Agilent PXT Wireless Communications Test Set (E6621A)

Agilent N6062A LTE
Message Editor User's Guide

Agilent Technologies

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Table of Contents

1   Introduction

Welcome to the ***N6062A LTE Message Editor User's Guide*** for the Agilent E6621A PXT Wireless Communications Test Set (PXT). The purpose of this guide is to provide you with installation instructions and user information for the Agilent N6062A LTE Message Editor (N6062A) software application. For more information about the PXT and other PXT software products, refer to the ***Agilent PXT Wireless Communications Test Set Getting Started Guide*** and the ***Agilent PXT Wireless Communications Test Set User's Guide***.

Latest Documentation

For the latest version of all documentation, please go to www.agilent.com/find/pxt.

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For the latest release of all PXT related software, please go to http://www.agilent.com/find/softwaremanager.

IMPORTANT	An active N6050AS Software and Technical Support Contract (STSC) is required to access the software manager website (displayed above), together with the login credentials registered by you or your company for activation. See the section on licensing in the ***Agilent PXT Wireless Communications Test Set Getting Started Guide*** for instructions to activate your STSC.

2 System Architecture

The N6062A LTE Message Editor software application runs on PCs using the Microsoft (MS) Windows XP/ Windows 7 operating systems. The N6062A is connected to the PXT via a private Ethernet interface to enable you to create and modify scenario files for download into the PXT. An example N6062A user interface is shown below.
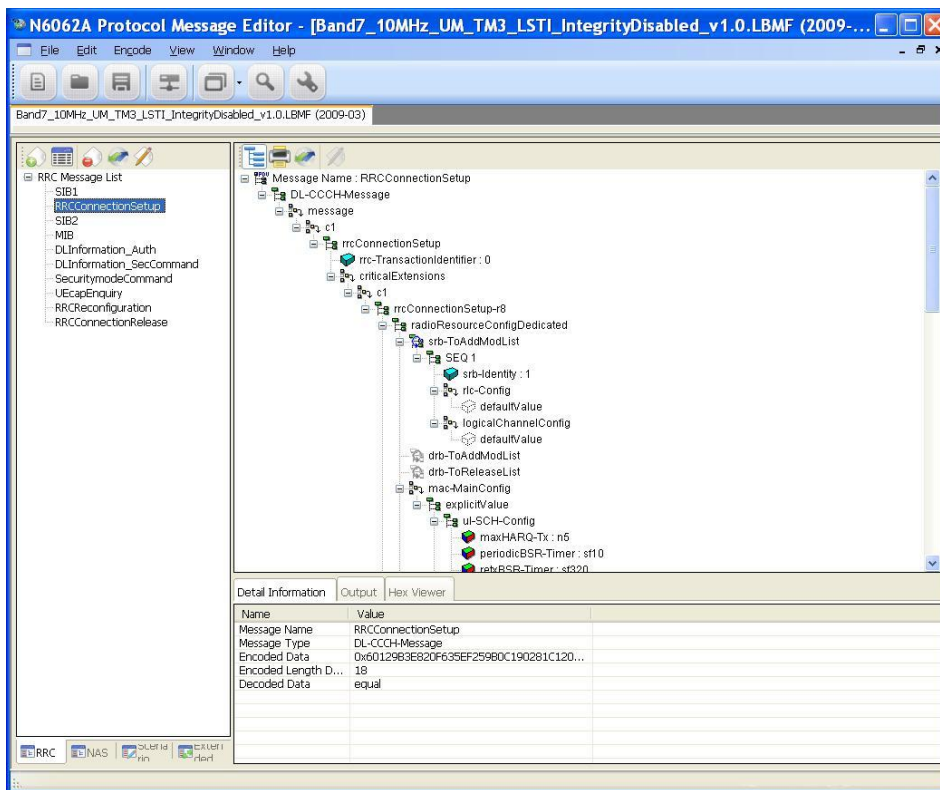

Figure 2-1: N6062A Message Editor

3 N6062A Software Installation

Installation Computer Minimum Requirements

For successful operation, the installation computer for the N6062A LTE Message Editor must meet or exceed the following specifications:

Minimum System Requirements	
Operating System	Computer running Windows XP or Windows 7
Communication with Test Set(s)	Ethernet
RAM (Memory)	4 GB RAM (Minimum)
Processor	>2.5 GHz Intel Pentium® Quad core or equivalent
.NET Framework	Version 2.0 or later

NOTES:

1. Consideration for storage space should be given for storing scenario files and supporting documentation.

2. A clean installation of the Operating System is required to ensure freedom from Ad-ware, Spy-ware, updaters and other processor resource consuming applications. For expected performance, Antivirus software should not be running.

3. Connecting the PXT and the message editor PC to a network is not recommended.

Downloading the Latest Version of N6062A Message Editor Software

To ensure you have the latest version, download the N6062A software from the Agilent software manager web site. To access this site, you must first register and activate your N6050AS Software and Technical Support Contract (STSC) for the E6621A PXT.

If you have not already done so, follow the instructions on your N6050AS Entitlement Certificate to activate your Contract. For more information on activating licenses, see the section on licensing in the ***Agilent PXT Wireless Communications Test Set Getting Started Guide*** for instructions to activate your STSC.

On the www.agilent.com/find/softwaremanager download site, locate the N6062A Message Editor Software, and save it to a location on your PC.

Locate the file on your PC and double-click the setup file to install the software. Follow the on-screen instructions to complete the installation.

Before running the software, plug your N6062A USB license key into your PC.

NOTE	Always check the release notes for the latest information about any known issues and other important information about your product. Release notes are available for download from www.agilent.com/find/softwaremanager.

Connecting the Computer and Test Set

Connect the N6062A LTE Message Editor installation computer to the LAN port on the E6621A PXT rear panel.
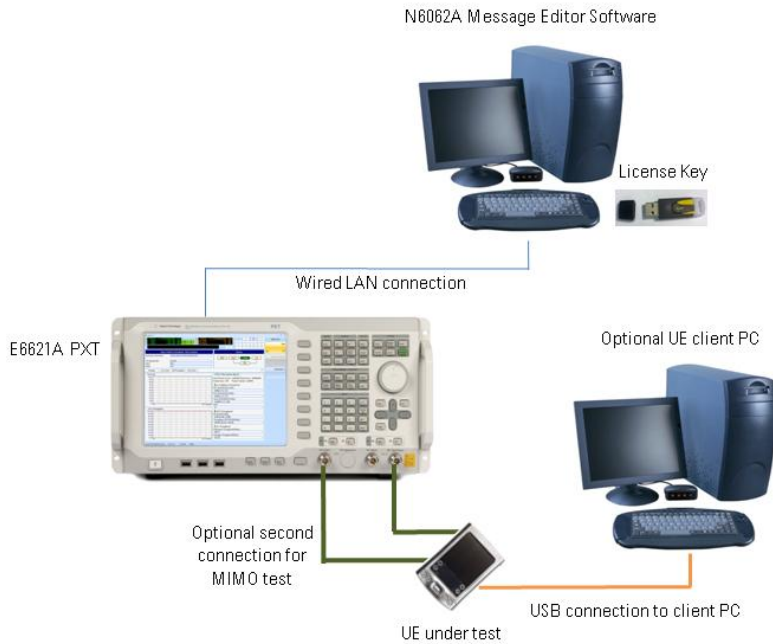

Figure 3-1: System Configuration

## Launch the N6062A Message Editor Software

Start the N6062A LTE Message Editor application from the Windows Start menu by selecting Start, All Programs, Agilent PXT, N6062A Message Editor, N6062A, or by double-clicking on the

desktop icon.

4 Menus for N6062A LTE Message Editor

The N6062A Message Editor is presented in a single window. Some functions are available from the menu bar. Frequently used functions are duplicated in the tool bar.

The Menu Bar

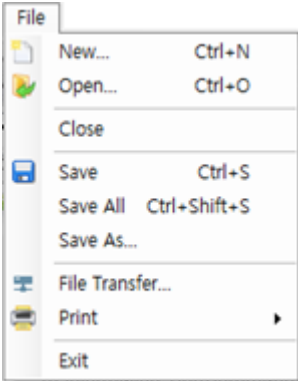File   Edit   Encode   View   Help
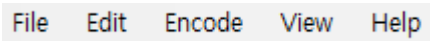
There are five drop-down menus: File, Edit, Encode, View, and Help. Before any files have been opened, only two menus are displayed: File and Help.

Using your mouse to select the following menu options performs the described task:

The File Menu

The N6062A Message Editor works with a file type known as a scenario file which contains message definitions and defines the desired sequence of messages exchanged between the PXT and a UE. These file types have an .LBMF file extension.

File
New...   Ctrl+N
Open...   Ctrl+O
Close
Save   Ctrl+S
Save All   Ctrl+Shift+S
Save As...
File Transfer...
Print   ▶
Exit

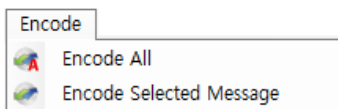| Top Level Menu Option	Drop-Down Menu Options	Task Performed
File		Opens the Drop-Down Menu
	New...	Creates a new scenario file.
	Open...	Opens an existing scenario file.
	Close	Closes the active scenario file.
	Save	Saves the active scenario file.
	Save All	Saves all open scenario files.
	Save As	Save a scenario file with a different name or location.
	File Transfer...	• Downloads a scenario file *to* the PXT. • Uploads a scenario file *from* the PXT.
	Print	Selects the file for printing.

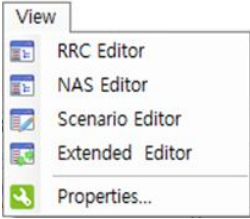| Top Level Menu Option	Drop-Down Menu Options	Task Performed
File (Continued)	**File, Print**	Prints selected scenario file.
	Tree Print	Print an individual message.
	File Preview	Provides a preview of the selected scenario file.
	Tree Preview	Prints a preview of the individual message.
	Exit	Closes the application.

The Edit Menu
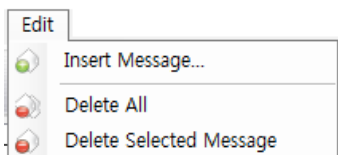
| Top Level Menu Option	Drop-Down Menu Command	Task Performed
Edit		
	Insert Message	Inserts a new RRC or NAS Message into the scenario file.
	Delete All	Deletes All RRC or NAS Messages from a scenario file.
	Delete Selected Message	Deletes a selected RRC or NAS Message from a scenario file.

The Encode Menu

Top Level Menu Option	Drop-Down Menu Command	Task Performed
Encode		
	Encode All	Encodes all RRC or NAS Messages in a scenario file.
	Encode Selected Message	Encodes a selected RRC or NAS Message.

The View Menu

Top Level Menu Option	Drop-Down Menu Command	Task Performed
View		
	RRC Editor	Displays the RRC Editor window.
	NAS Editor	Displays the NAS Editor window.
	Scenario Editor	Displays the Scenario Editor window.
	Extended Editor	Displays the Extended Editor window.
	Properties	Displays the properties of the .LBMF file. • File Name • File Path • Spec Version • RRC Version • NAS Version • Description

The Help Menu
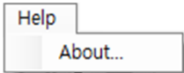
- Click **About...** to display the About (Version Information) Window.

The Tool Bar

The Tool bar provides quick access to frequently used functions.

