Oracle ASAP™ Cartridge 1.0 for Huawei HLR

Huawei HLR Cartridge Guide

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Cartridge Overview

ASAP cartridges are discrete software components that are developed for the ASAP product. An ASAP cartridge offers specific domain behavior on top of the core ASAP software, and provides the configuration that supports a set of services on a network element (NE).

An ASAP cartridge is not a stand-alone component, but operates in conjunction with the ASAP core product. ASAP cartridges offer the following benefits:

- **Reduced Time to Market**—time to market of new services is reduced through simplified development, implementation, and extension of cartridges on customer sites.
- **Extendable**—cartridges can be extended to include additional services and components that deliver business value, without requiring changes to the original cartridge.
- **Simplified Effort**—the effort and technical knowledge that is required to perform customizations is reduced.
- **Ease of Installation**—cartridges can be installed into an ASAP environment without interfering with the existing install base.

An ASAP cartridge can be used to configure ASAP to provision the following:

- NEs from a specific vendor, such as Nortel or Lucent.
- Technologies, such as Asynchronous Transfer Mode (ATM) and Frame Relay switches, or Internet Protocol (IP) routers.
- Services that are supported on the NE, such as ATM, IP Virtual Private Networks (VPN), Wireless, or Optical.

Cartridges are designed for a specific technology, software load, and service.

An ASAP cartridge supports a particular set of services on an NE. These services are independent of customer-specific service definitions. Professional Services or systems integrators can perform extensions to the cartridge to support customer-specific requirements.

For more information on extending a cartridge, refer to the *ASAP Cartridge Development Guide for Service Activation*.

Cartridge content

An ASAP cartridge contains the following:

- An interface to the NE
- A set of scripts, such as State Tables or Java methods
- A set of atomic actions in the form of Atomic Service Description Layer (ASDL) commands
- A set of Common Service Description Layer (CSDL) commands that form meaningful services
- Sample work orders
- Installation scripts

Prerequisites

System integrators such as managers, designers, programmers, and testers who are responsible for the adaptation and integration of ASAP-based solutions should use this manual as a reference. It assumes that readers possess the following skills:

- A knowledge of ASAP programming concepts
- A good working knowledge of the UNIX operating system
- A thorough understanding of service and network provisioning
- Familiarity with telecommunications

About this guide

This guide provides a detailed description of the Huawei HLR cartridge. It contains overview and technical information to assist with extending and integrating the cartridge into a customer environment.

The scope of this guide includes ASAP as it pertains to this cartridge. It is not a complete ASAP reference guide.

For additional ASAP information when using this cartridge, refer to the following supporting documentation:

- **ASAP documentation set**—for detailed information on the ASAP core product.
- **ASAP Cartridge Development Guide for Service Activation**—for information on how to extend a cartridge.

The Huawei HLR cartridge provides the ASAP service configuration and network element (NE) interface to activate wireless services on Huawei HLR NEs.

Services, features, and options

The following table lists the services supported by this cartridge:

- Add Subscriber Pilot Number
- Check Data Consistency.
- Delete Subscriber
- Delete Subscriber Pilot Number
- Modify Subscriber Pilot Number
- Modify CRBT service
- Modify Do-Not-Disturb Service
- Modify MDN
- Modify MSC Roaming Restrictions
- Modify NNAN service
- Modify ONLY Service Subscription
- Modify Subscriber Authentication Data
- Modify Subscriber Call Forwarding Service
- Modify Subscriber Call Waiting Service
- Modify Subscriber CENTREX Service
- Modify Subscriber CFMN service
- Modify Subscriber Conference Call Service
- Modify Subscriber Data Service
- Modify Subscriber Equal Access
- Modify Subscriber Intelligent Service
- Modify Subscriber Lock State
- Modify Subscriber Message Waiting Notification Service
- Modify Subscriber Preferred Language
- Modify Subscriber Property
- Modify Subscriber Restrictions
- Modify Subscriber Roaming Position
- Modify Subscriber Teleservice
- Modify Subscriber's CPPC service
- Modify Supplementary Services of a Subscriber
- Modify USCF service
- Query MSC Roaming Restrictions
- Query NNAN service
- Query Subscriber Authentication Data

- Query Subscriber CENTREX Service
- Query Subscriber Conference Call Service
- Query Subscriber Equal Access
- Query Subscriber Intelligent Service
- Query Subscriber Lock State
- Query Subscriber Message Waiting Notification Service
- Query Subscriber Preferred Language
- Query Subscriber Restrictions
- Query Subscriber Roaming Position
- Query Subscriber Teleservice
- Query USCF service
- Query Code Mutual Inquiry
- Query CRBT service
- Query Do-Not-Disturb Service
- Query ONLY Service
- Query Subscriber Call Forwarding Service
- Query Subscriber Call Waiting Service
- Query Subscriber CFMN service
- Query Subscriber Data Service
- Query Subscriber Pilot Number
- Query Subscriber Property
- Query Subscriber's CPPC service
- Query Supplementary Services of a Subscriber
- Query template name/number of NID and SID/configuration information
- Renew IMSI Card

Hardware and software requirements

The following sections contain the high-level software and hardware environment requirements for provisioning wireless services using this cartridge, including:

- Network element (NE) interface
- ASAP version

Network element (NE) interface

This cartridge operates with the Huawei M800 HLR V300R006 for CDMA.

ASAP version

This cartridge was developed and tested using ASAP 4.6.5.

For more information on the operating environment of this ASAP version, refer to the *ASAP 4.6.5 Release Record*.

Connecting to the NE

This cartridge connects to the NE using the TCP/IP socket based protocol.

Related documentation

This cartridge was developed according to the following Network Element Provisioning Specifications:

- M800 HLR V300R006 Business Hall Interface protocol specification

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Installing and Testing the Cartridge

This chapter describes the following procedures related to installing and testing the cartridge:

- Downloading the cartridge
- Starting ASAP
- Uninstalling the cartridge
- Testing the cartridge installation

Downloading the cartridge

Before you can install the cartridge, you must use the internet to download the cartridge's TAR file from Oracle's Customer Portal.

Use the following instructions to download, then unTAR the TAR file.

To download the TAR file

1. Login to Oracle MetaLink internet home page (http://www.metalink.oracle.com).
2. Download the cartridge patch to your workstation.

To unTAR the TAR file

1. On you workstation, create a repository directory—the naming of which is your choice.

   ```
   mkdir <repository dir>
   ```

2. Untar HuaweiHLR_R1_0.tar.

   ```
   tar xvf HuaweiHLR_R1_0.tar
   ```

3. Copy the resulting /Huawei directory and its contents to the repository directory.

   ```
   cp -rf /Huawei <repository_dir>
   ```

The directory structure in the repository directory should look like the following illustration. (this illustration describes the minimum required structure; you can enhance this directory structure with additional directories based on your requirements and deliverables).

```
<repository_directory>
    Huawei
        /README
        /installCartridge
        /uninstallCartridge
        /HW_HLR_M800_V300R006_SUB_1_0.sar
```

Starting ASAP

Before installing the cartridge, ensure that ASAP is running.

To start ASAP

1. To start ASAP, execute the following script:

   ```
   start_asap_sys
   ```

2. Ensure the ASAP Daemon (DAM_$ENV_ID) is running by checking the ASAP status using the ASAP script "status".
3. Check whether the WebLogic instance for this ASAP environment is running. If not, start the WebLogic instance.

The *ASAP System Configuration and Management Guide* contains more information on starting ASAP, the ASAP Daemon, and WebLogic.

Installing the cartridge

Run the installation script installCartridge to install the cartridge. You will find this script under /Huawei. The script executes the following tasks:

- Configures the Huawei HLR-specific NE using the SACT.
- Deploys the Huawei HLR cartridge service model (only if the Huawei HLR service model is not yet deployed) using the Service Activation Deployment Tool (SADT).
- Copies the Huawei HLR-specific jar files and the cpp library file to the ASAP environment.
- Loads the sample work orders to the SRP database.

For information on the SACT and the SADT, refer to the *ASAP System Configuration and Management Guide*.

To install the cartridge

1. Run the installCartridge script from /Huawei. At the prompt, type:

   ```
   installCartridge HW_HLR_M800_V300R006_SUB_1_0.sar
   ```

2. The script prompts you for the values of the following WebLogic login parameters:

   - WebLogic Hostname
   - WebLogic HTTP Port
   - WebLogic Login User ID
   - WebLogic Login Password

   The script loads the NEP-NE configuration and the CSDL-ASDL configuration to the SARM database, and loads sample work orders to the SRP database. The script also copies the cartridge-specific jar files and cpp library file to the ASAP environment.

3. Restart ASAP to upload the cartridge configuration into ASAP.

Uninstalling the cartridge

Run the uninstallation script uninstallCartridge to uninstall the Huawei HLR cartridge. This script is located under Huawei. The script executes the following tasks:

- Unconfigures Huawei HLR-specific NEs using the SACT.
- Undeploys the Huawei HLR cartridge service model (only if the Huawei HLR service model is already deployed) using the Service Activation Deployment Tool (SADT).
- Removes the Huawei HLR-specific jar files and cpp library file from the ASAP environment.

For more information on the SACT and the SADT, refer to the *ASAP System Configuration and Management Guide*.

To uninstall the cartridge

1. Run the uninstallCartridge script from /Huawei. At the prompt, type

   ```
   uninstallCartridge HW_HLR_M800_V300R006_SUB_1_0.<timestamp>.sar
   ```

2. The script prompts you for the values of the following parameters:
   - WebLogic Hostname
   - WebLogic HTTP Port
   - WebLogic Login User ID
   - WebLogic Login Password

The script unloads the NEP-NE configuration and CSDL-ASDL configuration from SARM database. It also removes the cartridge specific jar files and cpp library file from the ASAP environment.

Testing the cartridge installation

To test this cartridge installation, you need to know about the network element (NE), services, and basic ASAP configuration. You may need to perform adjustments to provision a service for a specific NE, network, or connectivity configuration.

You can test the cartridge installation using one of the following methods:

- **Loopback mode**—does not actually connect to or send commands to the NE.
- **Live mode**—connects to and sends commands to a live NE.

Configuring loopback and live mode parameters

The following sections describe the variables you must configure to use the loopback and live testing modes.

Configuration parameters

The following are the list of NE configuration parameters:

Table 1: NE configuration parameters

Parameters	Default Value	Description
HOST_NAME		The network element host name
HOST_IPADDR		The network IP Address for the network element.
PORT	9999	The port of the MML_SERVER of Business Hall Interface.

Table 1: NE configuration parameters

Parameters	Default Value	Description
LOGINID	ASAP	User name for login.
PASSWORD	AsP98wy	The password for login.
OPEN_TIMEOUT	5	5 seconds open timeout.
READ_TIMEOUT	2	2 seconds read timeout.
CMD_RESPONSE_FILE	/config/HW_HLR_M800-V300R006_CmdResponse.cfg	The command response file from which query response will be fetched in loopback mode.
USER_ERROR_TYPES_FILE	/config/HW_HLR_M800-V300R006_UserExitTypes.cfg	Configuration file that maps the NE response code to the user exit type.
QUERY_RESPONSE_MAP_FILE	/config/HW_HLR_M800-V300R006_QueryMap.cfg	Configuring file mapping the query response parameter label to corresponding ASDL parameter label.

Loopback mode

Set the following parameter to test the cartridge in loopback mode.

Table 2: Loopback mode parameter settings

Configuration Variable	Parameter Settings	Location
LOOPBACK_ON	1 (default setting)	ASAP.cfg

Live mode

Set the following parameter to test the cartridge in live mode.

Table 3: Live mode parameter settings

Configuration Variable	Parameter Settings	Location
LOOPBACK_ON	0	ASAP.cfg

Modifying huawei_hlr_M800-V300R006_ne_config.xml

Use the following procedure to modify huawei_hlr_M800-V300R006_ne_config.xml.

To modify huawei_hlr_M800-V300R006_ne_config.xml

1. Create a new source directory under /Huawei. You can give this directory any appropriate, meaningful name you want to.

   ```
   mkdir <new_source_directory>
   ```

2. Copy HW_HLR_M800_V300R006_SUB_1_0.sar to this new source directory.

   ```
   cp HW_HLR_M800_V300R006_SUB_1_0.sar ./<new_source_directory>
   ```

3. Change directory to <new_source_directory>.

   ```
   cd <new_source_directory>
   ```

4. Un-jar HW_HLR_M800_V300R006_SUB_1_0.sar. This extracts the contents of the sar file (see Figure 1 on page 14 for an example of the resulting file structure).

   ```
   jar xvf HW_HLR_M800_V300R006_SUB_1_0.sar
   ```

5. Edit <new_source_directory>/HUAWEI_HLR_M800-V300R006/common/application_config/huawei_hlr_M800-V300R006_ne_config.xml in with the appropriate changes.

6. Create a new sar file at the <new_source_directory> level.

   ```
   CreateSar $PWD
   ```

7. Uninstall the cartridge using HW_HLR_M800_V300R006_SUB_1_0.sar in /Huawei (That is, use the original sar file that you copied in Step 2 above—see "Uninstalling the cartridge" on page 10 for uninstallation instructions).

8. After you uninstall the cartridge, rename the sar file in /Huawei so you have a backup copy of it.

9. Copy the new sar file from <new_source_directory> to /Huawei.

10. Reinstall the cartridge (see "Installing the cartridge" on page 10 for installation instructions).

```
META-INF/activation-model.xml
Huawei/
   HUAWEI_HLR_M800-V300R006/
      Wireless/
         sample_wo/
         sarm/
            ne_progs/
            PLSQL/
         control/
            PLSQL/
         nep/
            PLSQL/
         java/
            lib/
         cpp/
            lib/
         service_model/{at least one .xml file}
         application_config/
      common/
         sarm/
            ne_progs/
            PLSQL/
         control/
            PLSQL/
         nep/
            PLSQL/
         java/
            lib/
         cpp/
            lib/
         service_model/
         application_config/
         scripts/
```

Figure 1: File Structure of the Un-Jared .sar File

Testing the installation

The following procedure describes the steps required to test the cartridge installation in loopback mode. We recommend that you perform the initial cartridge installation test in loopback mode.

To test in loopback mode

1. Stop ASAP by typing the following command at the UNIX prompt:

   ```
   stop_asap_sys
   ```

2. Ensure loop back mode is on. See "Loopback mode" on page 12 for a description of how to set the loopback parameter to "On". You can simulate the NE response by configuring the contents of the HW_HLR_M800-V300R006_CmdResponse.cfg configuration file.

