------------|---|
| NSL Scenario Basic Pack (91 TCs)     | Video Call              | Originate (UE/Network), Release (UE/Network)              |
|                                      | Multi Call              | Voice + Packet  |
|                                      | Packet (IP/PPP)         | Originate (UE), Release (UE/Network)                      |
|                                      | Registration            | Combined Attach (CS/PS), Detach                           |
|                                      | SMS                     | Originate, Terminate                                      |
|                                      | Supplementary Service   | Call Forward, Call Waiting, CLI Notification              |
|                                      | UDI                     | Originate (UE), Release (UE/Network)                      |
|                                      | Voice (AMR) Call        | Originate (UE/Network), Terminate (UE/Network)            |
| NSL Scenario Advanced Pack (182 TCs) | Video Call              | Handover, Reallocation, ReEstablish                       |
|                                      | Periodic RA/LA Updating |   |
|                                      | Multi Call              | Handover, Rate Change, Reallocation                       |
|                                      | Packet (IP/PPP)         | Handover, Rate Change, Periodic Cell Update, Reallocation |
|                                      | Registration            | Combined Attach (CS/PS)                                   |
|                                      | SMS                     | Handover, Reallocation                                    |
|                                      | Supplementary Service   | Call Waiting, CLI Notification                            |
|                                      | UDI                     | Handover, ReEstablish                                     |
|                                      | Voice (AMR) Call        | Handover, ReEstablish, DTMF                               |

## Execution environment with easy-to-run test cases

The NSL Platform lets users execute a test simply by selecting and single-clicking any member of a suite of test cases arranged in categories on the execution screen.

- The categories of test cases can be displayed in a tree view, allowing for prompt execution of the intended test.
  - Sub-windows allow a user to check the contents and progress of test cases.
  - Pop-up windows show the UE operating procedure, enabling anyone to perform tests easily.
  - Help windows allow a user to check the connection diagram for each test and details of the test contents.



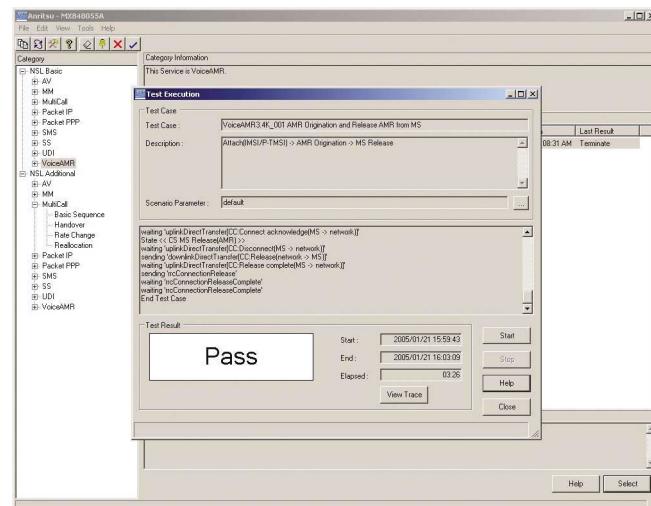
### <Example of test start screen>

## UE validation by highly reliable test cases

The NSL Scenario Basic Pack/Advanced Pack offer test cases complying with 3GPP and created on the basis of actual operational experience. This enables pre-validation of Interoperability Testing (IOT) by objective and highly reliable test cases, rather than by test cases created in-house, and allows final UE validation before product launch.

- All test cases have been operationally verified by a real commercial UE.
  - Supports various 3G UE services.

Overall UE operational tests can be performed, including the User Plane.

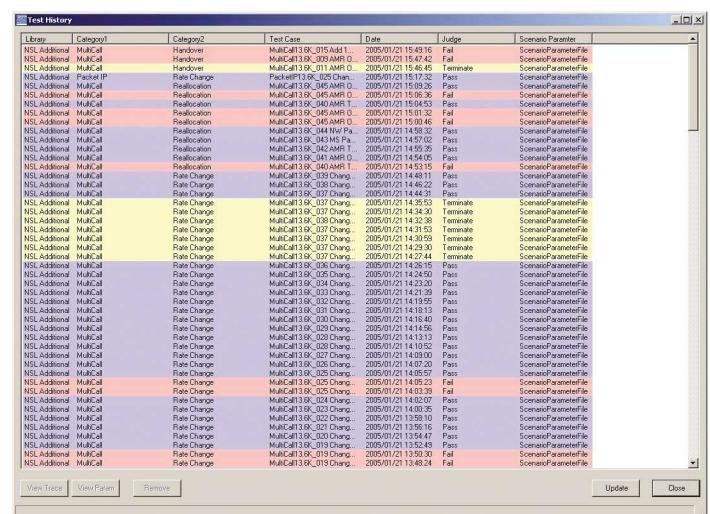


### <Example of test end screen>

## The latest software upgrades via technical support service

Anritsu Technical Support Service (1 year, a required option) provides the latest software upgrades in conjunction with MD8480A/B version upgrades.

Also, our expert engineers will reply to your questions on product testing and other technical questions through a dedicated Email address.



### <Example of test result list>

## Configuration

|                 |  |
|-----------------|--|
| MX848055A       | NSL Platform                           |
| MX848055A-01    | NSL Scenario Basic Pack                |
| MX848055A-02    | NSL Scenario Advanced Pack             |
| MX848055A-TS110 | Technical Support Service              |
| MX848055A-TS121 | MX848055A-01 Technical Support Service |
| MX848055A-TS122 | MX848055A-02 Technical Support Service |

## Required System

Refer to each detailed data sheet for configuration detail.

|            |  |
|------------|--|
| MD8480A/B  | MD8480A/B Mainframe (V5.10)  |
|            | MU848053A RX Baseband  |
|            | MU848055A ISDN   |
|            | MU848057A Frame coder  |
|            | MU848058A TX baseband x 2  |
|            | MD8480A/B-02 Additional RF Unit                                    |
|            | MX848041A Ciphering (V5.10)  |
| Control PC | MX848041A Ciphering (V5.10) <sup>*1</sup>                          |
|            | Pentium4 <sup>*2</sup> 1 GHz or more                               |
|            | Memory 256 Mbyte or more   |
|            | Hard disk space 2 Gbyte or more                                    |
|            | Display 1024 x 768 pixel (XGA) or more                             |
|            | Microsoft Internet Explorer 6.0 or later <sup>*3</sup>             |
|            | Unoccupied USB port x 1, Ethernet (100Base-TX / 10Base-T) port x 1 |
| USIM       | P0027 Test USIM (Anritsu) <sup>*4</sup>                            |

\*1 Windows2000 Professional is a registered trademark of the Microsoft Corporation.

\*2 Pentium4 is a registered trademark of the Intel Corporation.

\*3 Internet Explorer is a registered trademark of the Microsoft Corporation.

\*4 The operation of this software has been verified by above USIM.



Specifications are subject to change without notice.

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