- The [icon] icon duplicates the function of File, New (Ctrl+N)

- The [icon] icon duplicates the function of File, Open (Ctrl+O)

- The ⊞ icon duplicates the function of File, Save (Ctrl+S)

- The ⊏ icon duplicates the function of File, File Transfer (Ctrl+S)

- The ⊡ icon duplicates the function of View, LTE BSE ME, NAS Editor, Scenario Editor, Extended Editor

- The 🔧 icon enables the function of Search.

- The 🔧 icon duplicates the function of View, Properties

-

The Tool bar provides quick access to frequently used functions.

- The icon duplicates the function of File, New (Ctrl+N)

- The icon displays the Hex viewer window

- The icon changes Sorting Type

- The icon expands All Message List

- The icon duplicates the function of Encode, Encode Selected Message

- The icon expands All Message List in RRC Message window

- The icon duplicates the function of File, Print

- The icon duplicates the function of Encode, Encode Selected Message

- The icon edits Value in RRC Message window

5   Scenario File Overview

The N6062A LTE Message Editor provides the ability to create and modify a type of file known as a scenario file. Scenario files contain message definitions and a desired sequence of message exchanges at the RRC level between the PXT and a UE. Since many RRC messages also contain NAS messages, the N6062A also enables the creation of NAS messages. These can be included as payload in the generated RRC messages.

The content of the RRC messages also determines lower layer behavior. For example, the Bandwidth of the cell is defined using the dl-Bandwidth parameter in the Master Information Block.

Scenario files are downloaded to the PXT via the N6062A LTE Message Editor, where they are then selected to run from a menu on the PXT.

Message Editor Fields that can be Over-written by PXT Front-panel Menu Keys

When a scenario file is loaded on the PXT, the parameters from the scenario file that have PXT menu keys associated with them are updated on the PXT to reflect the values from the scenario file. The table below shows those values from the scenario file that can be changed using the PXT front-panel menu keys without requiring modification of the scenario file using the N6062A LTE Message Editor.

Message Editor Field	PXT Menu Key	Key Path
freqBandindicator controls which frequency band is transmitted in System Information Block 1(SIB1).	Band	**Freq**
dl-bandwidth determines the channel bandwidth defined in the Master Information Block (MIB) message.	CH Bandwidth	**Mode > BSE > Mode Setup**
transmissionMode controls the transmission mode assigned in the RRC Connection Setup message. If this value is set to TM3 or TM4, the codebook subset restriction field is also enabled.	Transmission Mode	**BSE > Mode Setup> More >** *RRC Settings*
p-Max is carried in SIB1 and provides a value for the maximum power the UE is allowed to transmit. If this value is not present in the scenario file, the **p-Max On/Off** setting is overwritten, but this setting is not.	p-Max	**BSE > Mode Setup> More >** *RRC Settings*
p-Max On/Off determines whether the p-Max value is present in the scenario file by controlling whether the Information Element (IE) is present or not.	p-Max On/Off	**BSE > Mode Setup> More >** *RRC Settings*
p0-NominalPUSCH contributes towards the power of the PUSCH and is carried in SIB2.	p0-NominalPUSCH	**BSE > Mode Setup> More >** *RRC Settings*

Message Editor Field	PXT Menu Key	Key Path
p0-UE-PUSCH contributes towards PUSCH power and is carried in the (RRC Connection) Setup message.	p0-UE-PUSCH	**BSE** > **Mode Setup**> **More** > *RRC Settings*
defaultPagingCycle controls how frequently the UE can be paged and is contained in SIB2.	Default Paging Cycle	**BSE** > **Mode Setup**> **More** > *RRC Settings*
nB controls how frequently the UE can be paged and is contained in SIB2.	NB	**BSE** > **Mode Setup**> **More** > *RRC Settings*
additionalSpectrumEmission controls how much leakage the UE is allowed into adjacent frequencies and is contained in SIB2.	Additional Spectrum Emission	**BSE** > **Mode Setup**> **More** > *RRC Settings*
PDNAddressInformation is the IP Address assigned to the UE in the Activate Default EPS Bearer Context Request message. Since this is #1, it is the IP address that is contained inside the (Non-Access Stratum) NAS Attach Accept message.	DUT IP Address #1	**BSE** > **Mode Setup**> **More** > *RRC Settings*
MCC is carried in SIB1 and also exists in the NAS Attach Accept message, if Globally Unique Temporary Identity (GUTI) is present. This setting overwrites both of these values.	MCC	**BSE** > **Mode Setup**> **More** > *RRC Settings*
MNC is carried in SIB1and also exists in the NAS Attach Accept message, if Globally Unique Temporary Identity (GUTI) is present. This setting overwrites both of these values.	MNC	**BSE** > **Mode Setup**> **More** > *RRC Settings*
This setting controls the number of digits of MNC. It is carried in SIB1and also exists in the NAS Attach Accept message, if Globally Unique Temporary Identity (GUTI) is present. This setting overwrites both of these values.	2 or 3 Digit MNC	**BSE** > **Mode Setup**> **More** > *RRC Settings*
drx-Config determines if the DRX Config IE in the RRC Connection Reconfiguration message is set to setup or release.	Connected DRX On/Off	**BSE** > **Mode Setup**> **More** > *RRC Settings* > **More**
longDRX-Cycle is related to Connected Mode DRX and is present in the RRC Connection Reconfiguration message.	longDRX-Cycle	**BSE** > **Mode Setup**> **More** > *RRC Settings* > **More**

Message Editor Field	PXT Menu Key	Key Path
longDRX-CycleStartOffset is related to Connected Mode DRX and is present in the RRC Connection Reconfiguration message.	longDRX-CycleStartOffset	**BSE** > **Mode Setup**> **More** > *RRC Settings* > **More**
onDurationTimer is related to Connected Mode DRX and is present in the RRC Connection Reconfiguration message.	onDurationTimer	**BSE** > **Mode Setup**> **More** > *RRC Settings* > **More**
drx-InactivityTimer is related to Connected Mode DRX and is present in the RRC Connection Reconfiguration message.	drx-InactivityTimer	**BSE** > **Mode Setup**> **More** > *RRC Settings* > **More**
shortDRX is related to Connected Mode DRX and is present in the RRC Connection Reconfiguration message. This field controls whether shortDRX IE is present or not.	Short DRX Cycle On/Off	**BSE** > **Mode Setup**> **More** > *RRC Settings* > **More**
shortDRX-Cycle is related to Connected Mode DRX and is present in the RRC Connection Reconfiguration message.	shortDRX-Cycle	**BSE** > **Mode Setup**> **More** > *RRC Settings* > **More**
shortDRX-CycleTimer is related to Connected Mode DRX and is present in the RRC Connection Reconfiguration message.	drxShortCycleTimer	**BSE** > **Mode Setup**> **More** > *RRC Settings* > **More**

6 Creating a New Scenario File

It is often easiest to start with an existing scenario file as a template and make modifications from that. However, you may want to create a new scenario file to use as a completely blank canvas.

1. Click **New** Insert Icon [icon] or Click **File**, **New**
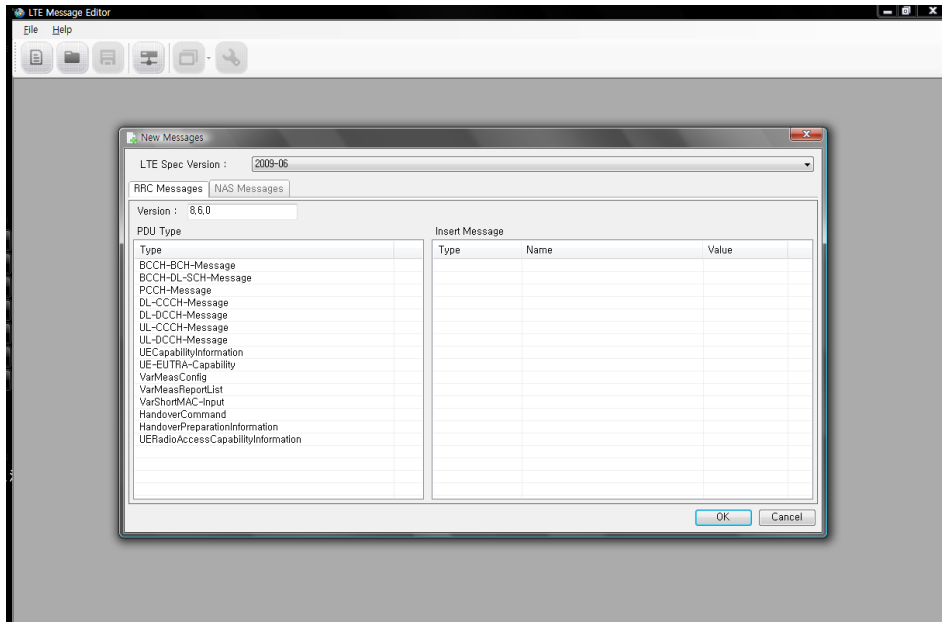
Figure 6-1: Creating New Scenario File

2. Click the **OK** button, This creates a new, blank, scenario file.

3. Save this under an appropriate name before making further edits to it.

7 Creating and Changing a Scenario File

After you save a new scenario file or open an existing one, you see four tabs at the bottom left of the scenario file window, which enables you to access the various functions of the N6062A Message Editor. They are described in each of the sections below:

The RRC Window

NAS Window

Scenario Window

Extended Window

The RRC Window

The N6062A LTE Message Editor provides a comprehensive tool for generating and manipulating RRC messages.

The RRC Message List box displays all the user defined RRC messages. By clicking on the Insert Message button, you can easily insert, delete, and edit RRC messages. You can select an individual message on the list to view its structure and parameters on the Message Structure box to the right of the RRC Message List.
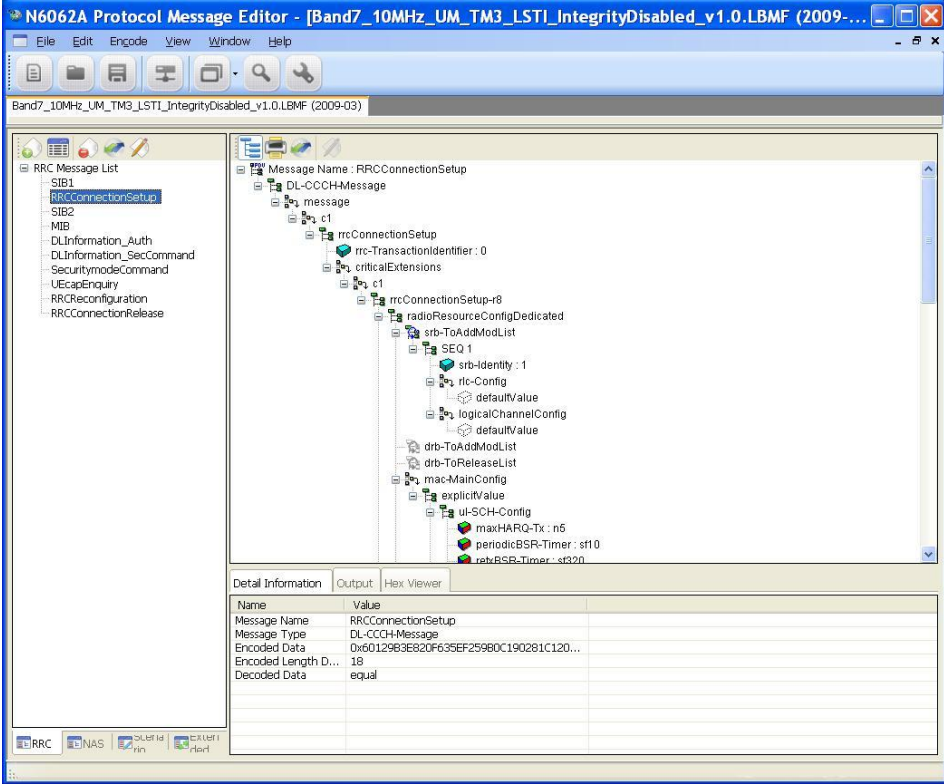