3. Start ASAP by typing:

   ```
   start_asap_sys
   ```

4. Send the sample work orders through the SRP Emulator by typing:

   ```
   run_suite $SRP <ctrl_password> <suite name>
   ```

   You can locate the suite names in /Huawei/sample_wo by typing:

   ```
   grep   SUITE * | grep -v END
   ```

   A list of all available suites appears.

   To see the sample work orders, refer to Viewing the sample work orders, below.

   For more information on the SRP Emulator, refer to the *ASAP System Configuration and Management Guide*.

5. Verify the status of the sample work orders by typing:

   ```
   asap_utils l
   ```

   All successful work orders return the 104 state.

   To view the sample work orders provided with this cartridge, refer to the Huawei HLR cartridge source.

Viewing the sample work orders

You find the sample work orders under the sample_wo directory in the sar file. The following procedure describes how to view the sample work orders.

To view the sample work orders

1. If necessary, create a repository directory under /Huawei, copy the sar file to the new directory and un-jar the sar file, as described by Step 1 through Step 4 in "Modifying huawei_hlr_M800-V300R006_ne_config.xml" on page 12.
2. Locate and view the sample work order files under /HUAWEI_HLR_M800-V300R006.

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Atomic Service Description Layer (ASDL) Commands

ASDL commands represent a set of atomic actions that ASAP can perform on a network element (NE). ASAP can combine ASDLs to create meaningful services (CSDLs) within a cartridge.

This chapter presents detailed information on the ASDL parameters that we provide with this cartridge. The following table lists and describes the type of parameter information that is included.

Table 4: ASDL parameter information

Item	Description
Parameter Name	Identifies the parameter that is configured for the stated service.
Description	Describes the parameter.
Range	Describes or lists the range of values that can be used to satisfy this parameter.
Default Value	Configures a default value for the parameter so that it is not mandatory for the upstream system to provide a value.

Table 4: ASDL parameter information

Item	Description
Type	Indicates one of the following parameter types: ◆ S—Scalar, specifies the parameter label transmitted on the ASDL command. Scalar parameters are conventional name-value pair parameters. ◆ C—Compound, specifies the base name of the compound parameter transmitted on the ASDL command. A compound parameter contains structures or arrays of information that are represented by a particular structure name or compound parameter name. Each compound parameter can contain a large number of elements. If you use compound parameters, you only require a single entry in the ASAP translation tables to call the compound parameter and all its associated parameter elements. ◆ I—Indexed, identifies a parameter that contains a sequential numerical index value to tell the SARM that it should execute the same operation (for example, an ASDL command) for all occurrences of that index. Consequently, if there are several options on a particular CSDL command (OPT1, OPT2, OPT3, etc.), you can specify the OPT parameter as an indexed parameter. When you specify the OPT parameter as an indexed parameter, the SARM generates several occurrences of that same ASDL command and each command has a different value for the option being transmitted to the NEP. For more information on parameter types, refer to the *ASAP Developer's Reference*.
Class	Indicates one of the following parameter classifications: ◆ R—Required scalar parameter ◆ O—Optional scalar parameter ◆ C—Required compound parameter ◆ N—Optional compound parameter ◆ M—Mandatory indexed parameter ◆ I—Optional indexed parameter ◆ S—Parameter count

For a detailed description of the Required and Optional parameter classifications, refer to the *ASAP System Configuration and Management Guide.*

Wireless services

The Huawei HLR cartridge provides the following ASDL commands to support Wireless service on Huawei HLR NEs:

- A_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-PILOT-NUMBER
- A_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE
- A_HW-HLR_M800-V300R006_CHECK_DATA-CONSISTENCY
- A_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER
- A_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER-PILOT-NUMBER
- A_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_MDN
- A_HW-HLR_M800-V300R006_MODIFY_MDN-RB
- A_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS
- A_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS-RB
- A_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE-RB

- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE-RB
- A_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE
- A_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE-RB
- A_HW-HLR_M800-V300R006_QUERY_CODE-MUTUAL-INQUIRY
- A_HW-HLR_M800-V300R006_QUERY_CRBT-SERVICE

- A_HW-HLR_M800-V300R006_QUERY_DO-NOT-DISTURB-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_MSC-ROAMING-RESTRICTIONS
- A_HW-HLR_M800-V300R006_QUERY_NNAN-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_ONLY-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-AUTHENTICATE-DATA
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-FORWADING-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-WAITING-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CENTREX-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CFMN-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CONFERENCE-CALL-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CPPC-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-DATA-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-EQUAL-ACCESS
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-LOCK-STATE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PILOT-NUMBER
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PREFERRED-LANGUAGE
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PROPERTY
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-RESTRICTIONS
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-ROAMING-POSITION
- A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-TELESERVICE
- A_HW-HLR_M800-V300R006_QUERY_SUPPLEMENTARY-SERVICE
- A_HW-HLR_M800-V300R006_QUERY_TEMPLATE-NAME-NID-SID
- A_HW-HLR_M800-V300R006_QUERY_USCF-SERVICE
- A_HW-HLR_M800-V300R006_RENEW_IMSI-CARD
- A_HW-HLR_M800-V300R006_RENEW_IMSI-CARD-RB

A_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-PILOT-NUMBER

Adds a subscriber pilot number. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.addSubscriberPilotNumber.**

Table 5: A_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-PILOT-NUMBER

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
PILOTNUMBER	Pilot number.	1-15 character string.		S	R
MEMBER	Member number. 32bit decimal system number.	1-32		S	R
STATUS	Member's status.	ACTIVE, INACTIVE	ACTIVE	S	O
CNIPPILOTNUMBER	Calling Number Identification Presentation of Pilot number.	False (do not display it), True (display it).	false	S	O

MML commands/API calls

```
Mod-
onlymemb:pilotnumber=<PILOTNUMBER>,operate=1,member=<MEMBER>,status=<STATUS>
,cnippilotnumber=<CNIPPILOTNUMBER>;
```

Where

- PILOTNUMBER = Pilot number
- MEMBER = Member number
- STATUS = Member's status
- CNIPPILOTNUMBER = CNIP Pilot number

Example

```
mod-
onlymemb:PilotNumber="8613300012709",operate=1,member="8613910240011",Status
=1,CnipPilotNumber=true;
```

A_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE

Adds a subscriber with a template. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.addSubscriberWithTemplate.**

Table 6: A_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI.	7-15 character string.		S	R
MDN	Mobile directory number.	1-15 character string.		S	R
ESN	Electronic serial number.			S	O
TEMPNO	Template number.			S	R
VOICE	Voice mailbox number.	1-16 character string.		S	O
IFAC	Specifies whether or not to perform authentication.	YES, NO		S	R
SHAREALLOW	Specifies whether to allow the SSD to share user-level switch or not. When IFAC = YES, it is mandatory, when IFAC = NO, it is optional.	NOT_ALLOWED, ALLOWED		S	O
SSDREFACC	Specifies whether user access is permanently rejected. When IFAC = YES, it is mandatory, when IFAC = NO, it is optional. SSD updating failed.	NOT_REJECT, REJECT.		S	O
VP	Specifies whether voice privacy user-level switch is allowed.	NOT_ALLOWED, ALLOWED		S	O

Table 6: A_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE

Parameter Name	Description	Range	Default Value	Type	Class
AKEY	Authentication key. 16 digit hexadecimal value.			S	O
K4NUMBER	0 means that a_key doesn't encrypt by k4;.	0-255	0	S	O

MML commands/API calls

```
Def-
withtemp:imsi=<IMSI>,mdn=<MDN>[,esn=<ESN>],tempno=<TEMPNO>[,voice=<VOICE>],i
fac=<IFAC>[,shareallow=<SHAREALLOW>][,ssdrefacc=<SSDREFACC>][,vp=<VP>][,akey
=<AKEY>][,k4number=<K4NUMBER>];
```

Where

- IMSI = International Mobile Subscriber Identity
- MDN = Mobile Directory Number
- ESN = Electronic serial number
- TEMPNO = Template number
- VOICE = Voice mailbox number
- IFAC = Authentication flag
- SHAREALLOW = Allow SSD to share user- level switch or not
- SSDREFACC = SSD updating failed. Reject user access permanently or not
- VP = Allow to Voice Privacy user- level switch or not
- AKEY = A_KEY data
- K4NUMBER = K4 number

Examples:

```
Def-
withtemp:imsi="460123456789005",mdn="8612345678903",tempno=0,ifac=2,shareall
ow=1,ssdrefacc=1,vp=3,akey="1234567890123456",k4number=1;
```

```
Def-
withtemp:imsi="460123456789005",mdn="8612345678903",esn="12345678",tempno=0,
ifac=1,shareallow=1,ssdrefacc=1,vp=1,akey="1234567890123456",k4number=1;
```

```
Def-
withtemp:imsi="460123456789005",mdn="8612345678903",esn="12345678",tempno=0,
voice="632",ifac=1,akey="1234567890123456",k4number=1;
```

A_HW-HLR_M800-V300R006_CHECK_DATA-CONSISTENCY

Checks data consistency. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.checkDataConsistency.**

Table 7: A_HW-HLR_M800-V300R006_CHECK_DATA-CONSISTENCY

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	Mobile directory number. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Chk-data:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
chk-data: imsi="460123456789003";
```

A_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER

Deletes a subscriber. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.deleteSubscriber.**

Table 8: A_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
MDN	Mobile directory number.	1-15 character string.		S	R

Table 8: A_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER

Parameter Name	Description	Range	Default Value	Type	Class
FORCEFLAG	Flag for the forced deletion of a subscriber.	NOT_FORCE, FORCE	NOT_FORCE	S	O

MML commands/API calls

```
del-subscr:mdn=<MDN>[,forceflag=FORCEFLAG];
```

Where

- MDN = Mobile Directory Number
- FORCEFLAG = Flag for forced deleting a subscriber

Example

```
del-subscr:mdn="8612345678901";
```

A_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER-PILOT-NUMBER

Deletes the subscriber's pilot number. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.deleteSubscriberPilotNumber.**

Table 9: A_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER-PILOT-NUMBER

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
PILOTNUMBER	Pilot number.	1-15 character string		S	R
MEMBER	Member number. 32bit decimal system number.	1-32		S	R

MML commands/API calls

```
Mod-onlymemb:pilotnumber=<PILOTNUMBER>,operate=2,member=<MEMBER>;
```

Where

```
PILOTNUMBER = Pilot number
```

```
MEMBER = Member number
```

Example

```
mod-onlymemb:PilotNumber="8613300012709",operate=2,member="8613910240011";
```

A_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE

Modifies CRBT services. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyCRBTService.**

Table 10: A_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
CRBT	CRBT services.	1 (unsubscribed) 2 (subscribed but inactive) 3 (subscribed and active).		S	R

MML commands/API calls

```
Mod-crbt:imsi=<IMSI>|mdn=<MDN>,crbt=<CRBT>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CRBT = CRBT service subscribing state

Example

```
mod-crbt:mdn="8613312121000", crbt =1;
```

A_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE-RB

Rolls back modifications to CRBT services. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyCRBTServiceRB.**

Table 11: A_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
OLD_CRBT	The old CRBT services value.	1 (unsubscribed) 2 (subscribed but inactive) 3 (subscribed and active).		S	R

MML commands/API calls

```
Mod-crbt:imsi=<IMSI>|mdn=<MDN>,crbt=<OLD_CRBT>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_CRBT = CRBT service subscribing state

Example

```
mod-crbt:mdn="8613312121000", crbt =1;
```

A_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE

Modifies a subscriber's Do-Not-Disturb service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyDoNotDisturbService.**

Table 12: A_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
DNDACTI	Do not disturb service activation status.	0 (deactivation), 1 (activation)		S	R

MML commands/API calls

```
Mod-dndsvr:imsi=<IMSI>|mdn=<MDN>,dndacti=<DNDACTI>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- DNDACTI = Do not disturb service activation status

Example

```
mod-dndsvr: mdn="8612345678903",dndacti=1;
```

A_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE-RB

Rolls back modifications to a subscriber's Do-Not-Disturb service. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyDoNotDisturbServiceRB.

Table 13: A_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
OLD_DNDACTI	The old DNDACTI setting.	0 (deactivation), 1 (activation)		S	R

MML commands/API calls

```
Mod-dndsvr:imsi=<IMSI>|mdn=<MDN>,dndacti=<OLD_DNDACTI>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_DNDACTI = Do not disturb service activation status

Example:

```
mod-dndsvr: mdn="8612345678903",dndacti=1;
```

A_HW-HLR_M800-V300R006_MODIFY_MDN

Modifies the MDN. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyMDN.**

Table 14: A_HW-HLR_M800-V300R006_MODIFY_MDN

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
OLDMDN	The old MDN to be modified.	1-15 character string.		S	R

Table 14: A_HW-HLR_M800-V300R006_MODIFY_MDN

Parameter Name	Description	Range	Default Value	Type	Class
NEWMDN	MDN.	1-15 character string		S	R

MML commands/API calls

```
Chg-mdn:oldmdn=<OLDMDN>,newmdn=<NEWMDN>;
```

Where

- OLDMDN = Old MDN Number
- NEWMDN = New MDN Number

Example:

```
chg-mdn:oldmdn="8612345678901", newmdn="8612345678902";
```

A_HW-HLR_M800-V300R006_MODIFY_MDN-RB

Rolls back modifications to the MDN. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyMDNRB.**

Table 15: A_HW-HLR_M800-V300R006_MODIFY_MDN-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID			S	R
OLDMDN	Old MDN.	1-15 character string		S	R
NEWMDN	The new MDN.	1-15 character string		S	R

MML commands/API calls

```
Chg-mdn:oldmdn=<NEWMDN>,newmdn=<OLDMDN>;
```

Where

- OLDMDN = Old MDN Number
- NEWMDN = New MDN Number

Example:

```
chg-mdn:oldmdn="8612345678901", newmdn="8612345678902";
```

A_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS

Modifies MSC roaming restrictions. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyMSCRoamingRestrictions.**

Table 16: A_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
ROAMFLAG	Roaming restriction flag.	0 (international roaming restriction), 1 (national roaming restriction), 2 (regional roaming restriction).		S	R
TEMPNO	MSC template number. If ROAMFLSAG = 2, at least one MSC template number must be input. In other cases, template numbers are optional.	0 - 254		S	O

MML commands/API calls

```
Mod-msclist:imsi=<IMSI>|mdn=<MDN>,roamflag=<ROAMFLAG>[,tempno=TEMPNO];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- ROAMFLAG = Roaming restriction flag
- TEMPNO = MSC template no

Example:

```
Mod-msclist:mdn="8612345678903",roamflag=2, tempno=2;
```

A_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS-RB

Rolls back modifications to MSC roaming restrictions. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyMSCRoamingRestrictionsRB.**

Table 17: A_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
OLD_ROAMFLAG	The old roaming restriction flag.	0 (international roaming restriction), 1 (national roaming restriction), 2 (regional roaming restriction).		S	R
OLD_TEMPNO	The old MSC template number. If ROAMFLSAG = 2, at least one MSC template number must be input. In other cases, template numbers are optional.	0 - 254		S	O

MML commands/API calls

```
Mod-
msclist:imsi=<IMSI>|mdn=<MDN>,roamflag=<OLD_ROAMFLAG>[,tempno=OLD_TEMPNO];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_ROAMFLAG = Roaming restriction flag
- OLD_TEMPNO = MSC template no

Example

```
Mod-msclist:mdn="8612345678903",roamflag=2, tempno=2;
```

A_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE

Modifies the NNAN service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyNNANService.**

Table 18: A_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NNAN	NNAN service.	1 (unsubscribed), 2 (subscribed but inactive), 3 (subscribed and active)		S	R
NNANOPTION	NNAN service option.	true (transmit), false (not transmit)		S	O

MML commands/API calls

```
Mod-nnan:imsi=<IMSI>|mdn=<MDN>,nnan=<NNAN>[,nnanoption=<NNANOPTION>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- NNAN = NNAN service subscribing state
- NNANOPTION = NNAN service option.