Figure 7-1: RRC Message Structure

1. Click on the **Insert Message** icon. The window below is displayed.

2. Select **PDU Type**.

3. Double-click or drag and drop to insert a new message.

4. Name the message by double-clicking in the **Name** column and typing the desired name. (For example: "Master Information Block")
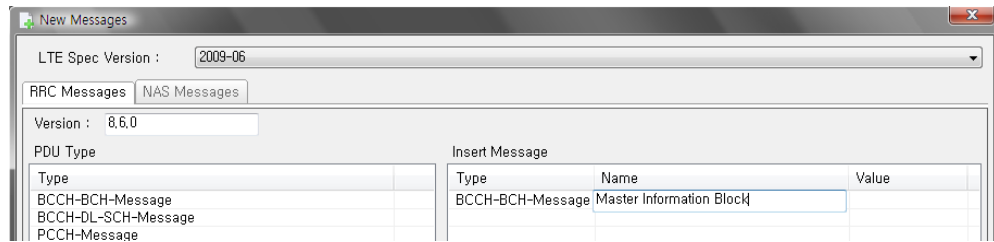

Figure 7-2: Insert a New Message Type

5. A message can be created directly by inserting a hex value into the **Value** column or this can be left blank.

6. Click the **OK** button.

A new message now appears in the **RRC Message List**. The message name appears in red, indicating that it still needs to be encoded.

If a hex value has been specified for the message, a decoded RRC message corresponding to that hex value appears on the right-hand side, when the message name is highlighted.

If the hex value has not been specified, a blank message corresponding to the selected PDU type appears in the right-hand side.
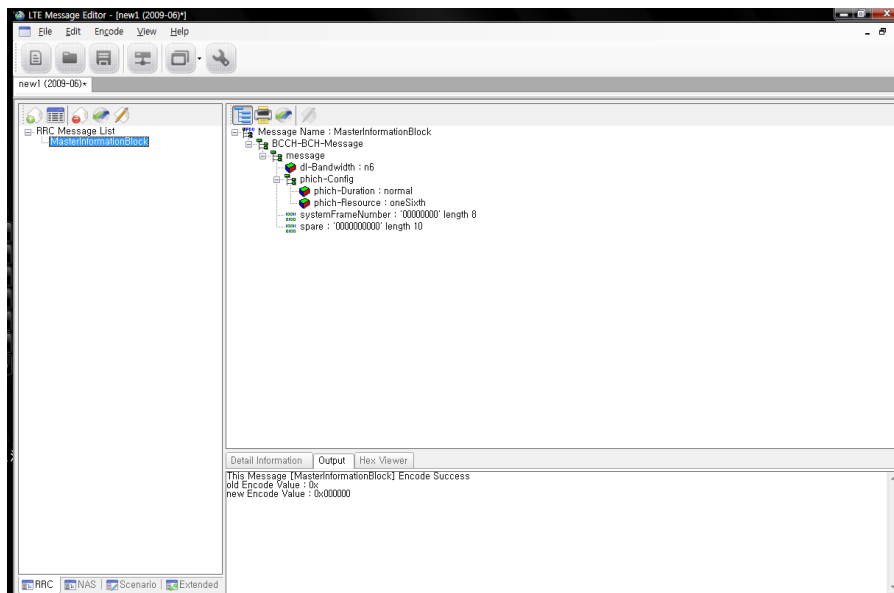

Figure 7-3: New RRC Message
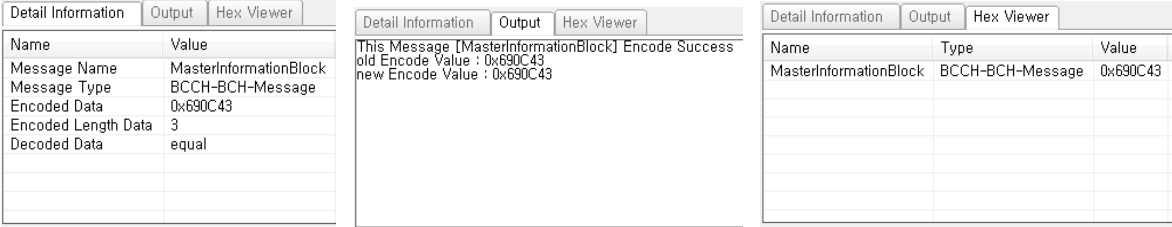
The fields of the message can be manipulated by selecting a modifiable parameter on the right-hand side, right-clicking and selecting **Value Changed**. Depending on the field type, a value can either be entered directly, or chosen from an enumerated list.

| NOTE	Any applied changes to an RRC message on the list are not finalized unless the message is encoded again.

Figure 7-4: Detail Information - Output - Hex Viewer

The Input box (the top-right-side window, where you can change values) shows a brief summary of a selected item. Once you encode an item, the result will be shown in the **Output** box.

NAS Window

Non-Access Stratum (NAS) Editor enables you to easily generate and decode encoded HEX NAS data. These are very important features to create a wide range of PXT scenario files. Generated, encoded HEX NAS data can be used in the N6062A to generate RRC messages containing NAS data; any received NAS messages on the eNodeB emulator side can be decoded for debugging.

NOTE	It is not sufficient to construct an NAS message for it to be included in a scenario file – the hex content associated with the NAS message must appear inside an RRC message for it to be sent to the UE during a message exchange.
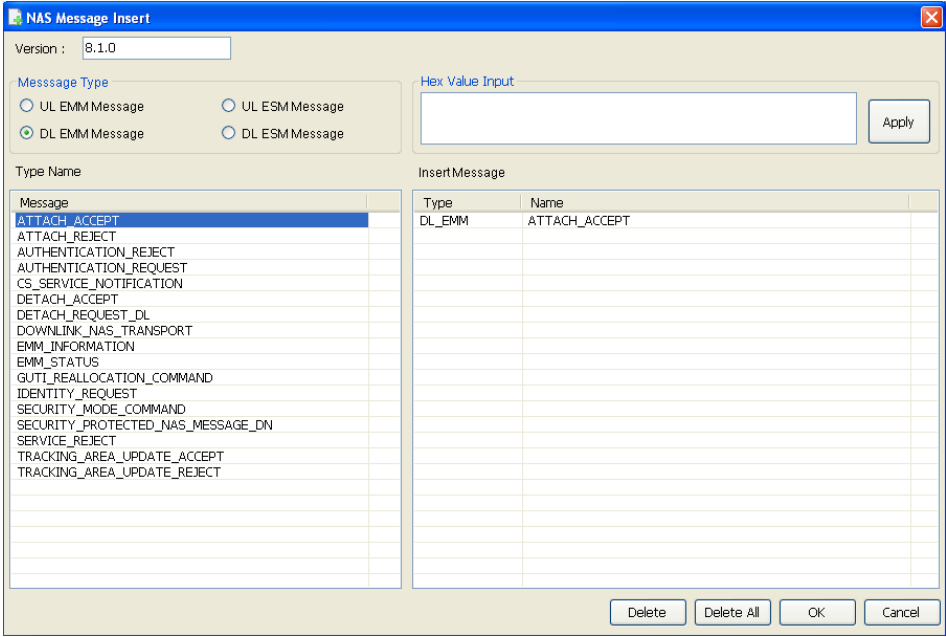
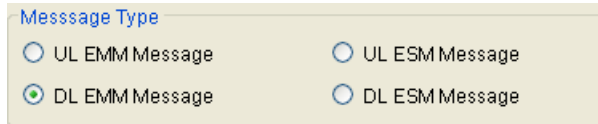**Figure 7-5: NAS Message Insert Window**

To generate a new message, first select one of the DL radio buttons in the Message Type box. (The UL radio buttons exist to enable maximum flexibility of this tool, however, the current application does not require use of the UL Message types.)

After specifying the message type, click **New** to display the desired NAS message in Message Structure box.

NAS Message Insertion Procedure

1. Click the Insert Message icon or **Edit**, **Insert Message.**

2. Select Message Type.

3. Select **Message.**

4. Double click or drag and drop to Insert Message window.

5. Click **OK** button.

Scenario Window

The Scenario Editor provides a simple interface for you to create and modify various test scenarios for the eNodeB emulator. Use the DL RRC messages (which may contain NAS data) defined in N6062A LTE Message Editor software as well as those you have pre-defined. Each scenario is divided into two sub-scenarios:

- Start Scenario
- Communication Scenario

Start Scenario

The Start Scenario window defines master information block and system information block messages that are broadcast by the PXT; you can double-click or drag and drop to place a selected MIB/SIB message in Start Scenario box. The index in the Start Scenario box indicates the order of message transmission from eNodeB.

Figure 7-6: Start Scenario Window

Communication Scenario

The Communication Scenario window defines the desired message exchange between the PXT and a UE. The UL RRC Message contains the name of a standard RRC Message (for example, rrcConnectionRequest). The right-hand DL RRC Message column contains the name of the message that will be sent to the UE as a result of receiving the UL RRC Message Type. The messages in the DL RRC column are those that have been constructed by the user and appear in the RRC Window.

Some UL RRC messages can carry NAS messages inside them. For those messages, it is possible to further qualify the DL RRC message that will be sent based on the NAS content of an UL RRC message. So, for a received UL Information Transfer message at RRC, different DL RRC messages could be sent to the UE depending on the NAS message that was carried inside the UL RRC Message.

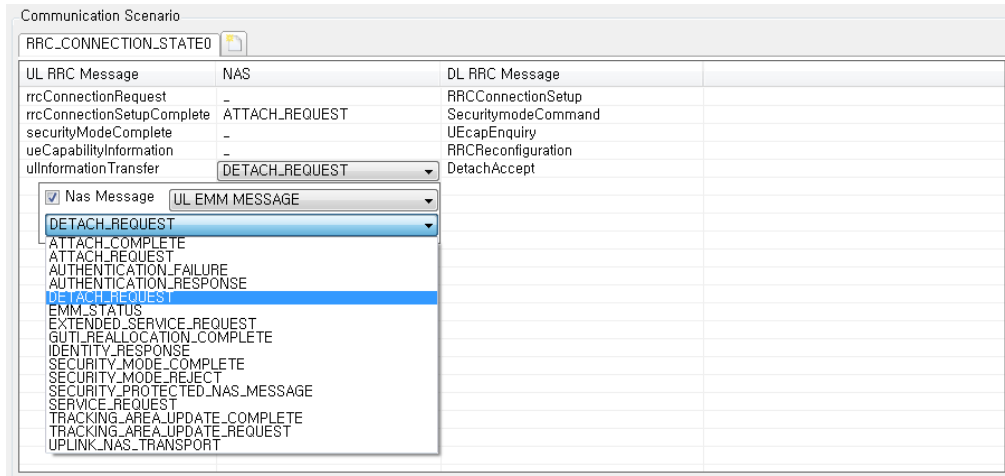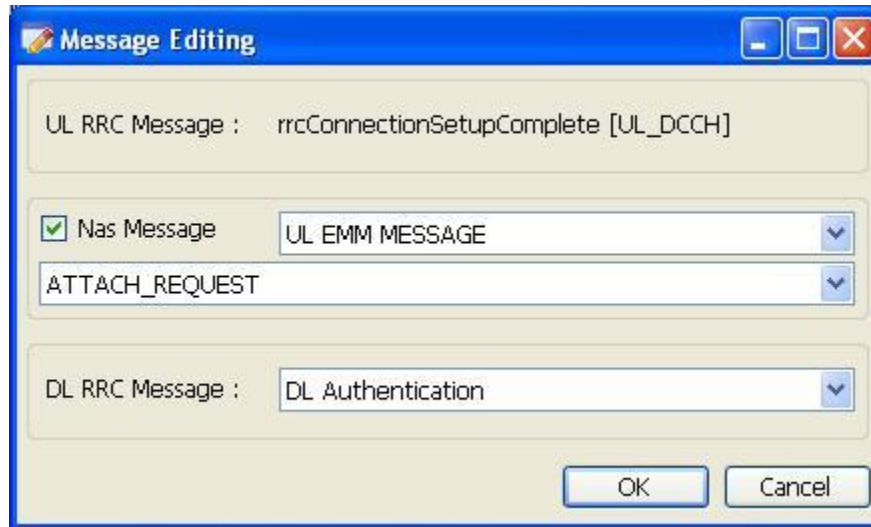**Figure 7-7: Communication Scenario Window**

Figure 7-8: NAS Messages

As well as qualifying a message response based on the UL NAS message that is being carried, there is the option to further qualify the response to certain messages based on message content.

The PDN Connectivity Request message can carry information on the Access Point Name. It is possible to determine the response that should be sent based on the Access Point Name being carried inside the message. This means that a different response can be sent in response to different PDN Connectivity Request messages.
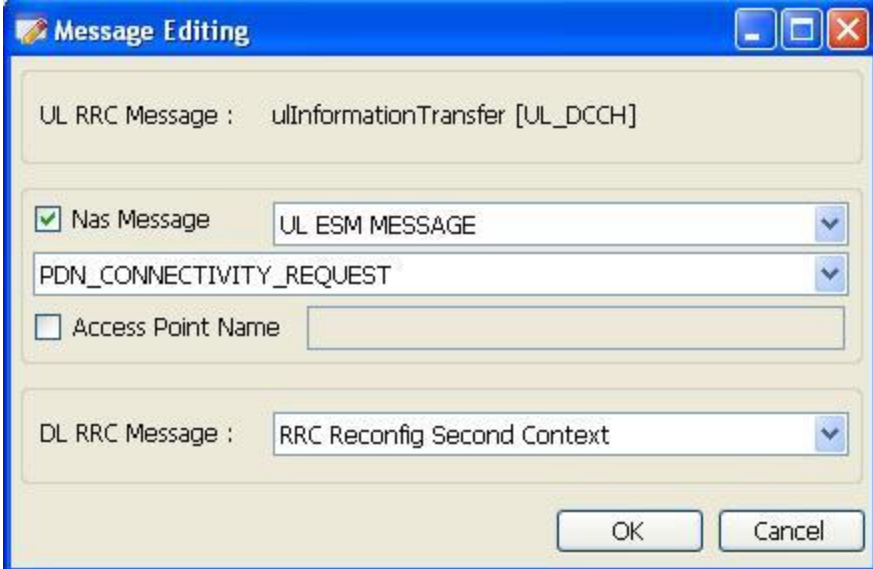
The Measurement Report message can carry a different measurement identity (or MeasID). A different response can be sent to measurement reports containing different measurement identities – allowing a certain report to trigger an automatic redirection to another cell, for example.
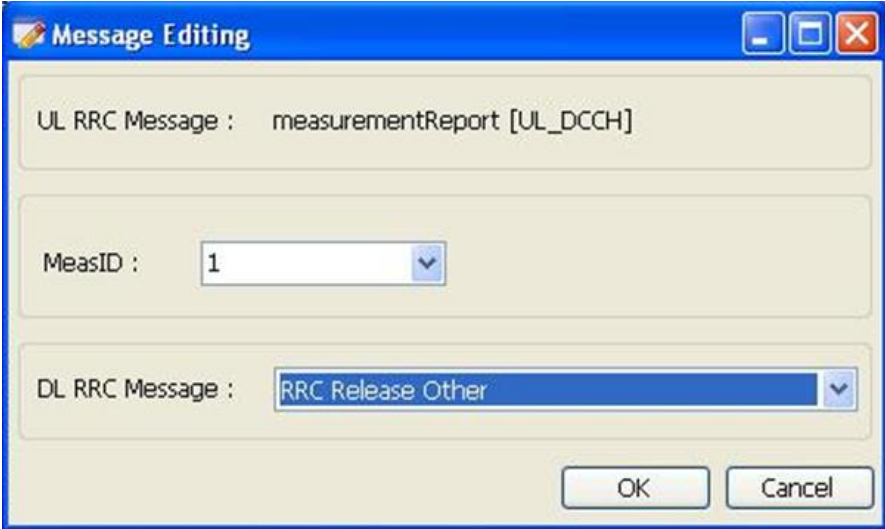
Extended Window

Using Extended Window, you can add a message that has been defined in the RRC message window to the Custom Message, Page Message, or Release Message pane.
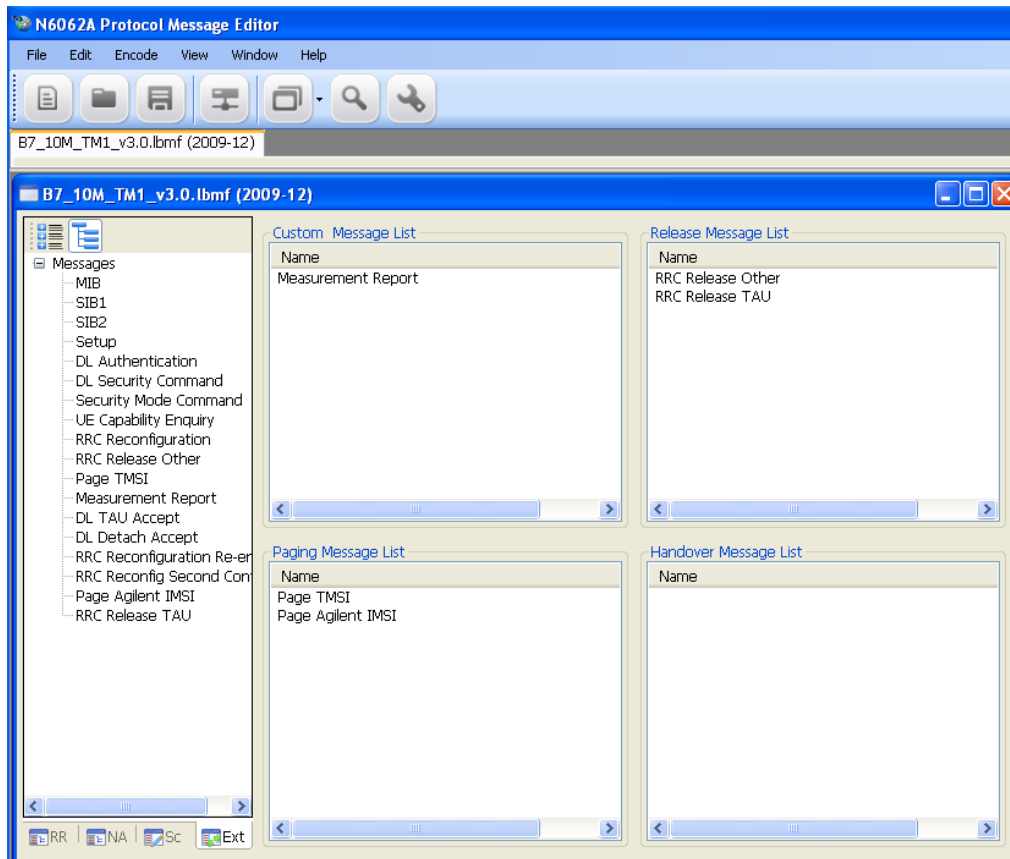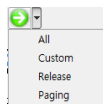

Figure 7-9: Extended Window

On the PXT instrument, it is possible to send these on demand by pressing the appropriate softkeys under the PXT **Function** menu.

Extended Message Insertion Procedure

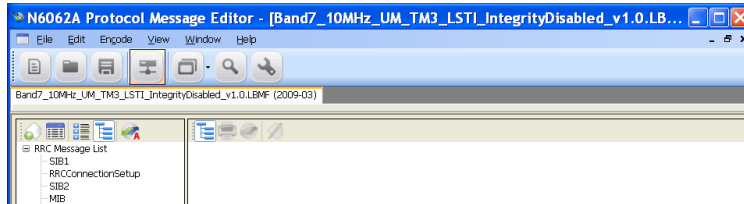1. Select a message in the All Message View.

2. Select message and click the icon (**All**/**Custom**/**Release**/**Paging**).
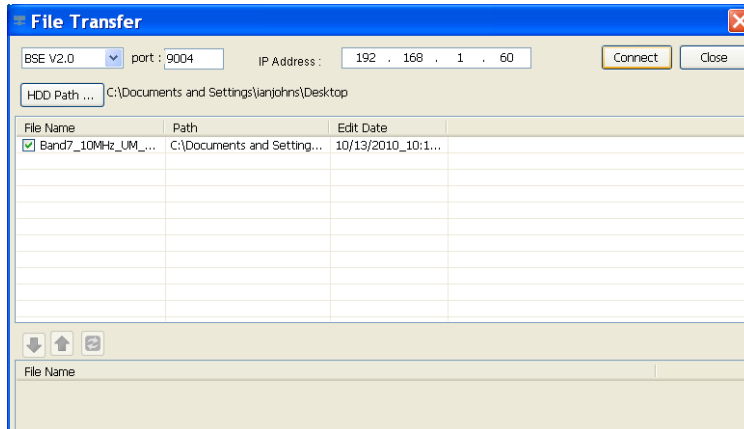
File Transfer

A scenario file must be transferred to the PXT before it can be run. This is done using the procedure below.

File Transfer Procedure

1. Click ![icon] icon from the main tool bar or select **File**, **File Transfer.**

2. Check the BSE Version (Default BSE V2.0), port (Default 9004), and IP Address (for example: 192.168.1.60).

3. Click **Connect** Button.

4. Click the check box from the **File Name** list.

5. Click ![icon] icon

6. The file is transferred to the scenario file directory in the PXT. A message indicates whether the message has been successfully transferred.