Example:

```
mod-nnan:mdn="8613312121000", nnan =1;
mod-nnan:mdn="8613312121000", nnan =3, nnanoption =true;
mod-nnan:mdn="8613312121000", nnan =3, nnanoption =false;
```

A_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE-RB

Rolls back modifications to the NNAN service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyNNANServiceRB.**

Table 19: A_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
OLD_NNAN	The old NNAN service.	1 (unsubscribed), 2 (subscribed but inactive), 3 (subscribed and active)		S	R
OLD_NNANOPTION	The old NNAN service option.	true (transmit), false (not transmit)		S	O

MML commands/API calls

```
Mod-
nnan:imsi=<IMSI>|mdn=<MDN>,nnan=<OLD_NNAN>[,nnanoption=<OLD_NNANOPTION>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_NNAN = NNAN service subscribing state
- OLD_NNANOPTION = NNAN service option.

Example:

```
mod-nnan:mdn="8613312121000", nnan =1;
mod-nnan:mdn="8613312121000", nnan =3, nnanoption =true;
mod-nnan:mdn="8613312121000", nnan =3, nnanoption =false;
```

A_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE

Modifies an ONLY service subscription. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyONLYService.**

Table 20: A_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
STATUS	ONLY service.	UNSUBSCRIBED, SUBSCRIBED_BUT_INACTIVE, SUBSCRIBED_AND_ACTIVE		S	R
MDNASPILOTNUMBER	Specifies whether to use the MDN as a pilot number or not.	TRUE, FALSE		S	O
PILOTNUMBER	Pilot number.	1-15 character string.		S	O
CNIPPILOTNUMBER	CNIP (Calling Number Identification Presentation) Pilot number. When status = UNSUBSCRIBED, it is mandatory. When status = SUBSCRIBED_BUT_INACTIVE or SUBSCRIBED_AND_ACTIVE, it is optional and should use the default value FALSE.	FALSE (do not display), TRUE (display)		S	O

MML commands/API calls

```
Mod-
onlysvr:imsi=<IMSI>|mdn=<MDN>,status=<STATUS>[,mdnaspilotnumber=<MDNASPILOTN
UMBER>][,pilotnumber=<PILOTNUMBER>][,cnippilotnumber=<CNIPPILOTNUMBER];
```

Where

- STATUS = ONLY Service subscription status
- MDNASPILOTNUMBER = Flag indicating whether to use MDN as pilot number
- PILOTNUMBER = Pilot number
- CNIPPILOTNUMBER = CNIP Pilot number or not

Examples

```
mod-onlysvr:mdn="8613399160003",status=1;
```

```
mod-
onlysvr:mdn="8613399160003",status=2,MDNasPilotNumber=false,PilotNumber="861
3910240011",CnipPilotNumber=true;
```

```
mod-
onlysvr:mdn="8613399160003",status=3,MDNasPilotNumber=true,CnipPilotNumber=f
alse;
```

A_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE-RB

Rolls back modifications to an ONLY service subscription. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyONLYServiceRB.**

Table 21: A_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
OLD_STATUS	The old ONLY service value.	UNSUBSCRIBED, SUBSCRIBED_BUT_INACTIVE, SUBSCRIBED_AND_ACTIVE		S	R
OLD_MDNASPILOTNUMBER	The old MDNASPILOTNUMBER value. Specifies whether use MDN as the Pilot Number.	TRUE, FALSE		S	O

Table 21: A_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_PILOTNUMBER	The old Pilot Number.			S	O
OLD_CNIPPILOTNUMBER	The old CNIP. When status = UNSUBSCRIBED, it is mandatory. When status = SUBSCRIBED_BUT_INACTIVE or SUBSCRIBED_AND_ACTIVE, it is optional and should use the default value FALSE.	FALSE (do not display), TRUE (display)		S	O

MML commands/API calls

```
Mod-
onlysvr:imsi=<IMSI>|mdn=<MDN>,status=<OLD_STATUS>[,mdnaspilotnumber=<OLD_MDN
ASPILOTNUMBER>][,pilotnumber=<OLD_PILOTNUMBER>][,cnippilotnumber=<OLD_CNIPPI
LOTNUMBER];
```

Where

- OLD_STATUS = ONLY Service subscription status
- OLD_MDNASPILOTNUMBER = Flag indicating whether to use MDN as pilot number
- OLD_PILOTNUMBER = Pilot number
- OLD_CNIPPILOTNUMBER = CNIP Pilot number or not

Examples

```
mod-onlysvr:mdn="8613399160003",status=1;
```

```
mod-
onlysvr:mdn="8613399160003",status=2,MDNasPilotNumber=false,PilotNumber="861
3910240011",CnipPilotNumber=true;
```

```
mod-
onlysvr:mdn="8613399160003",status=3,MDNasPilotNumber=true,CnipPilotNumber=f
alse;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA

Modifies subscriber authentication data. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberAuthenticateData.**

Table 22: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI.	7-15 character string		S	R
MSAUTH	Authentication ability of mobile station.	AUTHENTICATE, NOT_AUTHENTICATE		S	R
SHAREALLOW	Specifies whether to allow the SSD to share user-level switch or not. When MSAUTH equals AUTHENTICATE, it is mandatory, otherwise optional.	NOT_ALLOWED, ALLOWED		S	O
SSDREFACC	Specifies whether user access is permanently rejected. When IFAC = YES, it is mandatory, when IFAC = NO, it is optional. SSD updating failed.	NOT_REJECT, REJECT		S	O
VP	Specifies whether voice privacy user-level switch is allowed.	NOT_ALLOWED, ALLOWED		S	O

MML commands/API calls

```
Mod-
acsvr:imsi=<IMSI>,msauth=<MSAUTH>[,shareallow=<SHAREALLOW>][,ssdrefacc=<SSDR
EFACC>][,vp=<VP>];
```

Where

- IMSI = International Mobile Subscriber Identity
- MSAUTH = MS authentication flag

- SHAREALLOW = Allow SSD to share user- level switch or not
- SSDREFACC = SSD updating failed. Reject user access permanently or not.
- VP = Allow to Voice Privacy user- level switch or not

Example

```
mod-acsvr:imsi="460123456789003",msauth=2,shareallow=1,ssdrefacc=1,vp=3;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA-RB

Rolls back modifications to subscriber authentication data. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberAuthenticateDataRB.**

Table 23: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI.	7-15 character string		S	R
OLD_MSAUTH	The previous MSAUTH value that represents the authentication ability of mobile station.	AUTHENTICATE, NOT_AUTHENTICATE		S	R
OLD_SHAREALLOW	The old SHAREALLOW value. Specifies whether the SSD is allowed to share user-level switch or not. When MSAUTH equals AUTHENTICATE, it is mandatory, otherwise optional.	NOT_ALLOWED, ALLOWED		S	O
OLD_SSDREFACC	The old SSDREFACC value. Specifies whether user access is permanently rejected. When IFAC = YES, it is mandatory, when IFAC = NO, it is optional. SSD updating failed.	NOT_REJECT, REJECT		S	O

Table 23: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_VP	The old VP value. Specifies whether voice privacy user-level switch is allowed.	NOT_ALLOWED, ALLOWED		S	O

MML commands/API calls

```
Mod-
acsvr:imsi=<IMSI>,msauth=<OLD_MSAUTH>[,shareallow=<OLD_SHAREALLOW>][,ssdrefa
cc=<OLD_SSDREFACC>][,vp=<OLD_VP>];
```

Where

- IMSI = International Mobile Subscriber Identity
- OLD_MSAUTH = MS authentication flag
- OLD_SHAREALLOW = Allow SSD to share user- level switch or not
- OLD_SSDREFACC = SSD updating failed. Reject user access permanently or not.
- OLD_VP = Allow to Voice Privacy user- level switch or not

Example

```
mod-acsvr:imsi="460123456789003",msauth=2,shareallow=1,ssdrefacc=1,vp=3;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE

Modifies a subscriber's call forwarding service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCallForwadingService.**

Table 24: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

Table 24: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CFSCODE	Forwarding service number.	CFB, CFD, CFNA, CFU		S	R
CFNUM	Forwarding number.	1-32 character string (digital only)		S	O
IFACTIVE	The active state of a subscriber's call forwarding service.	REGISTER, DEACTIVATE, ACTIVATE		S	O
VOICE	Specifies whether to forward to voice message.	FORWARDED, NOT_FORWARDED		S	R

MML commands/API calls

```
Mod_cfsvr:imsi=<IMSI>|mdn=<MDN>,cfscode=<CFSCODE>[,ifactive=<IFACTIVE>][,cfn
um=<CFNUM>],voice=<VOICE>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CFSCODE = Call forward service code
- IFACTIVE = Activation status
- CFNUM = Forwarded to number
- VOICE = Whether forward to voice message or not

Example

```
mod-
cfsvr:imsi="460123456789003",cfscode=1,cfnum="07551234567568214785456325",if
Active=3,voice=0;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE-RB

Rolls back modifications to a subscriber's call forwarding service. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCallForwadingServiceRB.

Table 25: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE Logical ID			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
CFSCODE	Forwarding service number.	CFB, CFD, CFNA, CFU		S	R
OLD_CFNUM	The old forwarding number.	1-32 character string (digital only)		S	O
OLD_IFACTIVE	The old active state value of a subscriber's call forwarding service.	REGISTER, DEACTIVATE, ACTIVATE		S	O
OLD_VOICE	The old VOICE setting that specifies whether to forward to voice message.	FORWARDED, NOT_FORWARDED		S	R

MML commands/API calls

```
Mod_cfsvr:imsi=<IMSI>|mdn=<MDN>,cfscode=<CFSCODE>[,ifactive=<OLD_IFACTIVE>][
,cfnum=<OLD_CFNUM>],voice=<OLD_VOICE>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CFSCODE = Call forward service code
- OLD_IFACTIVE = Activation status
- OLD_CFNUM = Forwarded to number
- OLD_VOICE = Whether forward to voice message or not

Example

```
mod-
cfsvr:imsi="460123456789003",cfscode=1,cfnum="07551234567568214785456325",if
Active=3,voice=0;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE

Modifies a subscriber's call waiting service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCallWaitingService.**

Table 26: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
CWACTI	Call waiting service activation status.	0 (deactivation), 1 (activation)		S	R

MML commands/API calls

```
Mod-cwsvr:imsi=<IMSI>|mdn=<MDN>,cwacti=<CWACTI>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CWACTI = Call waiting activation status

Example

```
mod-cwsvr: mdn="8612345678903", cwacti=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE-RB

Rolls back modifications to a subscriber's call waiting service. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCallWaitingServiceRB.

Table 27: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_CWACTI	The old CWACTI value.	0 (deactivation), 1 (activation)		S	R

MML commands/API calls

```
Mod-cwsvr:imsi=<IMSI>|mdn=<MDN>,cwacti=<OLD_CWACTI>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_CWACTI = Call waiting activation status

Example

```
mod-cwsvr: mdn="8612345678903", cwacti=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE

Modifies a subscriber's CENTREX service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCentrexService.**

Table 28: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O

Table 28: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
CENTREXFLAG	Specifies whether to support Centrex service. Possible values: .	SUPPORT, NOT_SUPPORT		S	R
CENTREXID	Centrex ID.	0-65534		S	O
CENTREXORI	The Centrex out right.	FORBIDDEN, PERMITTED		S	O

MML commands/API calls

```
Mod-
centrex:imsi=<IMSI>|mdn=<MDN>,centrexflag=<CENTREXFLAG>[,centrexid=<CENTREXI
D>][,centrexori=<CENTREXORI>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CENTREXFLAG = Whether to support centrex service
- CENTREXID = Centrex Id
- CENTREXORI = Centrex outright flag

Example

```
mod-centrex:mdn="8612345678901",centrexflag=1,centrexid=23456,centrexori=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE-RB

Rolls back modifications to a subscriber's CENTREX service. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCentrexServiceRB.

Table 29: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_CENTREXFLAG	The old CENTREXFLAG value. Specifies whether to support Centrex service.	SUPPORT, NOT_SUPPORT		S	R
OLD_CENTREXID	The old Centrex ID.	0-65534		S	O
OLD_CENTREXORI	The old Centrex out right.	FORBIDDEN, PERMITTED		S	O

MML commands/API calls

```
Mod-
centrex:imsi=<IMSI>|mdn=<MDN>,centrexflag=<OLD_CENTREXFLAG>[,centrexid=<OLD_
CENTREXID>][,centrexori=<OLD_CENTREXORI>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_CENTREXFLAG = Whether to support centrex service
- OLD_CENTREXID = Centrex Id
- OLD_CENTREXORI = Centrex outright flag

Example

```
mod-centrex:mdn="8612345678901",centrexflag=1,centrexid=23456,centrexori=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE

Modifies a subscriber's CFMN service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCFMNService.**

Table 30: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
CFMNFLAG	Specifies whether to support CFMN service.	1 (unsupported), 2 (supported and deactivated, 3 (supported and activated)		S	R

MML commands/API calls

```
Mod-cfmnpara:imsi=<IMSI>|mdn=<MDN>,cfmnflag=<CFMNFLAG>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CFMNFLAG = CFMN service subscribing state

Example

```
mod-cfmnpara:mdn="8612345678901",cfmnflag=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE-RB

Rolls back modifications to a subscriber's CFMN service. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCFMNServiceRB.