7. On the PXT, select **BSE, Mode Setup, Call Scenario** to see the list of available scenario files, and check that the file you downloaded is listed.
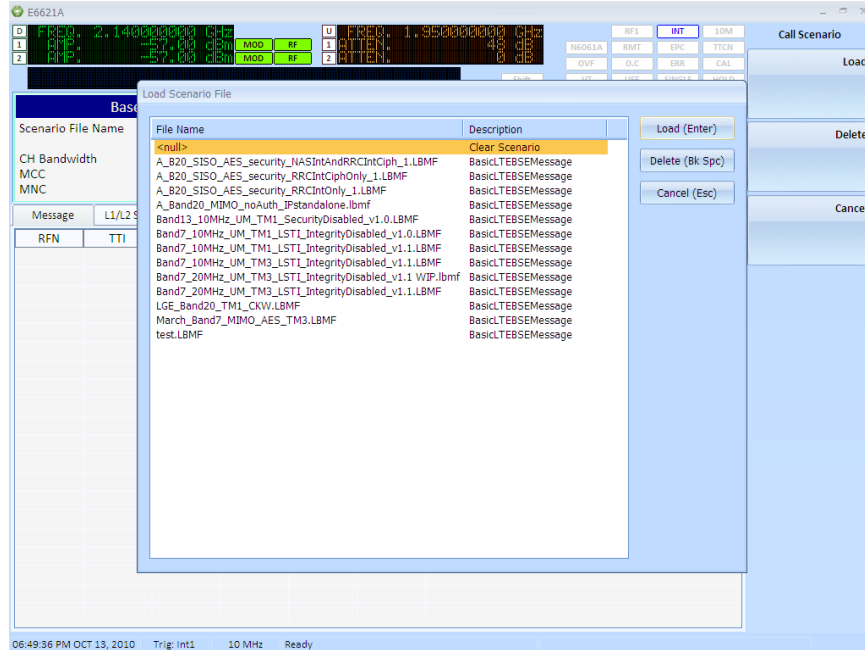
Figure 7-10: Verifying a Successful Download

Examples of Common Changes

Setting the Channel Quality Indicator (CQI) Value

1. Locate the rrcConnectionSetup message on the RRC message tab. The cqi-ReportConfig Information Element is near the bottom of this message.
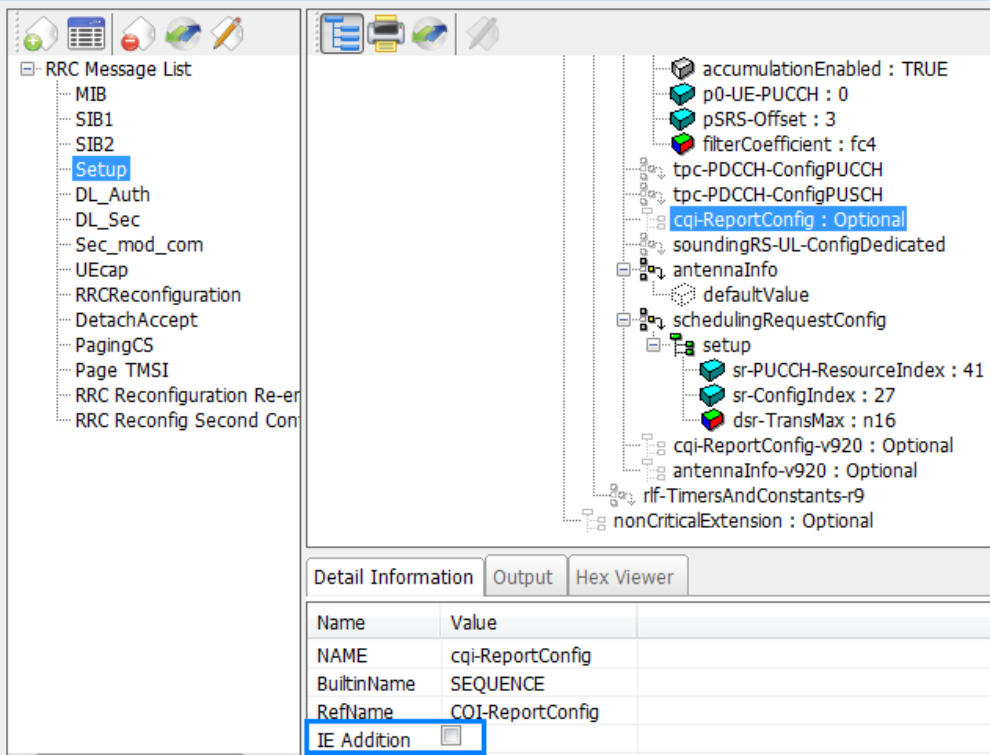

Figure 7-11: Accessing CQI Reporting

2. The Information Element (IE) may not be present in the message – which indicates to the UE that CQI reporting is not being configured in this message. To include the IE, highlight the cqi-ReportingConfig field as shown above and notice that an IE Addition box becomes available under the Detail Information tab. Select the box marked IE Addition. This enables the cqi-ReportConfig information to become visible as shown below.

Figure 7-12: Enabling CQI Report Configuration

3. Disable Aperiodic CQI reporting, by highlighting the cqi-ReportModeAperiodic field and de-selecting the IE Addition box.

Figure 7-13: Disabling Aperiodic CQI Reporting

4. Enable Periodic CQI reporting, by right-clicking the cqi-ReportPeriodic IE and selecting "setup" from the drop-down list of possible options.
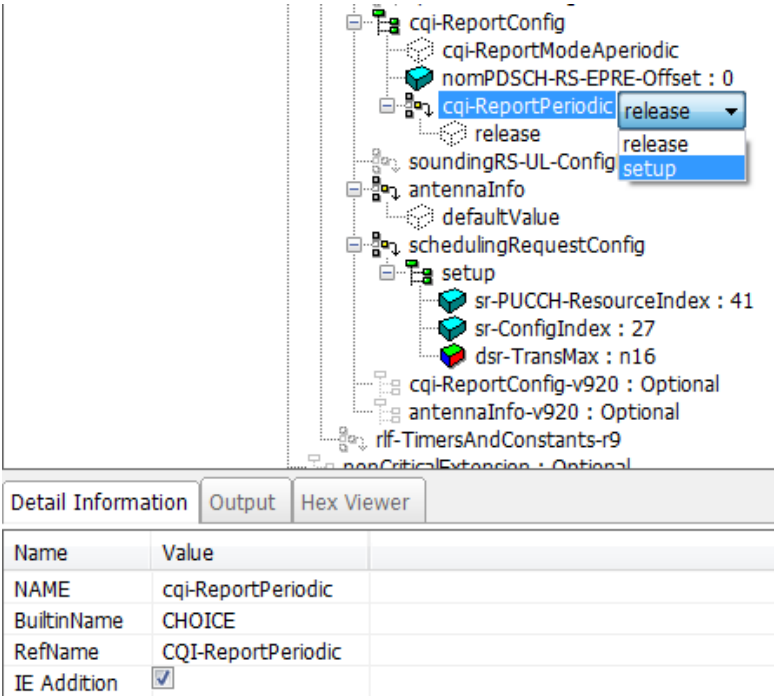
Figure 7-14: Enabling Periodic CQI Reporting

5. The most basic type of CQI reporting is Periodic Wideband CQI reporting. Setting the values shown in the diagram below enables this.
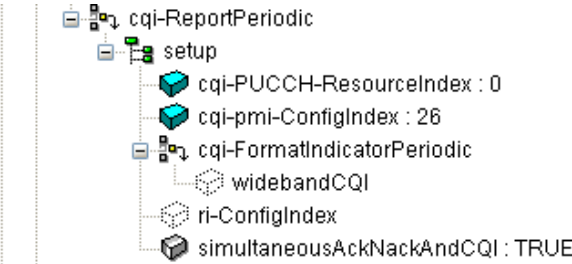
Figure 7-15: Settings for Periodic Wideband CQI Reporting

6. Make sure you encode the message by clicking the **Encode Message** button. The Setup message in the RRC Message List changes its color, from red to black, indicating the message is encoded.

NOTE	If you navigate away from the message before pressing the **Encode Message** button, your changes are lost.

7. Select **File**, **Save As...** and save the file with a new name, retaining the .LBMF extension.

Changing the Initial DUT IP Address

1. Check the NAS message list:

   - If the list includes ATTACH ACCEPT, then go to step 6, below.

   - If the list also includes ACTIVATE_DEFAULT_EPS_BEARER_CONTEXT_REQUEST message then go to step 9, below.

2. Locate the RRCreconfiguration message on the RRC message tab. Near the top of message is the dedicatedinfoNASList content. Right-click on this message. A pop-up window displays the text, "Value Changed". Select this and then copy the contents (**Ctrl+C**) to the clipboard of your pc.
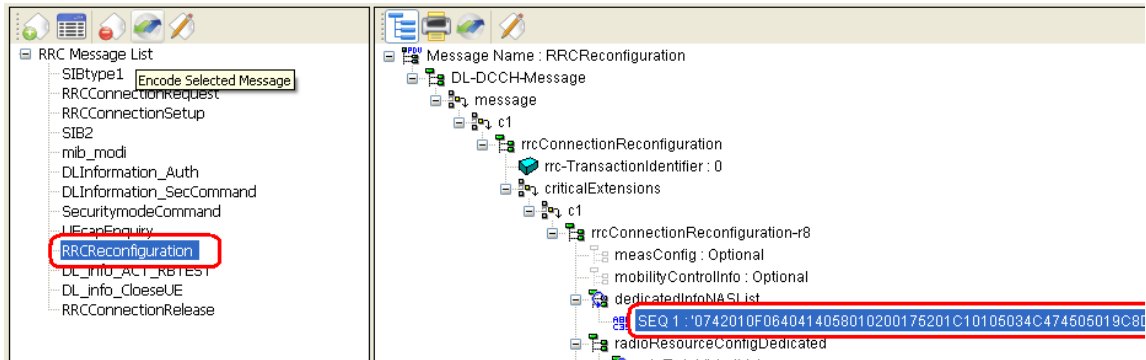

Figure 7-16: Copy Contents of Sequence 1

3. Select the NAS tab, and click on the **Insert Message** icon.
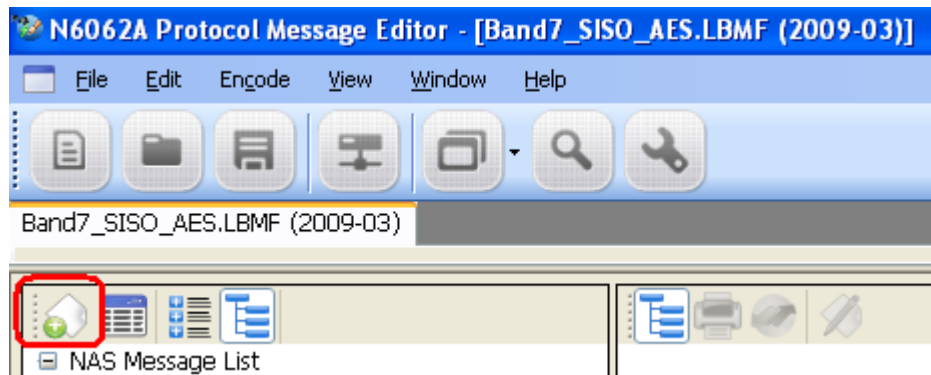
Figure 7-17: Click Insert Message Icon

4.   The following screen is displayed. Copy the dedicatedinfoNASList message contents into the box as shown. Select **DL EMM Message** and click on **Apply**.