Table 31: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_CFMNFLAG	The old CFMNFLAG that specifies whether to support CFMN service.	1 (unsupported), 2 (supported and deactivated), 3 (supported and activated)		S	R

MML commands/API calls

```
Mod-cfmnpara:imsi=<IMSI>|mdn=<MDN>,cfmnflag=<OLD_CFMNFLAG>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_CFMNFLAG = CFMN service subscribing state

Example:

```
mod-cfmnpara:mdn="8612345678901",cfmnflag=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

Modifies a subscriber's conference call service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberConferenceCallService.**

Table 32: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE Logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
CCMAX	The maximum number of subscribers for a conference call.	3-32		S	R

MML commands/API calls

```
Mod-ccsvr:imsi=<IMSI>|mdn=<MDN>,ccmax=<CCMAX>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CCMAX = The max. subscribers for a conference call

Example:

```
mod-ccsvr: mdn="8612345678900", ccmax=10;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE-RB

Rolls back modifications to a subscriber's conference call service. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberConferenceCallServiceRB.

Table 33: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_CCMAX	The previous maximum number of subscribers on a conference call.	3-32		S	R

MML commands/API calls

```
Mod-ccsvr:imsi=<IMSI>|mdn=<MDN>,ccmax=<OLD_CCMAX>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_CCMAX = The max. subscribers for a conference call

Example

```
mod-ccsvr: mdn="8612345678900", ccmax=10;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE

Modifies a subscriber's CPPC service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCPPCService.**

Table 34: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R

Table 34: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
CPPCFLAG	Specifies whether CPPC service is supported.	1 (supported), 0 (unsupported)		S	R

MML commands/API calls

```
Mod-cppcpara:imsi=<IMSI>|mdn=<MDN>,cppcflag=<CPPCFLAG>;
```

Where

- IMSI = International Mobile Subscriber Identity
- MDN = Mobile Directory Number
- CPPCFLAG = CPPC service subscribing state.

Example

```
mod-cppcpara:imsi="460123456789001",cppcflag=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE-RB

Rolls back modifications to a subscriber's CPPC service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberCPPCServiceRB.**

Table 35: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

Table 35: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_CPPCFLAG	The old CPPCFLAG that specifies whether CPPC service is supported.	1 (supported), 0 (unsupported)		S	R

MML commands/API calls

```
Mod-cppcpara:imsi=<IMSI>|mdn=<MDN>,cppcflag=<OLD_CPPCFLAG>;
```

Where

- IMSI = International Mobile Subscriber Identity
- MDN = Mobile Directory Number
- OLD_CPPCFLAG = CPPC service subscribing state.

Example

```
mod-cppcpara:imsi="460123456789001",cppcflag=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Modifies the subscriber's data service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberDataService.**

Table 36: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
SP8	Basic Variable Rate Voice Service. (8 kbps)=0x0001, //8K speech.	FALSE (not subscribed), TRUE (subscribed)		S	O

Table 36: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
SP13	SPEECH_13K=0x8000, //13K speech.	FALSE (not subscribed), TRUE (subscribed)		S	O
HSP13	High Rate Voice Service. (13 kbps)=0x0011, //13K high rate voice service.	FALSE (not subscribed), TRUE (subscribed)		S	O
EHSP	Enhanced Variable Rate Voice Service. (8 kbps) =0x0003, //EVRC	FALSE (not subscribed), TRUE (subscribed)		S	O
ADS1	Asynchronous Data Service (9.6 kbps) =0x0004,// Asynchronous Data rate set 1.	FALSE (not subscribed), TRUE (subscribed)		S	O
G3F1	Group 3 Facsimile (9.6 kbps)=0x0005, //Group 3 Fax rate set 1.	FALSE (not subscribed), TRUE (subscribed)		S	O
MSLB13	Mobile Station Loopback (13kbps) = 0x0009, //13K loopback.	FALSE (not subscribed), TRUE (subscribed)		S	O
ADS2	Asynchronous Data Service (14.4 or 9.6 kbps) = 0x000C.	FALSE (not subscribed), TRUE (subscribed)		S	O
G3F2	Group 3 Facsimile (14.4 or 9.6 kbps)=0x000D, // Group 3 Fax rate set 2.	FALSE (not subscribed), TRUE (subscribed)		S	O
SMS1	Short Message Services (Rate Set 1) = 0x0006, // SMS rate set 1.	FALSE (not subscribed), TRUE (subscribed)		S	O
SMS2	Short Message Services (Rate Set 2) = 0x000E, // SMS rate set 2.	FALSE (not subscribed), TRUE (subscribed)		S	O

Table 36: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
HSPDS11	High Speed Packet Data Service (RS1 forward, RS1 reverse) = 0x0016, //High Speed Packet Data Service: Internet or ISO Protocol Stack (RS1 forward, RS1 reverse). Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed)		S	O
HSPDS12	High Speed Packet Data Service (RS1 forward, RS2 reverse) = 0x0017, //High Speed Packet Data Service: Internet or ISO Protocol Stack (RS1 forward, RS2 reverse). Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed)		S	O
HSPDS21	High Speed Packet Data Service (RS2 forward, RS1 reverse) = 0x0018, //High Speed Packet Data Service: Internet or ISO Protocol Stack (RS2 forward, RS1 reverse). Use of this value is outside the scope of this version of this standard.	FALSE - not subscribed, TRUE - subscribed		S	O
HSPDS22	High Speed Packet Data Service (RS2 forward, RS2 reverse) = 0x0019, //High Speed Packet Data Service: Internet or ISO Protocol Stack (RS2 forward, RS2 reverse). Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed)		S	O

Table 36: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
PDS1	144 kbps Packet Data Service, Internet or ISO Protocol Stack=0x0021, //High Speed Packet Data, 144 Kbps.	FALSE (not subscribed), TRUE (subscribed)		S	O
PDS2	Packet Data Service: Internet or ISO Protocol Stack (14.4 kbps) = 0x000F //.	FALSE (not subscribed), TRUE (subscribed)		S	O
PDS3	Packet Data Service: CDPD Protocol Stack (14.4kbps) =0x0010 //.	FALSE (not subscribed), TRUE (subscribed)		S	O
G3AF1	Group 3 Analog Facsimile (Rate Set 1).	FALSE (not subscribed), TRUE (subscribed)		S	O
G3AF2	Group 3 Analog Facsimile (Rate Set 2).	FALSE (not subscribed), TRUE (subscribed)		S	O
ADSR1	Asynchronous Data Service, Revision 1 (9.6 or 14.4 kbps).	FALSE (not subscribed), TRUE (subscribed)		S	O
G3FR1	Group 3 Facsimile, Revision 1 (9.6 or 14.4 kbps).	FALSE (not subscribed), TRUE (subscribed)		S	O

MML commands/API calls

```
Mod-
datasvr:imsi=<IMSI>|mdn=<MDN>,[,sp8=<SP8>][,sp13=<SP13>][,hsp13=<HSP13>][,eh
sp=<EHSP>][,ads1=<ADS1>][,g3f1=<G3F1>][,mslb13=<MSLB13>][,ads2=<ADS2>][,g3f2
=<G3F2>][,sms1=<SMS1>][,sms2=<SMS2>][,hspds11=<HSPDS11>][,hspds12=<HSPDS12>]
[hspds21=<HSPDS21>][,hspds22=<HSPDS22>][,pds1=<PDS1>][,pds2=<PDS2>][,pds3=<P
DS3>][,g3af1=<G3AF1>][,g3af2=<G3AF2>][,adsr1=<ADSR1>][,g3fr1=<G3FR1>];
```

Where

- SP8 = Basic Variable Rate Voice Service (8 kbps) flag
- SP13 = SPEECH_13K flag
- HSP13 = High Rate Voice Service (13 kbps) flag
- EHSP = Enhanced Variable Rate Voice Service (8 kbps) flag

- ADS1 = Asynchronous Data Service (9.6 kbps) flag
- G3F1 = Group 3 Facsimile (9.6 kbps) flag
- MSLB13 = Mobile Station Loopback (13kbps) flag
- ADS2 = Asynchronous Data Service (14.4 or 9.6 kbps) flag
- G3F2 = Group 3 Facsimile (14.4 or 9.6 kbps) flag
- SMS1 = Short Message Services (Rate Set 1) flag
- SMS2 = Short Message Services (Rate Set 2) flag
- HSPDS11 = High Speed Packet Data Service (RS1 forward, RS1 reverse) flag
- HSPDS12 = High Speed Packet Data Service (RS1 forward, RS2 reverse) flag
- HSPDS21 = High Speed Packet Data Service (RS2 forward, RS1 reverse) flag
- HSPDS22 = High Speed Packet Data Service (RS2 forward, RS2 reverse) flag
- PDS1 = 144 kbps Packet Data Service, Internet or ISO Protocol Stack flag
- PDS2 = Packet Data Service: Internet or ISO Protocol Stack (14.4 kbps) flag
- PDS3 = Packet Data Service: CDPD Protocol Stack (14.4kbps) flag
- G3AF1 = Group 3 Analog Facsimile (Rate Set 1) flag
- G3AF2 = Group 3 Analog Facsimile (Rate Set 2) flag
- ADSR1 = Asynchronous Data Service, Revision 1(9.6 or 14.4 kbps) flag
- G3FR1 = Group 3 Facsimile, Revision 1(9.6 or 14.4 kbps) flag

Example

```
mod-datasvr:mdn="8612345678903", G3F1=true, ADS2=false
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE-RB

Rolls back modifications to the subscriber's data service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberDataServiceRB.**

Table 37: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

Table 37: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_SP8	Basic Variable Rate Voice Service (8 kbps) = 0x0001, //8K speech.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_SP13	SPEECH_13K =0x8000, //13K speech.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_HSP13	High Rate Voice Service (13 kbps) =0x0011, // 13K high rate voice service.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_EHSP	Enhanced Variable Rate Voice Service (8 kbps) =0x0003, //EVRC	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_ADS1	Asynchronous Data Service (9.6 kbps) =0x0004,// Asynchronous Data rate set 1.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_G3F1	Group 3 Facsimile (9.6 kbps) =0x0005,//Group 3 Fax rate set 1.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_MSLB13	Mobile Station Loopback (13kbps)=0x0009, //13K loopback.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_ADS2	Asynchronous Data Service (14.4 or 9.6 kbps) =0x000C.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_G3F2	Group 3 Facsimile (14.4 or 9.6 kbps)=0x000D, // Group 3 Fax rate set 2.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_SMS1	Short Message Services (Rate Set 1)=0x0006, // SMS rate set 1.	FALSE (not subscribed), TRUE (subscribed)		S	O

Table 37: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_SMS2	Short Message Services (Rate Set 2)=0x000E, // SMS rate set 2.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_HSPDS11	High Speed Packet Data Service (RS1 forward, RS1 reverse) =0x0016,// High Speed Packet Data Service:Internet or ISO Protocol Stack (RS1 forward, RS1 reverse) Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_HSPDS12	High Speed Packet Data Service (RS1 forward, RS2 reverse) = 0x0017,// High Speed Packet Data Service:Internet or ISO Protocol Stack (RS1 forward, RS2 reverse) Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_HSPDS21	High Speed Packet Data Service (RS2 forward, RS1 reverse) =0x0018,// High Speed Packet Data Service:Internet or ISO Protocol Stack (RS2 forward, RS1 reverse) Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed)		S	O

Table 37: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_HSPDS22	High Speed Packet Data Service (RS2 forward, RS2 reverse) =0x0019,// High Speed Packet Data Service:Internet or ISO Protocol Stack (RS2 forward, RS2 reverse) Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_PDS1	144 kbps Packet Data Service, Internet or ISO Protocol Stack=0x0021,//High Speed Packet Data, 144 Kbps.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_PDS2	Packet Data Service: Internet or ISO Protocol Stack (14.4 kbps) =0x000F.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_PDS3	Packet Data Service: CDPD Protocol Stack (14.4kbps) =0x0010.	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_G3AF1	Group 3 Analog Facsimile (Rate Set 1).	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_G3AF2	Group 3 Analog Facsimile (Rate Set 2)	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_ADSR1	Asynchronous Data Service, Revision 1(9.6 or 14.4 kbps).	FALSE (not subscribed), TRUE (subscribed)		S	O
OLD_G3FR1	Group 3 Facsimile, Revision 1(9.6 or 14.4 kbps)	FALSE (not subscribed), TRUE (subscribed)		S	O

MML commands/API calls

```
Mod-
datasvr:imsi=<IMSI>|mdn=<MDN>,[,sp8=<OLD_SP8>][,sp13=<OLD_SP13>][,hsp13=<OLD
```

```
_HSP13>][,ehsp=<OLD_EHSP>][,ads1=<OLD_ADS1>][,g3f1=<OLD_G3F1>][,mslb13=<OLD_
MSLB13>][,ads2=<OLD_ADS2>][,g3f2=<OLD_G3F2>][,sms1=<OLD_SMS1>][,sms2=<OLD_SM
S2>][,hspds11=<OLD_HSPDS11>][,hspds12=<OLD_HSPDS12>][hspds21=<OLD_HSPDS21>][
,hspds22=<OLD_HSPDS22>][,pds1=<OLD_PDS1>][,pds2=<OLD_PDS2>][,pds3=<OLD_PDS3>
][,g3af1=<OLD_G3AF1>][,g3af2=<OLD_G3AF2>][,adsr1=<OLD_ADSR1>][,g3fr1=<OLD_G3
FR1>];
```

Where

- OLD_SP8 = Basic Variable Rate Voice Service (8 kbps) flag
- OLD_SP13 = SPEECH_13K flag
- OLD_HSP13 = High Rate Voice Service (13 kbps) flag
- OLD_EHSP = Enhanced Variable Rate Voice Service (8 kbps) flag
- OLD_ADS1 = Asynchronous Data Service (9.6 kbps) flag
- OLD_G3F1 = Group 3 Facsimile (9.6 kbps) flag
- OLD_MSLB13 = Mobile Station Loopback (13kbps) flag
- OLD_ADS2 = Asynchronous Data Service (14.4 or 9.6 kbps) flag
- OLD_G3F2 = Group 3 Facsimile (14.4 or 9.6 kbps) flag
- OLD_SMS1 = Short Message Services (Rate Set 1) flag
- OLD_SMS2 = Short Message Services (Rate Set 2) flag
- OLD_HSPDS11 = High Speed Packet Data Service (RS1 forward, RS1 reverse) flag
- OLD_HSPDS12 = High Speed Packet Data Service (RS1 forward, RS2 reverse) flag
- OLD_HSPDS21 = High Speed Packet Data Service (RS2 forward, RS1 reverse) flag
- OLD_HSPDS22 = High Speed Packet Data Service (RS2 forward, RS2 reverse) flag
- OLD_PDS1 = 144 kbps Packet Data Service, Internet or ISO Protocol Stack flag
- OLD_PDS2 = Packet Data Service: Internet or ISO Protocol Stack (14.4 kbps) flag
- OLD_PDS3 = Packet Data Service: CDPD Protocol Stack (14.4kbps) flag
- OLD_G3AF1 = Group 3 Analog Facsimile (Rate Set 1) flag
- OLD_G3AF2 = Group 3 Analog Facsimile (Rate Set 2) flag
- OLD_ADSR1 = Asynchronous Data Service, Revision 1(9.6 or 14.4 kbps) flag
- OLD_G3FR1 = Group 3 Facsimile, Revision 1(9.6 or 14.4 kbps) flag

Example