Figure 7-18: Add New Hex Value

NOTE	When you select, **Apply**, the Message Editor decodes the contents and displays the type and name of the message.

Figure 7-19: New ATTACH ACCEPT Message

5.   Click **OK**. The new ATTACH ACCEPT message is now present in the NAS message list.

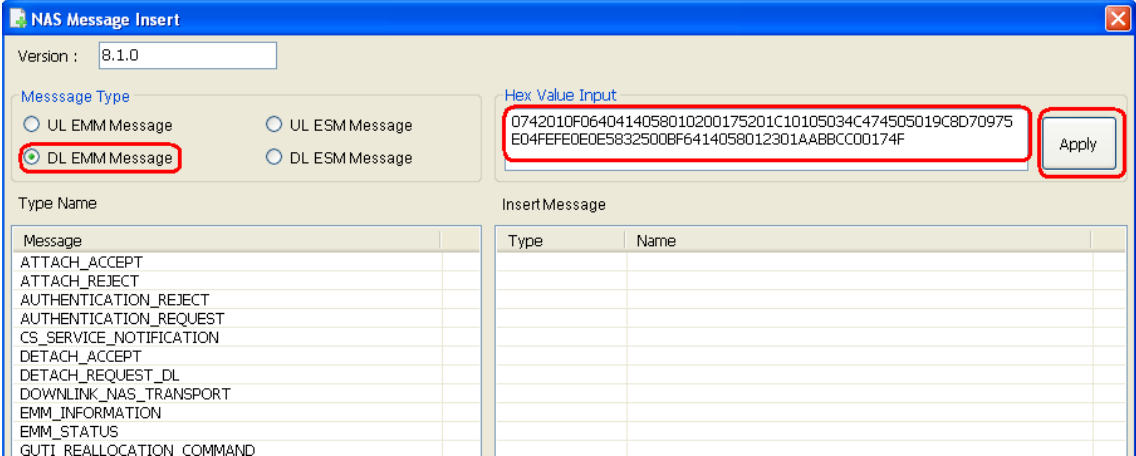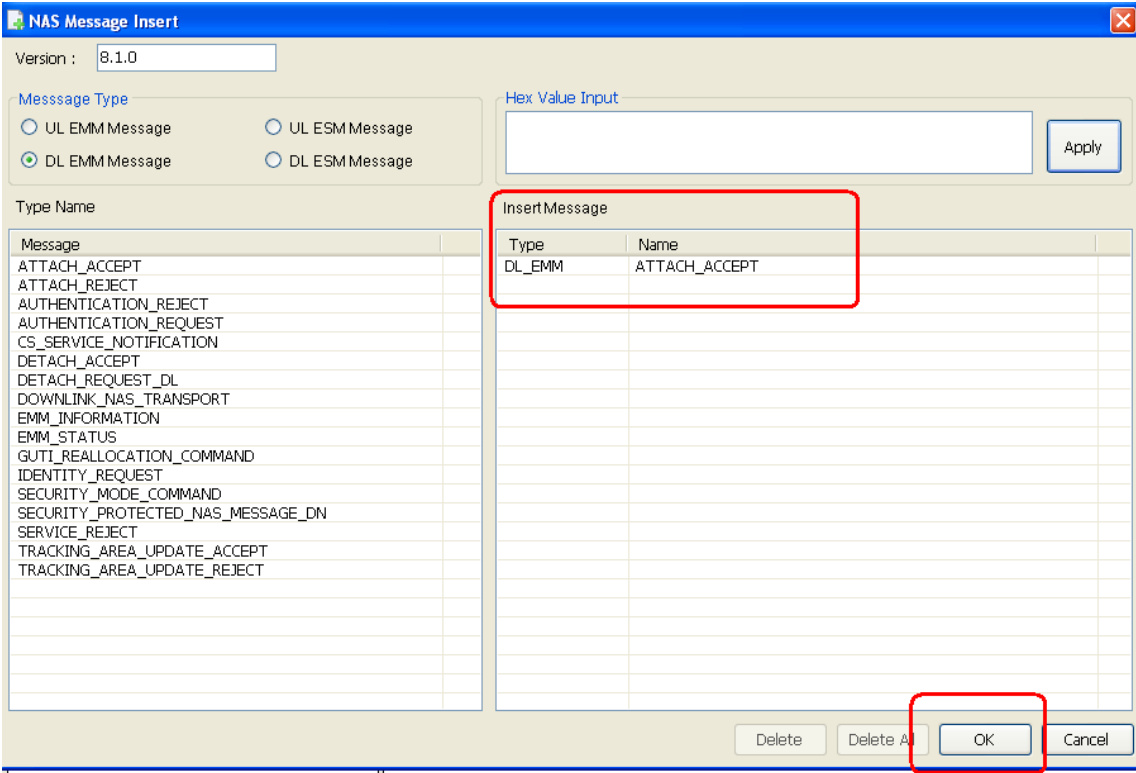6. Click the ATTACH ACCEPT message, which includes further embedded NAS information. Find the NasMessageDnData message. Right-click on the contents, select "Value Changed" and copy (**Ctrl+C**) the contents to your pc clipboard.

7. Select the **Insert Message** button and copy the contents of the NasMessageDnData message into the field as shown. Select DL ESM Message and click, **Apply**.
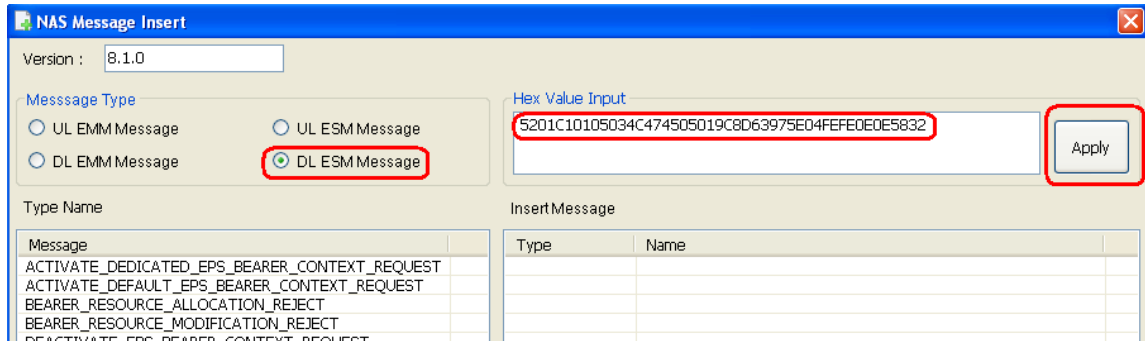

Figure 7-20: DL ESM Message

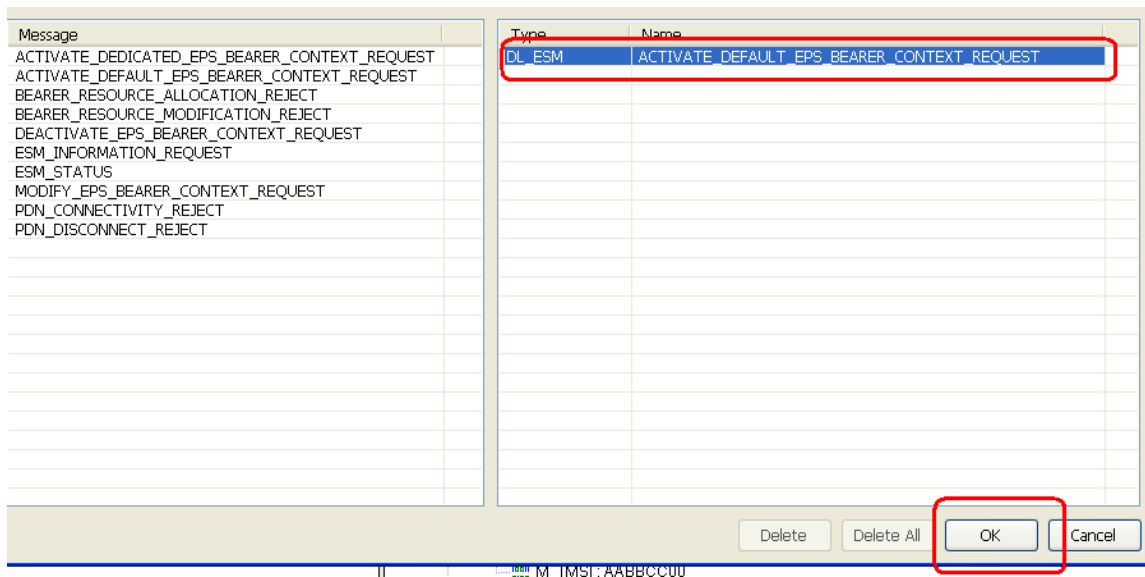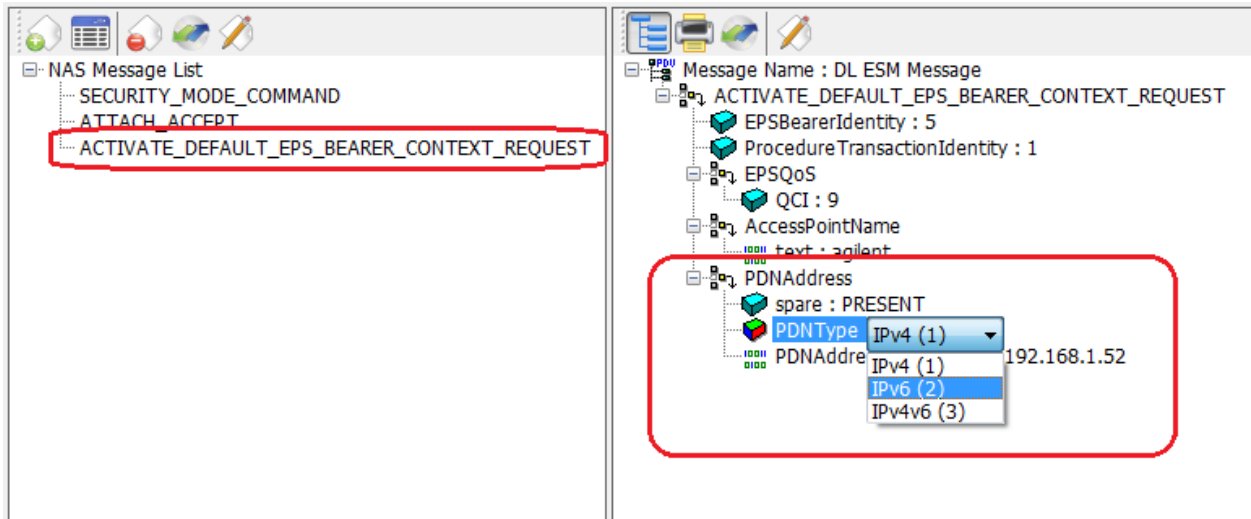8. This identifies the message as an ACTIVATE_DEFAULT_EPS_BEARER_CONTEXT_REQUEST message. Click **OK**.

Figure 7-21: ACTIVATE_DEFAULT_EPS_BEARER_CONTEXT_REQUEST Message

9. Select the ACTIVATE_DEFAULT_EPS_BEARER_CONTEXT_REQUEST message shown in the NAS message list. The DUT IP address information now appears near the end of the message.