```
mod-datasvr:mdn="8612345678903", G3F1=true, ADS2=false;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS

Modifies a subscriber's equal access. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberEqualAccess.**

Table 38: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
EAFA	EA subscribing state.	1 or 3.1. (not authorized), or 3. (authorized and activated)		S	R
INTERCIC	International long distance operator logo identifier. If EAFA is 3, the parameter can be added. If EAFA is 3, either intercic or nationalcic must be selected. If EAFA is 1, the parameter cannot be added.			S	O
NATIONALCIC	National long distance operator logo identifier. If EAFA is 3, the parameter can be added; If EAFA is 3, either intercic or nationalcic must be selected; If EAFA is 1, the parameter cannot be added.			S	O

MML commands/API calls

```
Mod-
cic:imsi=<IMSI>|mdn=<MDN>,eafa=<EAFA>[,intercic=<INTERCIC>][,nationalcic=<NA
TIONALCIC>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- EAFA = Equal Access service subscribing state
- INTERCIC = International Long distance operator logo identifier
- NATIONALCIC = National Long distance operator logo identifier

Examples

```
mod-cic:imsi="460123456789001",eafa=3,intercic="17951", nationalcic="17909";
Mod-cic: imsi="460123456789001", eafa=3,intercic="none", nationalcic="17909";
Mod-cic: imsi="460123456789001", eafa=3,intercic="17951", nationalcic="none";
mod-cic:imsi="460123456789001",eafa=3, intercic="17951";
mod-cic:imsi="460123456789001",eafa=3, nationalcic="17909";
mod-cic:imsi="460123456789001",eafa=1
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS-RB

Rolls back modifications to a subscriber's equal access. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberEqualAccessRB.**

Table 39: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_EAFA	The old EA subscribing state.	1 or 3.1. (not authorized), or 3. (authorized and activated)		S	R

Table 39: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_INTERCIC	The old international long distance operator logo identifier. If EAFA is 3, the parameter can be added. If EAFA is 3, either intercic or nationalcic must be selected. If EAFA is 1, the parameter cannot be added.			S	O
OLD_NATIONALCIC	The old national long distance operator logo identifier. If EAFA is 3, the parameter can be added; If EAFA is 3, either intercic or nationalcic must be selected; If EAFA is 1, the parameter cannot be added.			S	O

MML commands/API calls

```
Mod-
cic:imsi=<IMSI>|mdn=<MDN>,eafa=<OLD_EAFA>[,intercic=<OLD_INTERCIC>][,nationa
lcic=<OLD_NATIONALCIC>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_EAFA = Equal Access service subscribing state
- OLD_INTERCIC = International Long distance operator logo identifier
- OLD_NATIONALCIC = National Long distance operator logo identifier

Examples

```
mod-cic:imsi="460123456789001",eafa=3,intercic="17951", nationalcic="17909";
Mod-cic: imsi="460123456789001", eafa=3,intercic="none", nationalcic="17909";
Mod-cic: imsi="460123456789001", eafa=3,intercic="17951", nationalcic="none";
mod-cic:imsi="460123456789001",eafa=3, intercic="17951";
```

```
mod-cic:imsi="460123456789001",eafa=3, nationalcic="17909";
mod-cic:imsi="460123456789001",eafa=1
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE

Modifies the subscriber intelligent service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberINService.**

Table 40: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
SERVICEID	Service ID.	1-65535		S	R
SERVICEFLAG	The subscribing status of the intelligent service.	UNSUBSCRIBED, SUBSCRIBED_BUT_INACTIVATED, SUBSCRIBED_AND_ACTIVATED		S	R
SCPNO	SCP number.	1-4		S	R
CFU	Call Forwarding Unconditional service subscription.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
CFB	Call Forwarding on mobile subscriber Busy service subscription.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
CFNA	Call Forwarding No Answer service subscription.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
DPPC	Subscriber activate/ deactivate operation allowed.	SUBSCRIBED, NOT_SUBSCRIBED		S	O

Table 40: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
FCN	Call failure notification.	SUBSCRIBED, NOT_SUBSCRIBED		S	O

MML commands/API calls

```
Mod-
winsvr:mdn=<MDN>|imsi=<IMSI>,serviceid=<SERVICEID>,serviceflag=<SERVICEFLAG>
,scpno=<SCPNO>[,cfu=<CFU>][,cfb=<CFB>][,cfna=<CFNA>][,dppc=<DPPC>][,fcn=<FCN
>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- SERVICEID = Service Id
- SERVICEFLAG = Service flag
- SCPNO = SCP where service resides
- CFU = Whether to subscribe CFU
- CFB = Whether to subscribe CFB
- CFNA = Whether to subscribe CFNA
- DPPC = Subscriber Activate/Deactivate Operation Allowed or not
- FCN = Whether to subscribe FCN (Call Failure Notification)

Example:

```
mod-
winsvr:mdn="8612345678912",ServiceID=3,ServiceFlag=3,ScpNo=1,cfu=1,cfb=1,cfn
a=1,dppc=1,fcn=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE-RB

Rolls back modification to the subscriber's intelligent service. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberINServiceRB.

Table 41: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE Logical ID			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
SERVICEID	Service ID.	1-65535		S	R
OLD_SERVICEFLAG	The old subscribing status of the intelligent service.	UNSUBSCRIBED, SUBSCRIBED_BUT_INACTIVATED, SUBSCRIBED_AND_ACTIVATED		S	R
SCPNO	SCP number.	1-4		S	R
OLD_CFU	The old CFU value.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
OLD_CFB	The old CFB value.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
OLD_CFNA	The old CFNA value.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
OLD_DPPC	The old DPPC value that indicates whether subscriber activate/ deactivate operation is allowed.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
OLD_FCN	The old Call Failure Notification value.	SUBSCRIBED, NOT_SUBSCRIBED		S	O

MML commands/API calls

```
Mod-
winsvr:mdn=<MDN>|imsi=<IMSI>,serviceid=<SERVICEID>,serviceflag=<OLD_SERVICEF
```

```
LAG>,scpno=<SCPNO>[,cfu=<OLD_CFU>][,cfb=<OLD_CFB>][,cfna=<OLD_CFNA>][,dppc=<
OLD_DPPC>][,fcn=<OLD_FCN>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- SERVICEID = Service Id
- OLD_SERVICEFLAG = Old value of Service flag
- SCPNO = SCP where service resides
- OLD_CFU = Whether to subscribe CFU
- OLD_CFB = Whether to subscribe CFB
- OLD_CFNA = Whether to subscribe CFNA
- OLD_DPPC = Subscriber Activate/Deactivate Operation Allowed or not
- OLD_FCN = Whether to subscribe FCN (Call Failure Notification)

Example

```
mod-
winsvr:mdn="8612345678912",ServiceID=3,ServiceFlag=3,ScpNo=1,cfu=1,cfb=1,cfn
a=1,dppc=1,fcn=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE

Modifies a subscriber's lock state. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberLockState.**

Table 42: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
MDN	MDN.	1-15 character string.		S	R
ACCOUNTLOCK	Delinquent account lock type.	UNLOCKED, INCOMING_CALL_ LOCK, OUTGOING_ CALL_LOCK, INCOMING_AND _OUTGOING CALL_ LOCK.		S	O

Table 42: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE

Parameter Name	Description	Range	Default Value	Type	Class
USERLOCK	User lock type.	UNLOCKED, INCOMING_CALL_ LOCK, OUTGOING_ CALL_LOCK		S	O
STOLENLOCK	Stolen lock type.	LOCKED, UNLOCKED		S	O
DUPLOCK	Duplication lock type.	LOCKED, UNLOCKED		S	O

MML commands/API calls

```
Mod-
lockstat:mdn=<MDN>[,accountlock=<ACCOUNTLOCK>][,userlock=<USERLOCK>][,stolen
lock=<STOLENLOCK>][,duplock=<DUPLOCK>];
```

Where

- MDN = Mobile Directory Number
- ACCOUNTLOCK = Delinquent account lock type
- USERLOCK = User lock type
- STOLENLOCK = Stolen lock type
- DUPLOCK = Duplication lock type

Example

```
mod-lockstat: mdn="8612345678900", accountlock=1,userlock=1,duplock=0;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE-RB

Rolls back modifications to a subscriber's lock state. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberLockStateRB.**

Table 43: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID			S	R

Table 43: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MDN	MDN.	1-15 character string		S	R
OLD_ACCOUNTLOCK	The old ACCOUNTLOCK value.	UNLOCKED, INCOMING_CALL_LOCK, OUTGOING_CALL_LOCK, INCOMING_AND_OUTGOING CALL_LOCK		S	O
OLD_USERLOCK	The old USERLOCK value.	UNLOCKED, INCOMING_CALL_LOCK, OUTGOING_CALL_LOCK		S	O
OLD_STOLENLOCK	The old STOLENLOCK value.	LOCKED, UNLOCKED		S	O
OLD_DUPLOCK	The old DUPLOCK value.	LOCKED, UNLOCKED		S	O

MML commands/API calls

```
Mod-
lockstat:mdn=<MDN>[,accountlock=<OLD_ACCOUNTLOCK>][,userlock=<OLD_USERLOCK>]
[,stolenlock=<OLD_STOLENLOCK>][,duplock=<OLD_DUPLOCK>];
```

Where

- MDN = Mobile Directory Number
- OLD_ACCOUNTLOCK = Old value of Delinquent account lock type
- OLD_USERLOCK = Old value of User lock type
- OLD_STOLENLOCK = Old value of Stolen lock type
- OLD_DUPLOCK = Old value of Duplication lock type

Example

```
mod-lockstat: mdn="8612345678900", accountlock=1,userlock=1,duplock=0;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

Modifies a subscriber's message waiting notification service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberMsgWaitNotificationService.**

Table 44: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
MWNACTI	Beep tone that designates the active state of message waiting notification.	0 (Deactivation), 1 (Activation)		S	R
MWNATPACTI	Alert tone that designates the active state of message waiting notification.	0 (Deactivation), 1 (Activation)		S	R

MML commands/API calls

```
Mod-
mwnsvr:imsi=<IMSI>|mdn=<MDN>[,mwnacti=<MWNACTI>][,mwnatpacti=<MWNATPACTI>];
```

Where:

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- MWNACTI = Beep tone active state of message waiting notification
- MWNATPACTI= Alert tone active state of message waiting notification

Example

```
mod-mwnsvr:mdn="8612345678903",mwnacti=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE-RB

Rolls back modifications to a subscriber's message waiting notification service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberMsgWaitNotificationServiceRB.**

Table 45: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_MWNACTI	The old beep tone that designates the active state of message waiting notification.	0 (Deactivation), 1 (Activation)		S	R
OLD_MWNATPACTI	The old alert tone that designates the active state of message waiting notification.	0 (Deactivation), 1 (Activation)		S	R

MML commands/API calls

```
Mod-
mwnsvr:imsi=<IMSI>|mdn=<MDN>[,mwnacti=<OLD_MWNACTI>][,mwnatpacti=<OLD_MWNATP
ACTI>];
```

Where:

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_MWNACTI = Beep tone active state of message waiting notification
- OLD_MWNATPACTI= Alert tone active state of message waiting notification

Example

```
mod-mwnsvr:mdn="8612345678903",mwnacti=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER

Modifies the subscriber pilot number. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberPilotNumber.**

Table 46: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
PILOTNUMBER	Pilot number.	1-15 character string.		S	R
MEMBER	Member number.			S	R
STATUS	Members.			S	O
CNIPPILOTNUMBER	Calling Number Identification Presentation of pilot number.	False (do not display), True (display)		S	O

MML commands/API calls

```
Mod-
onlymemb:pilotnumber=<PILOTNUMBER>,operate=0,member=<MEMBER>,status=<STATUS>
,cnippilotnumber=<CNIPPILOTNUMBER>;
```

Where

- PILOTNUMBER = Pilot number
- MEMBER = Member number
- STATUS = Member's status
- CNIPPILOTNUMBER = CNIP Pilot number

Example

```
mod-
onlymemb:PilotNumber="8613300012709",operate=0,member="8613910240011",Status
=1,CnipPilotNumber=true;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER-RB

Rolls back modifications to the subscriber pilot number. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberPilotNumberRB.**

Table 47: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
PILOTNUMBER	Pilot number.	1-15 character string.		S	R
MEMBER	Member number.			S	R
OLD_STATUS	The old status value.			S	O
OLD_CNIPPILOTNUMBER	The old CNIPPILOTNUMBER value.	False (do not display), True (display)		S	O

MML commands/API calls

```
Mod-
onlymemb:pilotnumber=<PILOTNUMBER>,operate=0,member=<MEMBER>,status=<OLD_STATUS>,cnippilotnumber=<OLD_CNIPPILOTNUMBER>;
```

Where

- PILOTNUMBER = Pilot number
- MEMBER = Member number
- OLD_STATUS = Member's status
- OLD_CNIPPILOTNUMBER = CNIP Pilot number

Example

```
mod-
onlymemb:PilotNumber="8613300012709",operate=0,member="8613910240011",Status=1,CnipPilotNumber=true;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE

Modifies the subscriber's preferred language. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberPreferredLanguage.**