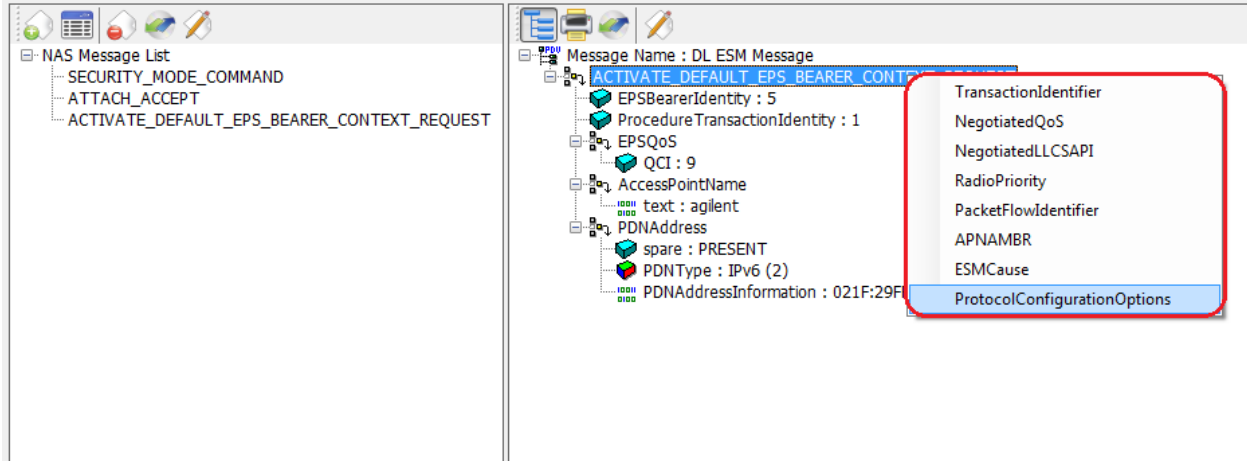

Figure 7-22: DUT IP Address Information

10. For this example, change the IP address from 192.168.1.52 IPv4 to 021F:29FF:FE7C:8F51 IPv6. Enter the address in the form shown: 4 groups of 4 characters, separated by colons. It is not possible to use the shortened notation using double colons. Entering an IPv4v6 address requires inputting a separate address for both the IPv4 and the IPv6 component of the address.

11. To complete this example, go to step 4 in the next section, below. If you wish to transmit other addressing options, continue to the next section, "Signaling Other Addressing Options".

Signaling Other Addressing Options

The ACTIVATE_DEFAULT_EPS_BEARER_CONTEXT_REQUEST message is also the method for signaling other addressing options.

- Right-clicking on the message header displays a list of these options.

- Left-clicking on each of these options adds additional fields to the message.

It is possible to enter a list of separate addressing options within a single message. In the example below, ContainerCfgs is set to 3, enabling you to provide 3 addresses to the UE when the ACTIVATE_DEFAULT_EPS_BEARER_CONTEXT_REQUEST message is transmitted to the UE. This example sets one P-CSCF and two DNS addresses.

Figure 7-23: DUT IP Address Additional Information

1. Select the ProtocolConfigurationOptions line. Right-click on ContainerCfgs and change the content to 3.
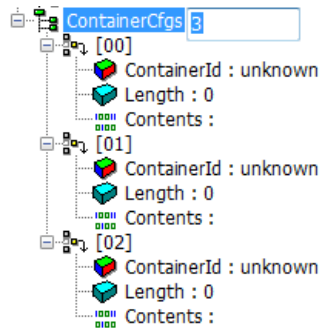
Figure 7-24: Creating ContainerIds for IP Addresses

Figure 7-25: DUT IP Address Additional Information Options

2. Right-click on ContainerId, select "Value Change" and then access the additional information element options shown in figure 7-25 by selecting the drop-down list.

3. Use the three containerId fields to select and populate each address for the information elements:
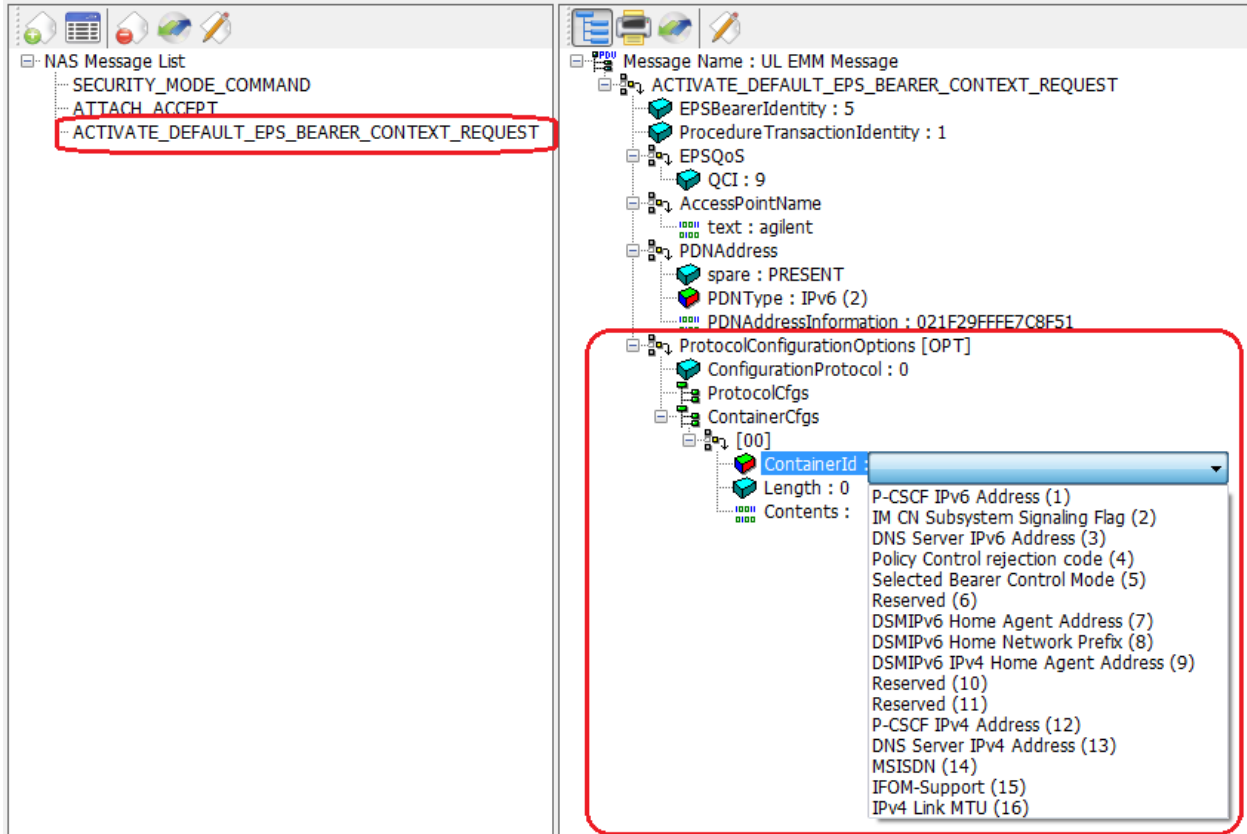
    - P-CSCF IPv6 Address
    - DNS Server IPv6 Address
    - DNS Server IPv4 Address

    The resulting contents are shown in figure 7-26.
    .

NOTE	• The UE IP address is entered in the form 021F:29FF:FE7C:8F51.
	• The server addresses also include the header information (resulting in 32 characters), and the colon separators must be omitted.
	• The UE IPv4 address is entered in dot separated decimal.
	• The server IPv4 addresses are entered in HEX with no separators.
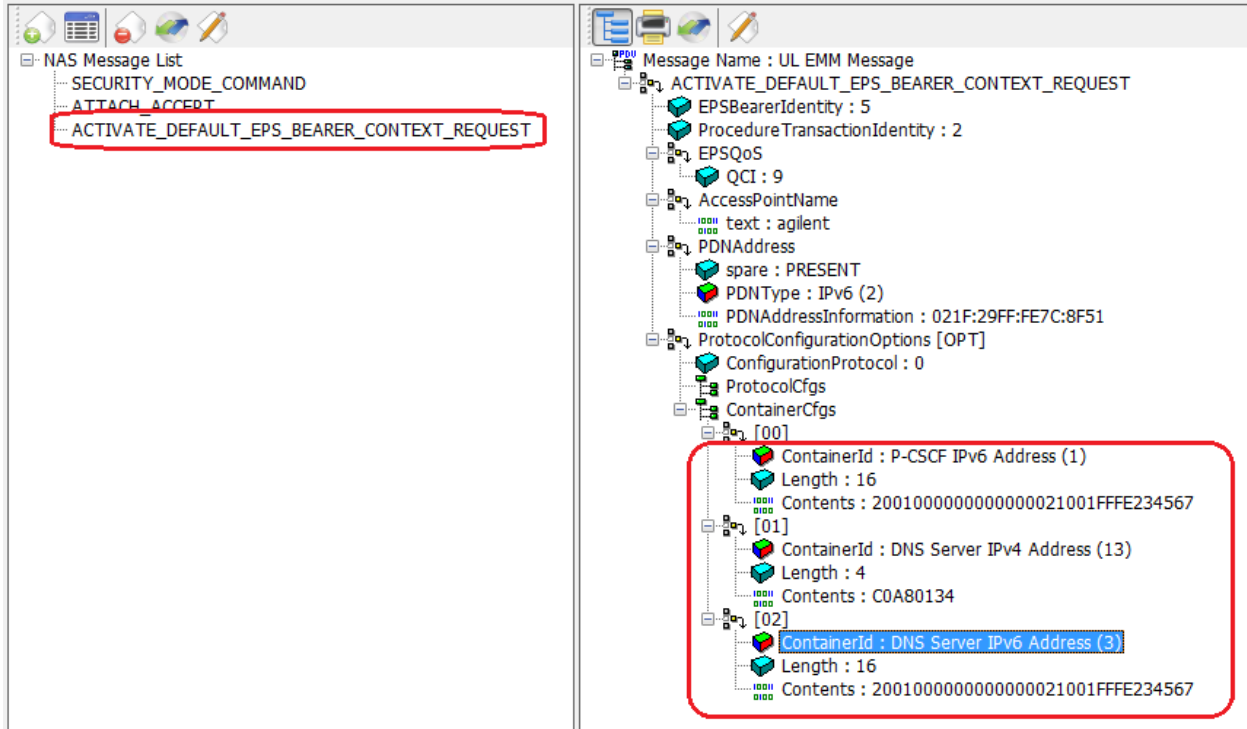
Figure 7-26: DUT IP Address Additional Information Options Final Content

4.   Make sure you encode the message by clicking the **Encode Message** button.

NOTE	If you navigate away from the message before pressing the **Encode Message** button, your changes will be lost.