Table 48: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

Table 48: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE

Parameter Name	Description	Range	Default Value	Type	Class
PL	Subscribers preferred language.	ENGLISH, FRENCH, SPANISH, GERMAN, PORTUGUESE, MANDARIN, CANTONESE, HANGUL, BAHASA, HINDI, URDU, TAGALOG, YORUBA, SWAHILI, GAELIC, HEBREW, NIHONGO, RUSSIAN, ARABIC, DUTCH, ITALIAN, POLISH, VIETNAMESE, GREEK, YIDDISH, THAI, LAOTIAN, PERSIAN, FRENCH, CREOLE, ARMENIAN, NAVAHO, HUNGARIAN, MON-KHMER, GUJARATHI, UKRANIAN, CZECH, PENNSYLVANIA, DUTCH, MIAO, NORWEGIAN, SLOVAK, SWEDISH, SERBIAN, KRU, RUMANIAN, LITHUANIAN, FINNISH, PUNJABI, FORMOSAN, CROATIAN, BOSNIAN, TURKISH, LLOCANO , BENGALI, DANISH, FLEMISH, SYRIAN, TAMIL, SAMOAN, MALAYALAM, CAJUN, AMHARIC		S	R

MML commands/API calls

```
Mod-plsvr:imsi=<IMSI>|mdn=<MDN>,pl=<PL>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- PL = Preferred language

Example

```
mod-plsvr: mdn="8612345678903",pl=10;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE-RB

Rolls back modifications to the subscriber's preferred language. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberPreferredLanguageRB.**

Table 49: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

Table 49: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_PL	The subscriber's previous preferred language.	ENGLISH, FRENCH, SPANISH, GERMAN, PORTUGUESE, MANDARIN, CANTONESE, HANGUL, BAHASA, HINDI, URDU, TAGALOG, YORUBA, SWAHILI, GAELIC, HEBREW, NIHONGO, RUSSIAN, ARABIC, DUTCH, ITALIAN, POLISH, VIETNAMESE, GREEK, YIDDISH, THAI, LAOTIAN, PERSIAN, FRENCH, CREOLE, ARMENIAN, NAVAHO, HUNGARIAN, MON-KHMER, GUJARATHI, UKRANIAN, CZECH, PENNSYLVANIA, DUTCH, MIAO, NORWEGIAN, SLOVAK, SWEDISH, SERBIAN, KRU, RUMANIAN, LITHUANIAN, FINNISH, PUNJABI, FORMOSAN, CROATIAN, BOSNIAN, TURKISH, LLOCANO , BENGALI, DANISH, FLEMISH, SYRIAN, TAMIL, SAMOAN, MALAYALAM, CAJUN, AMHARIC		S	R

MML commands/API calls

```
Mod-plsvr:imsi=<IMSI>|mdn=<MDN>,pl=<OLD_PL>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_PL = Preferred language

Example

```
mod-plsvr: mdn="8612345678903",pl=10;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY

Modifies a subscriber's properties. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberProperty.**

Table 50: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
CLASS	The mobile subscriber class value.	0 (ordinary subscriber), 2-255 (wireless payphone value)		S	R

MML commands/API calls

```
Mod-class:imsi=<IMSI>|mdn=<MDN>,class=<CLASS>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CLASS = Mobile subscriber's class

Example

```
mod-class:mdn ="8612345678903",class=0;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY-RB

Rolls back modifications to a subscriber's properties. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberPropertyRB.**

Table 51: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_CLASS	The old CLASS value.	0 (ordinary subscriber), 2-255 (wireless payphone value)		S	R

MML commands/API calls

```
Mod-class:imsi=<IMSI>|mdn=<MDN>,class=<OLD_CLASS>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_CLASS = Mobile subscriber's class

Example

```
mod-class:mdn ="8612345678903",class=0;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS

Modifies subscriber restrictions. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberRestrictions.**

Table 52: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Remote network element name.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
ORIGIN	Origination restriction.	ORIGINATION_ DENIED, ALLOW_LOCAL_ CALLS_ONLY, ALLOW_ONLY_ LEADING_DIGITS, ALLOW_LEADING_ DIGITS_AND_LOCAL _CALLS_ONLY, ALLOW_NATIONAL_ LONG_DISTANCE, ALLOW_ INTERNATIONAL_ CALLS, SINGLE_DIRECTORY		S	O
ORIBEGIN	Allow long distance area code. If ORIGIN = ALLOW_ONLY_LEAD ING_DIGITS or ALLOW_LEADING_DI GITS_AND_LOCAL_C ALLS_ONLY or SINGLE_DIRECTORY, it is mandatory. Else optional.	1-15 character string		S	O

Table 52: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
FMC	Forcedly pass through message center. Can only be set when SMS origination restriction supports initial sending short message service.	0 (No effect) ,1 (Force Indirect)		S	O
DIRECT	Direct. Can only can be set when SMS origination restriction supports initial sending short message service.	0 (Block direct), 1 (Allow direct)		S	O
ODEFAULT	ODEFAULT value. Can only can be set when SMS origination restriction supports initial sending short message service.	0 (Block all), 2 (Allow special), 3 (Allow all)		S	O
RC	RC. Can only be set when SMS termination restriction supports short message receiving service.	0 (Block), 1 (Allow)		S	O
TDEFAULT	TDEFAULT value. Only can be set when SMS termination restriction supports short message receiving service.	0 (Block all), 2 (Allow special), 3 (Allow all)		S	O
TERMINA	Incoming restriction.	1 (Termination denied), 2 (Unrestricted)		S	O

MML commands/API calls

```
Mod-
restrsvr:imsi=<IMSI>|mdn=<MDN>[,origin=<ORIGIN>][,oribegin=<ORIBEGIN>][,fmc=
<FMC>][,direct=<DIRECT>][,odefault=<ODEFAULT>][,rc=<RC>][,tdefault=<TDEFAULT
>][,termina=<TERMINA>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- ORIGIN = Origination Restriction value
- ORIBEGIN = Allow long distance area code
- FMC = Forcedly pass through message center flag
- DIRECT = Direct flag
- ODEFAULT = SMS Origination restriction default value
- RC = RC flag
- TDEFAULT = SMS Termination restriction default value
- TERMINA = Termination restriction value

Example

```
mod-restrsvr: mdn="8612345678903", origin=4,oribegin="0755", termina=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS-RB

Rolls back modifications to subscriber restrictions. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberRestrictionsRB.**

Table 53: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Remote network element name.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

Table 53: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_ORIGIN	The old origination restriction.	ORIGINATION_ DENIED, ALLOW_LOCAL_ CALLS_ONLY, ALLOW_ONLY_ LEADING_DIGITS, ALLOW_LEADING_ DIGITS_AND_LOCAL _CALLS_ONLY, ALLOW_NATIONAL_ LONG_DISTANCE, ALLOW_ INTERNATIONAL_ CALLS, SINGLE_DIRECTORY		S	O
OLD_ORIBEGIN	The old ORIBEGIN value. Allow long distance area code. character string. If ORIGIN = ALLOW_ONLY_LEA DING_DIGITS or ALLOW_LEADING_D IGITS_AND_LOCAL_ CALLS_ONLY or SINGLE_DIRECTORY , it is mandatory. Else optional.	1-15		S	O
OLD_FMC	The old FMC value. Forcedly pass through message center. Can only be set when SMS origination restriction supports initial sending short message service.	0 (No effect) ,1 (Force Indirect)		S	O

Table 53: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_DIRECT	The old DIRECT value. Can only can be set when SMS origination restriction supports initial sending short message service.	0 (Block direct), 1 (Allow direct)		S	O
OLD_ODEFAULT	The old OCEFAULT value. Can only can be set when SMS origination restriction supports initial sending short message service.	0 (Block all), 2 (Allow special), 3 (Allow all)		S	O
OLD_RC	The old RC value. Can only be set when SMS termination restriction supports short message receiving service.	0 (Block), 1 (Allow)		S	O
OLD_TDEFAULT	The old TDEFAULT value. Only can be set when SMS termination restriction supports short message receiving service.	0 (Block all), 2 (Allow special), 3 (Allow all)		S	O
OLD_TERMINA	The old incoming restriction value.	1 (Termination denied), 2 (Unrestricted)		S	O

MML commands/API calls

```
Mod-
restrsvr:imsi=<IMSI>|mdn=<MDN>[,origin=<OLD_ORIGIN>][,oribegin=<OLD_ORIBEGIN
>][,fmc=<OLD_FMC>][,direct=<OLD_DIRECT>][,odefault=<OLD_ODEFAULT>][,rc=<OLD_
RC>][,tdefault=<OLD_TDEFAULT>][,termina=<OLD_TERMINA>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_ORIGIN = Origination Restriction value
- OLD_ORIBEGIN = Allow long distance area code

- OLD_FMC = Forcedly pass through message center flag
- OLD_DIRECT = Direct flag
- OLD_ODEFAULT = SMS Origination restriction default value
- OLD_RC = RC flag
- OLD_TDEFAULT = SMS Termination restriction default value
- OLD_TERMINA = Termination restriction value

Example

```
mod-restrsvr: mdn="8612345678903", origin=4,oribegin="0755", termina=1;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION

Modifies a subscriber's roaming position. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberRoamingPosition.**

Table 54: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
PCSSN	Signaling sub-system number. If PCSSN is set to null, the PCSSN value is "null" or "NULL". If this parameter is not input, the PCSSN value remains unchanged.	null or NULL or a 10-digit hexadecimal number		S	O
MSCIN	MSC identity. If the MSCIN parameter is set to null, the MSCIN value is null or NULL. If no parameter is supplied, this indicates that the MSCIN value is not changed.	"null" or "NULL" or 1-15 digits		S	O

Table 54: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION

Parameter Name	Description	Range	Default Value	Type	Class
MSCID	MSC identification. If the MSCID value is set to null, the MSCID value is "null" or "NULL". If this parameter is not input, the MSCID value remains unchanged.	"null" or "NULL" or a 6-digit hexadecimal number		S	O

MML commands/API calls

```
Mod-
roam:imsi=<IMSI>|mdn=<MDN>[,pcssn=<PCSSN>][,mscin=<MSCIN>][,mscid=<MSCID>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- PCSSN = Signaling sub-system number
- MSCIN = MSC identity
- MSCID = MSC identification

Example

```
mod-roam:mdn="8612345678903",pcssn="1234567890",mscin
="123456789",mscid="234546";

mod-roam:mdn="8612345678903",pcssn="null",mscin ="123456789";

mod-roam:mdn="8612345678903",pcssn="1234567890",mscin="null";

mod-
roam:mdn="8612345678903",pcssn="1234567890",mscin="123456789",mscid="null";
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION-RB

Rolls back modifications to a subscriber's roaming position. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberRoamingPositionRB.

Table 55: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_PCSSN	The old signaling sub-system number. If PCSSN is set to null, the PCSSN value is "null" or "NULL". If this parameter is not input, the PCSSN value remains unchanged.	null or NULL or a 10-digit hexadecimal number		S	O
OLD_MSCIN	The old MSC identity. If the MSCIN parameter is set to null, the MSCIN value is null or NULL. If no parameter is supplied, this indicates that the MSCIN value is not changed.	"null" or "NULL" or 1-15 digits		S	O
OLD_MSCID	The old MSC identification. If the MSCID value is set to null, the MSCID value is "null" or "NULL". If this parameter is not input, the MSCID value remains unchanged.	"null" or "NULL" or a 6-digit hexadecimal number		S	O

MML commands/API calls

```
Mod-
roam:imsi=<IMSI>|mdn=<MDN>[,pcssn=<OLD_PCSSN>][,mscin=<OLD_MSCIN>][,mscid=<O
LD_MSCID>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_PCSSN = Signaling sub-system number
- OLD_MSCIN = MSC identity
- OLD_MSCID = MSC identification

Example

```
mod-roam:mdn="8612345678903",pcssn="1234567890",mscin
="123456789",mscid="234546";
```

```
mod-roam:mdn="8612345678903",pcssn="null",mscin ="123456789";
```

```
mod-roam:mdn="8612345678903",pcssn="1234567890",mscin="null";
```

```
mod-
roam:mdn="8612345678903",pcssn="1234567890",mscin="123456789",mscid="null";
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE

Modifies a subscriber's teleservice. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberTeleService.**

Table 56: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
SMMTPP	Short message MT_PP.	TRUE, FALSE		S	O
SMMOPP	Short message MO_PP.	TRUE, FALSE		S	O

MML commands/API calls

```
Mod-telsvr:imsi=<IMSI>|mdn=<MDN>[,smmtpp=<SMMTPP>][,smmopp=<SMMOPP>];
```

Where

- MDN = Mobile Directory Number

- IMSI = International Mobile Subscriber Identity
- SMMTPP = shortMessageMT_PP service
- SMMOPP = shortMessageMO_PP service

Example

```
mod-telsvr: imsi="460123456789001", smmtpp = true;
```

A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE-RB

Rolls back modifications to a subscriber's teleservice. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySubscriberTeleServiceRB.**

Table 57: A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_SMMTPP	The old short message MT_PP.	TRUE, FALSE		S	O
OLD_SMMOPP	The old short message MO_PP.	TRUE, FALSE		S	O

MML commands/API calls

```
Mod-
telsvr:imsi=<IMSI>|mdn=<MDN>[,smmtpp=<OLD_SMMTPP>][,smmopp=<OLD_SMMOPP>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_SMMTPP = shortMessageMT_PP service
- OLD_SMMOPP = shortMessageMO_PP service

Example

```
mod-telsvr: imsi="460123456789001", smmtpp = true;
```

A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE

Modifies a subscriber's supplementary services. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySupplementaryService.**

Table 58: A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
CFB	CFB.	TRUE, FALSE		S	O
CFD	Hidden condition forwarding.	TRUE, FALSE		S	O
CFNA	CFNR.	TRUE, FALSE		S	O
CFU	CFU.	TRUE, FALSE		S	O
CW	Call waiting.	TRUE, FALSE		S	O
CT	Call transfer.	TRUE, FALSE		S	O
CNIP	Caller identification display.	TRUE, FALSE		S	O
CNIR	Caller number identification restriction.	TRUE, FALSE		S	O
CNIO	Caller identification restriction override.	TRUE, FALSE		S	O
CC	Conference call.	TRUE, FALSE		S	O
FA	Reserved.			S	O
MAH	Reserved.			S	O
WC3	Three Party Service.	TRUE, FALSE		S	O

Table 58: A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
DND	Do not disturb.	TRUE, FALSE		S	O
PCA	Reserved.			S	O
SCA	Reserved.			S	O
SPINA	Subscriber PIN access.	TRUE, FALSE		S	O
SPINI	Subscriber PIN intercept.	TRUE, FALSE		S	O
MWN	Announcement waiting message.	TRUE, FALSE		S	O
PL	Preferred language.	TRUE, FALSE		S	O
RFC	Remote feature control.	TRUE, FALSE		S	O
VMR	Voice message retrieval.	TRUE, FALSE		S	O
VP	Reserved.			S	O
PACA	Priority Access and Channel Assignment.	TRUE, FALSE		S	O
CNIRMODE	Number identification restriction modes.	PERMANENTLY_|ACTIVATE, TEMPORARILY_ ACTIVATE, TEMPORARILY_ DEACTIVATE		S	O
PACALEVEL	PACA (Priority Access Channel Assignment) level.	1-15, 0 not available		S	O

MML commands/API calls