5.   After clicking the **Encode Message** button, the output tab displays a newly encoded value. This is now the new ACTIVATE_DEFAULT_EPS_BEARER_CONTEXT_REQUEST message content. Highlight and copy this value to your pc clipboard (using **Ctrl+C**) omitting the first 0x.
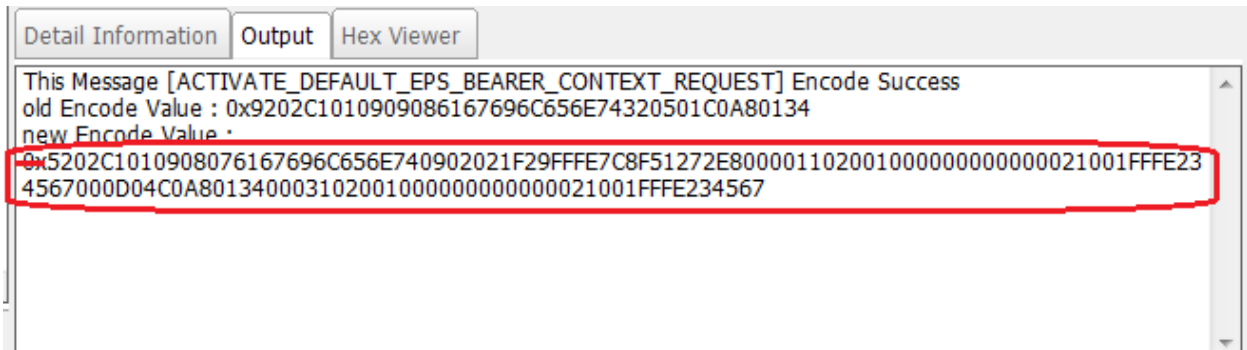
Figure 7-27: Copy New Message Content Without "0x"

6. Select the ATTACH ACCEPT Message. Right-click on the NasMessageDnData message. Select **Value Changed** and paste the new value (using **Ctrl+V**) into the field.
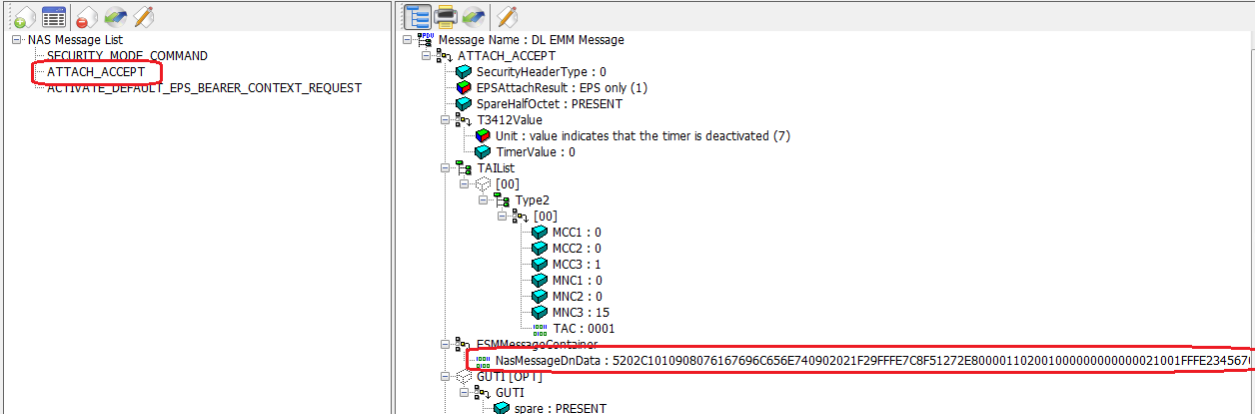
Figure 7-28: Paste New Message Content Without "0x"

7. Click on **Encode Message** to create the new contents for the ATTACH ACCEPT message. When done, copy (using **Ctrl+C**) the new encoded value as shown below, omitting the first 0x. This is the new content of your RRCReconfiguration message.
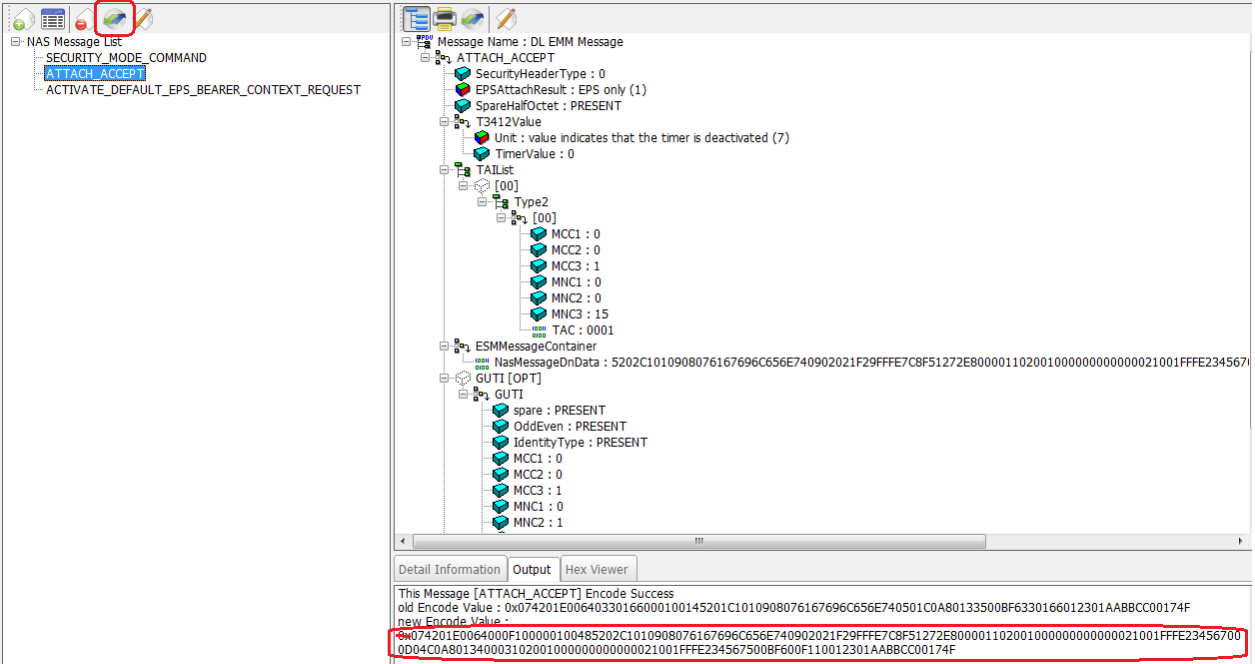
Figure 7-29: Copy New RRCReconfiguration Message Content Without "0x"

8. Return to the RRC tab. Select the RRCReconfiguration message and find the dedicatedNASInfo field. Paste (using **Ctrl+V**) your ATTACH ACCEPT message contents (minus the starting 0x) into this field, and click the **Encode Message** button.
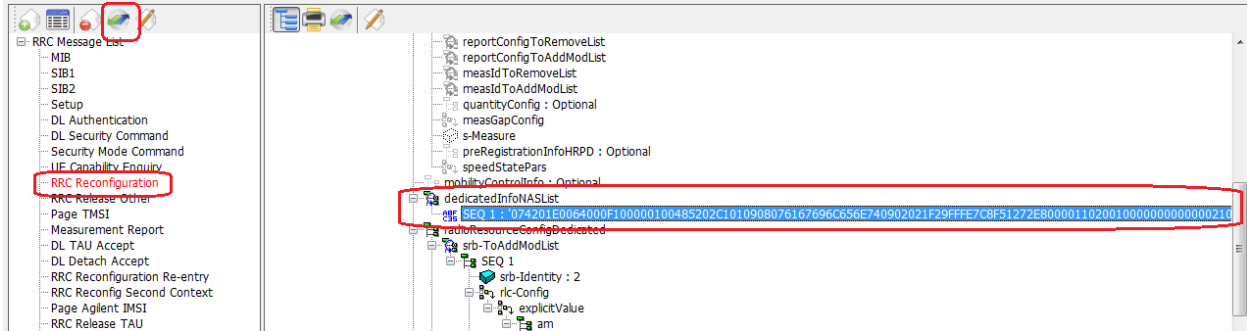
Figure 7-30: Paste New RRCReconfiguration Message Content Without "0x"

9. Select **File**, **Save As...** and save the file with a new name, retaining the .LBMF extension.

8 Service and Support

Calling Agilent Technologies

Agilent Technologies has offices around the world to provide you with complete support for your products. For help, to obtain servicing information or to order replacement parts, contact the nearest Agilent Technologies office listed below. In any correspondence or telephone conversations, you will need the product number, full serial number, software revision and Software and Technical Support Contract (STSC) details.

Press the **INFO** front panel key to view the product number (E6621A), serial number, and software revision information and STSC expiry date.

Locations for Agilent Technologies

Online assistance: http://www.agilent.com/find/assist

If you do not have access to the Internet, one of these centers can direct you to your nearest representative:

If you have a current STSC for the E6621A, you can contact Agilent at the email addresses listed in "Software and Technical Support Contracts" on page .

Should the Declaration of Conformity be required, please contact an Agilent Sales Representative, or the closest Agilent Sales Office. Alternately, contact Agilent at: www.agilent.com.

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Denmark	Israel	Switzerland
45 70 13 15 15	972-3-9288-504/544	0800 80 53 53
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Software and Technical Support Contracts

Software and Technical Support Contracts (STSC) entitle you to software updates and feature enhancements, as well as direct access to a technical expert for technical support for a fixed period, usually one year.

The STSC gives you direct access to technical product experts to increase your productivity and minimize the software difficulties you encounter. These technical support engineers are experts on the N6070A series Signaling Conformance Test solution, the E6621A PXT test set, and its complementary software products. They have instant access to instruments and software to enable them to resolve your issues as quickly as possible. Agilent will investigate all software defects and operational problems reported through the technical support channel. Upon completion of the investigation, we will advise you on possible solutions and functional alternatives. Where possible, Agilent will provide software releases to address problems caused by defects in the firmware or software.

STSCs for the Agilent E6621A PXT

The N6050AS STSC covers the N6050A, N6051A and N6052A software applications running on the E6621A PXT wireless communications test set, plus the associated N6061A and N6062A PC software applications.

If you have a Software and Technical Support Contract, there are three methods of accessing your technical support:

- Web-based support: My Support Center
- E-mail support
- Phone support

For fastest response times, we recommend using the web-based or email access methods as these provide the most direct route to your technical support expert. All support cases may be viewed and tracked through the online support center (My Support Center), regardless of how you initially contacted technical support.

Web-based support

You can directly enter and manage your support requests online via
www.agilent.com/find/mysupportcenter.

The first time you use My Support Center you will be asked to create a profile and provide proof of entitlement. Once your profile is created, you can use the online support center to enter your support request.
Each support request will be given a unique case number which you can use to track the progress of your support case. A technical expert will contact you via phone or email (whichever you have stated as your preferred option) to resolve your issue.

English, Japanese, Korean, and Mandarin local language support is available.

E-mail support

You can also contact our technical support at the following e-mail addresses:

- wireless_test_support_americas@agilent.com

- wireless_test_support_japan@agilent.com

- wireless_test_support_europe@agilent.com

- wireless_test_support_asia@agilent.com

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Your support request will be routed to a technical expert who will contact you via e-mail or phone (whichever you have stated as your preferred option) to help resolve your issue.

English, Japanese, Korean, and Mandarin local language support is available.

Phone support

If you prefer to speak to someone directly, you can call the Agilent customer contact centers at the numbers on page 36 of this document. For Japan, please use the phone number 0120-444-823.

The customer contact center will route your request to a technical support expert, who will contact you about your support request via phone or email. Local language support is available in many countries.

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