```
Mod-
supsvr:imsi=<IMSI>|mdn=<MDN>[,cfb=<CFB>][,cfd=<CFD>][,cfna=<CFNA>][,cfu=<CFU
>][,cw=<CW>][,ct=<CT>][,cnip=<CNIP>][,cnio=<CNIO>][,cnir=<CNIR>][,cc=<CC>][,
fa=<FA>][,mah=<MAH>][,wc3=<WC3>][,dnd=<DND>][,pca=<PCA>][,sca=<SCA>][,spina=
<SPINA>][,spini=<SPINI>][,mwn=<MWN>][,pl=<PL>][,rfc=<RFC>][,vmr=<VMR>][,vp=<
VP>][,paca=<PACA>][,cnirmode=<CNIRMODE>][,pacalevel=<PACALEVEL>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CFB = Call forward on mobile subscriber busy service flag
- CFD = Hidden condition forwarding service flag
- CFNA = Call forward on no answer service flag
- CFU = Call forward unconditional service flag
- CW = Call waiting service flag
- CT = Call transfer service flag
- CNIP = Calling Number Identification Presentation service flag
- CNIO = Caller Identification restriction override service flag
- CNIR = Caller Identification Restriction service flag
- CC = Conference call service flag
- WC3 = Three party service flag
- DND = Do not disturb service flag
- SPINA = Subscriber PIN access service flag
- SPINI = Subscriber PIN intercept service flag
- MWN = Message wait notification service flag
- PL = Preferred language service flag
- RFC = Remote feature control service flag
- VMR = Voice message retrieval service flag
- PACA = Priority Access and channel assignment service flag
- CNIRMODE = CNIR modes
- PACALEVEL = PACA levels

Example

```
mod-supsvr: imsi="460123456789001", cnip=true;
```

A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE-RB

Rolls back the modification of a subscriber's supplementary services. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifySupplementaryServiceRB.

Table 59: A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_CFB	The old CFB.	TRUE, FALSE		S	O
OLD_CFD	The old hidden condition forwarding setting.	TRUE, FALSE		S	O
OLD_CFNA	The old CFNR value.	TRUE, FALSE		S	O
OLD_CFU	The old CFU value.	TRUE, FALSE		S	O
OLD_CW	The old Call Waiting setting.	TRUE, FALSE		S	O
OLD_CT	The old Call Transfer setting.	TRUE, FALSE		S	O
OLD_CNIP	The old caller identification display setting.	TRUE, FALSE		S	O
OLD_CNIR	The old caller number identification restriction value.	TRUE, FALSE		S	O
OLD_CNIO	The old caller identification restriction override setting.	TRUE, FALSE		S	O
OLD_CC	The old conference call setting.	TRUE, FALSE		S	O
OLD_FA	Reserved.			S	O

Table 59: A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_MAH	Reserved.			S	O
OLD_WC3	The old three party service setting.	TRUE, FALSE		S	O
OLD_DND	The old do not disturb setting.	TRUE, FALSE		S	O
OLD_PCA	Reserved.			S	O
OLD_SCA	Reserved.			S	O
OLD_SPINA	The old subscriber PIN access setting.	TRUE, FALSE		S	O
OLD_SPINI	The old subscriber PIN intercept setting.	TRUE, FALSE		S	O
OLD_MWN	The old announcement waiting message setting.	TRUE, FALSE		S	O
OLD_PL	The old preferred language setting.	TRUE, FALSE		S	O
OLD_RFC	The old remote feature control setting.	TRUE, FALSE		S	O
OLD_VMR	The old voice message retrieval setting.	TRUE, FALSE		S	O
OLD_VP	Reserved.			S	O
OLD_PACA	The old priority access and channel assignment setting.	TRUE, FALSE		S	O
OLD_CNIRMODE	The old number identification restriction modes value.	PERMANENTLY_ ACTIVATE, TEMPORARILY_ ACTIVATE, TEMPORARILY_ DEACTIVATE		S	O

Table 59: A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_PACALEVEL	The old PACA level value.	1-15, 0 = unavailable		S	O

MML commands/API calls

```
Mod-
supsvr:imsi=<IMSI>|mdn=<MDN>[,cfb=<OLD_CFB>][,cfd=<OLD_CFD>][,cfna=<OLD_CFNA
>][,cfu=<OLD_CFU>][,cw=<OLD_CW>][,ct=<OLD_CT>][,cnip=<OLD_CNIP>][,cnio=<OLD_
CNIO>][,cnir=<OLD_CNIR>][,cc=<OLD_CC>][,fa=<OLD_FA>][,mah=<OLD_MAH>][,wc3=<O
LD_WC3>][,dnd=<OLD_DND>][,pca=<OLD_PCA>][,sca=<OLD_SCA>][,spina=<OLD_SPINA>]
[,spini=<OLD_SPINI>][,mwn=<OLD_MWN>][,pl=<OLD_PL>][,rfc=<OLD_RFC>][,vmr=<OLD
_VMR>][,vp=<OLD_VP>][,paca=<OLD_PACA>][,cnirmode=<OLD_CNIRMODE>][,pacalevel=
<OLD_PACALEVEL>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_CFB = Call forward on mobile subscriber busy service flag
- OLD_CFD = Hidden condition forwarding service flag
- OLD_CFNA = Call forward on no answer service flag
- OLD_CFU = Call forward unconditional service flag
- OLD_CW = Call waiting service flag
- OLD_CT = Call transfer service flag
- OLD_CNIP = Calling Number Identification Presentation service flag
- OLD_CNIO = Caller Identification restriction override service flag
- OLD_CNIR = Caller Identification Restriction service flag
- OLD_CC = Conference call service flag
- OLD_WC3 = Three party service flag
- OLD_DND = Do not disturb service flag
- OLD_SPINA = Subscriber PIN access service flag
- OLD_SPINI = Subscriber PIN intercept service flag
- OLD_MWN = Message wait notification service flag
- OLD_PL = Preferred language service flag
- OLD_RFC = Remote feature control service flag
- OLD_VMR = Voice message retrieval service flag
- OLD_PACA = Priority Access and channel assignment service flag

- OLD_CNIRMODE = CNIR modes
- OLD_PACALEVEL = PACA levels

Example

```
mod-supsvr: imsi="460123456789001", cnip=true;
```

A_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE

Modifies USCF services. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyUSCFService.**

Table 60: A_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
USCFVM	USCF forward the incoming call to voice mail.	1 (not authorized), 3 (authorized and activated)		S	O
USCFMS	USCF forward the incoming call to the destination provided by mobile.	1 (not authorized), 3 (authorized and activated)		S	O
USCFNR	USCF forward the incoming call to a network registered destination.	1 (not authorized), 3 (authorized and activated)		S	O
USCFDN	USCF forwarding number. When USCFDN = 3, it can be input.	1-32 digits character string		S	O

MML commands/API calls

```
Mod-
uscf:imsi=<IMSI>|mdn=<MDN>[,uscfvm=<USCFVM>][,uscfms=<USCFMS>][,uscfnr=<USCF
NR>][,uscfdn=<USCFDN>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- USCFVM = USCF Forward the incoming call to voice mail subscription value
- USCFMS = USCF Forward the incoming call to the destination provided by mobile subscription value
- USCFNR = USCF Forward the incoming call to a network registered destination subscription value
- USCFDN = USCF Forwarding number

Example

```
mod-
uscf:mdn="8612345678901",uscfvm=1,uscfms=3,uscfnr=3,uscfdn="8675528768001"
```

A_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE-RB

Rolls back modifications to USCF services. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.modifyUSCFServiceRB.**

Table 61: A_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
OLD_USCFVM	The old USCF value to forward the incoming call to voice mail.	1 (not authorized), 3 (authorized and activated)		S	O
OLD_USCFMS	The old USCF value to forward the incoming call to the destination provided by mobile.	1 (not authorized; 3 (authorized and activated)		S	O

Table 61: A_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE-RB

Parameter Name	Description	Range	Default Value	Type	Class
OLD_USCFNR	The old USCF value to forward the incoming call to a network registered destination.	1 (not authorized; 3 (authorized and activated)		S	O
OLD_USCFDN	The old USCF forwarding number. When USCFDN = 3, it can be input.	1-32 digits character string		S	O

MML command/API call

```
Mod-
uscf:imsi=<IMSI>|mdn=<MDN>[,uscfvm=<OLD_USCFVM>][,uscfms=<OLD_USCFMS>][,uscf
nr=<OLD_USCFNR>][,uscfdn=<OLD_USCFDN>];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- OLD_USCFVM = USCF Forward the incoming call to voice mail subscription value
- OLD_USCFMS = USCF Forward the incoming call to the destination provided by mobile subscription value
- OLD_USCFNR = USCF Forward the incoming call to a network registered destination subscription value
- OLD_USCFDN = USCF Forwarding number

Example

```
mod-
uscf:mdn="8612345678901",uscfvm=1,uscfms=3,uscfnr=3,uscfdn="8675528768001"
```

A_HW-HLR_M800-V300R006_QUERY_CODE-MUTUAL-INQUIRY

Queries the Code Mutual Inquiry. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.queryCodeMutualInquiry.**

Table 62: A_HW-HLR_M800-V300R006_QUERY_CODE-MUTUAL-INQUIRY

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Inq-code:imsi=<IMSI>;
```

Or

```
Inq-code:mdn=<MDN>;
```

Where

- IMSI = International Mobile Subscriber Identity
- MDN = Mobile Directory Number

Example:

```
inq-code: imsi="460882709000001";
```

A_HW-HLR_M800-V300R006_QUERY_CRBT-SERVICE

Queries CRBT services. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.queryCRBTService.**

Table 63: A_HW-HLR_M800-V300R006_QUERY_CRBT-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R

Table 63: A_HW-HLR_M800-V300R006_QUERY_CRBT-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-crbt:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-crbt:mdn="8613312121000" ;
lst-crbt:imsi="460031212100000" ;
```

Output parameters

Table 64: Output parameters

Parameter name	Parameter description
CRBT	Possible values: ◆ Unsubscribed ◆ Subscribed and activated ◆ Subscribed but inactivated

A_HW-HLR_M800-V300R006_QUERY_DO-NOT-DISTURB-SERVICE

Queries a subscriber's Do-Not-Disturb service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.queryDoNotDisturbService.**

Table 65: A_HW-HLR_M800-V300R006_QUERY_DO-NOT-DISTURB-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-dndsvr:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-dndsvr:imsi="460123456789003";
```

Output parameters

Table 66: Output parameters

Parameter name	Parameter description
DNDACTI	DND service activation status Possible values: ◆ Activation ◆ Deactivation

A_HW-HLR_M800-V300R006_QUERY_MSC-ROAMING-RESTRICTIONS

Queries MSC roaming restrictions. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.queryMSCRoamingRestrictions.**

Table 67: A_HW-HLR_M800-V300R006_QUERY_MSC-ROAMING-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-vlrlist:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-vlrlist:mdn="8612345678903";
```

Output parameters

Table 68: Output parameters

Parameter name	Parameter description
ROAMFLAG	Roaming restriction. Possible values: ◆ International ◆ National ◆ Regional
TEMPNO	MSC template No (If roam flag is regional)
TEMPNAME	MSC template name (If roam flag is regional)

A_HW-HLR_M800-V300R006_QUERY_NNAN-SERVICE

Queries the NNAN service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.queryNNANService.**

Table 69: A_HW-HLR_M800-V300R006_QUERY_NNAN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Mod-msclist:imsi=<IMSI>|mdn=<MDN>,roamflag=<ROAMFLAG>[,tempno=TEMPNO];
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- ROAMFLAG = Roaming restriction flag
- TEMPNO = MSC template no

Example

```
Mod-msclist:mdn="8612345678903",roamflag=2, tempno=2;
```

A_HW-HLR_M800-V300R006_QUERY_ONLY-SERVICE

Queries ONLY services. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.queryONLYService.**

Table 70: A_HW-HLR_M800-V300R006_QUERY_ONLY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-onlysvr:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-onlysvr:mdn="8613351067700";
lst-onlysvr:imsi="861335106770100";
```

Output parameters

Table 71: Output parameters

Parameter name	Parameter description
STATUS	Possible values: ◆ Unsubscribed ◆ Subscribed but inactivated ◆ Subscribed and activated
MDNASPILOTNUMBER	MDN as PilotNumber Possible values: ◆ True ◆ False
PILOTNUMBER	Pilot number
CNIPPILOTNUMBER	Possible values: ◆ True ◆ False

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-AUTHENTICATE-DATA

Queries subscriber authentication data. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberAuthenticateData.**

Table 72: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-AUTHENTICATE-DATA

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI.	7-15 character string		S	R

MML commands/API calls

Lst-acsvr:imsi=<IMSI>;

Where IMSI = International Mobile Subscriber Identity

Example

lst-acsvr: imsi="460123456789003";

Output parameters

Table 73: Output parameters

Parameter name	Parameter description
MSAUTH	MS authentication Possible values: ◆ Authenticated ◆ Not authenticated ◆ Incorrect data returned by hlrserver
SHAREALLOW	Allow SSD to share user-level Possible values: ◆ Allowed ◆ Not allowed ◆ Incorrect data returned by hlrserver
SSDREFACC	SSD updating failed. Reject user access permanently Possible values: ◆ Not Rejected ◆ Rejected ◆ Incorrect data returned by hlrserver
VP	Voice Privacy Possible values: ◆ Privacy ◆ Not Privacy ◆ Incorrect data returned by hlrserver
ESN	Electronic serial number

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-FORWADING-SERVICE

Queries a subscriber's call forwarding service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberCallForwadingService.**

Table 74: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-FORWADING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
CFSCODE	Call forward service code.	CFB, CFD, CFNA, CFU		S	R

MML commands/API calls

```
Lst-cfsvr:imsi=<IMSI>|mdn=<MDN>,cfscode=<CFSCODE>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity
- CFSCODE = Call forward service code.

Example:

```
lst-cfsvr:mdn="8612345678900",cfscode=1
```

Output parameters

Table 75: Output parameters

Parameter name	Parameter description
CFNUM	Forwarded to number
COURTEOUS_NOTIFICATION	Courteous notification Possible values: ◆ Not notified ◆ Notified
FORWARDED_TO_NOTIFICATION	Forwarded-to notification Possible values ◆ Not notified ◆ Notified
IFACTIVE	Activation Status Possible values: ◆ Deactivate ◆ Activate
VOICE	Whether forward to the voice mailbox Possible values: ◆ No ◆ Yes

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-WAITING-SERVICE

Queries a subscriber's call waiting service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberCallWaitingService.**

Table 76: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-WAITING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R

Table 76: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-WAITING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-cwsvr:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-cwsvr: mdn="8612345678905";
```

Output parameters

Table 77: Output parameters

Parameter name	Parameter description
SUB_OPERATION	Subscriber operation Possible values: ◆ Yes ◆ No
SUB_SINGLE_CALL	Subscriber single call Possible values: ◆ Yes ◆ No
CWACTI	CW service activation status Possible values: ◆ Activation ◆ Deactivation

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CENTREX-SERVICE

Queries a subscriber's CENTREX service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberCentrexService.**

Table 78: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CENTREX-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-centrex:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example:

```
lst-centrex:mdn="8612345678901";
```

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CFMN-SERVICE

Queries a subscriber's CFMN service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberCFMNService.**

Table 79: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CFMN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-cfmnpara:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-cfmnpara:mdn="8612345678901";
```

Output parameters

Table 80: Output parameters

Parameter name	Parameter description
CFMNFLAG	CFMN service Possible values: ◆ Subscribed and Activated ◆ Subscribed and Inactivated ◆ Unsubscribed

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

Queries a subscriber's conference call service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberConferenceCallService.**

Table 81: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-ccsvr:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-ccsvr:imsi="460123456789003";
```

Output parameters

Table 82: Output parameters

Parameter name	Parameter description
CCMAX	Maximum number of conference calling subscribers of CC

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CPPC-SERVICE

Queries the subscriber's CPPC service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberCPPCService.**

Table 83: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CPPC-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-cppcpara:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-cppcpara:mdn="8612345678901";
```

Output parameters

Table 84: Output parameters

Parameter name	Parameter description
CPPCFLAG	CPPC service subscribing state Possible values: ◆ Subscribed ◆ Unsubscribed

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-DATA-SERVICE

Queries the subscriber data service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberDataService.**

Table 85: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-datasvr:imsi=<IMSI>|mdn=<MDN>
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example:

```
lst-datasvr: mdn="8612345678903";
```

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-EQUAL-ACCESS

Queries the subscriber's equal access. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberEqualAccess.**

Table 86: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-EQUAL-ACCESS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-cic:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-cic:imsi="460123456789001";
```

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE

Queries the subscriber's intelligent service. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberINService.**

Table 87: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O

Table 87: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-winsvr:imsi=<IMSI>;
```

or

```
Lst-winsvr:mdn=<MDN>;
```

Where

- IMSI = International Mobile Subscriber Identity
- MDN = Mobile Directory Number

Example:

```
lst-winsvr: imsi="460123456789001";
```

Output parameters

Table 88: Output parameters

Parameter name	Parameter description
IN_SERVICE1.SERVICEFLAG	Subscription. Possible values: ◆ UnSubscribed ◆ Subscribed and activated ◆ Subscribed and inactivated. The serial number ranges from 1 to 20.
If IN_SERVICE1 is subscribed	
IN_SERVICE1.SERVICEID	Service ID
IN_SERVICE1.SERVICENAME	Service name
IN_SERVICE1.SCPNO	SCP where service resides Possible values: ◆ Vacant ◆ SCP No
IN_SERVICE1.CFB	Possible values: ◆ Not subscribed ◆ Subscribed
IN_SERVICE1.CFU	Possible values: ◆ Not subscribed ◆ Subscribed
IN_SERVICE1.CFNA	Possible values: ◆ Not subscribed ◆ Subscribed
IN_SERVICE1.DPPC	Possible values: ◆ Not subscribed ◆ Subscribed
IN_SERVICE1.FCN	Possible values: ◆ Not subscribed ◆ Subscribed

Table 88: Output parameters

Parameter name	Parameter description
To	
IN_SERVICE(n)	

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-LOCK-STATE

Queries a subscriber's lock state. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberLockState.**

Table 89: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-LOCK-STATE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
MDN	MDN.	1-15 character string.		S	R

MML commands/API calls

```
lst-lockstat:mdn=<MDN>;
```

Where MDN = Mobile Directory Number.

Example:

```
lst-lockstat: mdn="8612345678900";
```

Output parameters

Table 90: Output parameters

Parameter name	Parameter description
ACCOUNTLOCK	Delinquent account lock type Possible values: ◆ Unlocked ◆ Incoming call lock ◆ Outgoing call lock ◆ Incoming outgoing call lock
USERLOCK	User lock type Possible values: ◆ Unlocked ◆ Incoming call lock ◆ Outgoing call lock ◆ Incoming and outgoing call lock
STOLENLOCK	Stolen lock type Possible values: ◆ Unlocked ◆ Locked
DUPLOCK	Duplication lock type Possible values: ◆ Unlocked ◆ Locked

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

Queries a subscriber's message waiting notification service. It is implemented by the Java method

com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberMsgWaitNotificationService.

Table 91: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-mwnsvr:imsi=<IMSI>|mdn=<MDN>;
```

Where:

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-mwnsvr:imsi="460123456789003";
```

Output parameters

Table 92: Output parameters

Parameter name	Parameter description
MWNACTI	MWN pip tone activation status. Possible values: ◆ Activation ◆ Deactivation
MWNATPACTI	MWN alert tone activation status. Possible values: ◆ Activation ◆ Deactivation

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PILOT-NUMBER

Queries the subscriber's pilot number. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberPilotNumber.**

Table 93: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PILOT-NUMBER

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
PILOTNUMBER	Pilot number.	1-15 character string.		S	R

MML commands/API calls

```
Lst-onlymemb:pilotnumber=<PILOTNUMBER>;
```

Example:

```
lst-onlymemb:PilotNumber="8613336009677";
```

Output parameters

Table 94: Output parameters

Parameter name	Parameter description
MEMBER1	First member
MEMBER1.ATTRIBUTE	Possible values: ◆ Common ◆ master
MEMBER1.STATUS	Possible values: ◆ Inactive ◆ active
MEMBER1.CNIPPILOTNUMBER	Possible values: ◆ True ◆ False
To	
MEMBER5	Fifth member
MEMBER5.ATTRIBUTE	Possible values: ◆ Common ◆ master
MEMBER5.STATUS	Possible values: ◆ Inactive ◆ active
MEMBER5.CNIPPILOTNUMBER	Possible values: ◆ True ◆ False

If there are fewer than 5 members configured, then that many numbers will be output.

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PREFERRED-LANGUAGE

Queries the subscriber's preferred language. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberPreferredLanguage.**

Table 95: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PREFERRED-LANGUAGE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	Remote network element name.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-plsvr:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-plsvr: mdn="8612345678903";
```

Output parameters

Table 96: Output parameters

Parameter name	Parameter description
PL	Preferred language

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PROPERTY

Queries a subscriber's properties. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberProperty.**

Table 97: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PROPERTY

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-class:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-class:mdn ="8612345678903";
```

Output parameters

Table 98: Output parameters

Parameter name	Parameter description
CLASS	Subscriber attribute Possible values: ◆ Ordinary Subscriber ◆ Wireless Payphone Type

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-RESTRICTIONS

Queries subscriber restrictions. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberRestrictions.**

Table 99: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-restrsvr:imsi=<IMSI>|mdn=<MDN>;
```

Where:

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-restrsvr: imsi="460123456789003";
```

Output parameters

Table 100: Output parameters

Parameter name	Parameter description
ORIGIN	Origination Restriction Possible values: ◆ Origination denied ◆ Local calls only ◆ Leading digits ◆ Leading digits and local calls only ◆ National long distance ◆ International calls ◆ Single directory number ◆ Returned value error
ORIBEGIN	Leading digits
SMS_SUPPORT	Whether support short messages Possible values: ◆ Not support any short message services ◆ Only support initial sending short message service ◆ Only support short message receiving service ◆ Support both initial sending and short message receiving services
FMC	Force message center Possible values: ◆ No effect ◆ Force Indirect
DIRECT	Direct Possible values: ◆ Block direct ◆ Allow direct

Table 100: Output parameters

Parameter name	Parameter description
ODEFAULT	SMS origination restriction default value Possible values: ◆ Block all ◆ Allow special ◆ Allow all messages
RC	RC Possible values: ◆ Block ◆ Allow
TDEFAULT	SMS termination restriction default Possible values: ◆ Block all ◆ Allow specific ◆ Allow all
TERMINA	Termination restriction Possible values: ◆ Termination denied ◆ Unrestricted

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-ROAMING-POSITION

Queries a subscriber's roaming position. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberRoamingPosition.**

Table 101: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-ROAMING-POSITION

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O

Table 101: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-ROAMING-POSITION

Parameter Name	Description	Range	Default Value	Type	Class
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-roam:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-roam: mdn="8612345678903";
```

Output parameters

Table 102: Output parameters

Parameter name	Parameter description
PCSSN	Signalling subsystem number
MSCIN	MSC identity
MSCID	MSC identification

A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-TELESERVICE

Queries the subscriber's teleservice. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySubscriberTeleService.**

Table 103: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-TELESERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R

Table 103: A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-TELESERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-telsvr:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-telsvr: imsi="460123456789001";
```

Output parameters

Table 104: Output parameters

Parameter name	Parameter description
VOICE	Voice Service Possible values: ◆ Support ◆ Not support
EMERGENCY	Emergency Service Possible values: ◆ Support ◆ Not support
SMMTPP	Send Short Message Possible values: ◆ Support ◆ Not support
SMMOPP	Receiving Short Message Possible values: ◆ Support ◆ Not support

A_HW-HLR_M800-V300R006_QUERY_SUPPLEMENTARY-SERVICE

Queries a subscriber's supplementary services. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.querySupplementaryService.**

Table 105: A_HW-HLR_M800-V300R006_QUERY_SUPPLEMENTARY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O

Table 105: A_HW-HLR_M800-V300R006_QUERY_SUPPLEMENTARY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-supsvr:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-supsvr: imsi="460123456789001";
```

Output parameters

Table 106: Output parameters

Parameter name	Parameter description
CFB	CFB Possible values: True or False
CFD	Hidden condition forwarding Possible values: True or False
CFNA	CFNR Possible values: True or False
CFU	CFU Possible values: True or False
CW	Call waiting Possible values: True or False
CT	Call transfer Possible values: True or False
CNIP	Caller identification display Possible values: True or False
CNIR	Caller number identification restriction Possible values: True or False
CNIO	Caller identification restriction override Possible values: True or False
CC	Conference call Possible values: True or False
FA	Possible values: True or False
MAH	Possible values: True or False
WC3	Three Party Service Possible values: True or False

Table 106: Output parameters

Parameter name	Parameter description
DND	Do not disturb Possible values: True or False
PCA	Possible values: True or False
SCA	Possible values: True or False
SPINA	Subscriber PIN access Possible values: True or False
SPINI	Subscriber PIN intercept Possible values: True or False
MWN	Announcement waiting message Possible values: True or False
PL	Preferred language Possible values: True or False
RFC	Remote feature control Possible values: True or False
VMR	Voice message retrieval Possible values: True or False
VP	Possible values: True or False
PACA	Priority Access and Channel Assignment Possible values: True or False
CNIRMODE	Number identification restriction modes 0 (permanently activate) 1. (temporarily activate) 2. (temporarily deactivate)
PACALEVEL	1-15 PACA level, 0 unavailable

A_HW-HLR_M800-V300R006_QUERY_TEMPLATE-NAME-NID-SID

Queries template name/number of NID and SID configuration information. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.queryTemplateNameNIDSID.**

Table 107: A_HW-HLR_M800-V300R006_QUERY_TEMPLATE-NAME-NID-SID

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R

MML commands/API calls

```
lst-nidsid;
```

Output parameters

Table 108: Output parameters

Parameter name	Parameter description
COUNT	The number of NID/SID
NIDSID_TEMPNO1	The first NIDSIDTempno
NIDSID_TEMPNAME1	The first NIDSIDTempName
To	
NIDSID_TEMPNO[COUNT]	The last NIDSIDTempno
NIDSID_TEMPNAME[COUNT]	The last NIDSIDTempName

A_HW-HLR_M800-V300R006_QUERY_USCF-SERVICE

Queries USCF services. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.queryUSCFService.**

Table 109: A_HW-HLR_M800-V300R006_QUERY_USCF-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

MML commands/API calls

```
Lst-uscf:imsi=<IMSI>|mdn=<MDN>;
```

Where

- MDN = Mobile Directory Number
- IMSI = International Mobile Subscriber Identity

Example

```
lst-uscf:mdn="8612345678901";
```

Output parameters

Table 110: Output parameters

Parameter name	Parameter description
USCFVM	USCF Forward the incoming call to voice mail Possible values: ◆ Not Authorized ◆ Authorized and Activated.
USCFMS	USCF Forward the incoming call to the destination provided by mobile Possible values: ◆ Not Authorized ◆ Authorized and Activated.
USCFNR	USCF Forward the incoming call to a network registered destination Possible values: ◆ Not Authorized ◆ Authorized and Activated.
USCFDN	USCF Forwarded-to number

A_HW-HLR_M800-V300R006_RENEW_IMSI-CARD

Renews a subscriber's IMSI card. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.renewIMSICard.**

Table 111: A_HW-HLR_M800-V300R006_RENEW_IMSI-CARD

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID.			S	R
NEWIMSI	IMSI.	7-15 character string.		S	R
MDN	MDN.	1-15 character string.		S	R
ESN	Electronic serial number.			S	O

Table 111: A_HW-HLR_M800-V300R006_RENEW_IMSI-CARD

Parameter Name	Description	Range	Default Value	Type	Class
IFAC	Specifies whether or not to perform authentication.	YES, NO		S	R
FORCEFLAG	Flag for the forced deletion of a subscriber.	NOT_FORCE, FORCE	NOT_ FORCE	S	O
AKEY	Authentication key.	16 digit hexadecimal value		S	O
K4NUMBER	0 means that a_key does not encrypt by k4.	0 - 255	0	S	O

MML command/API calls

```
Chg-
imsi:mdn=<MDN>,newimsi=<NEWIMSI>[,esn=<ESN>],ifac=<IFAC>[,forceflag=<FORCEFL
AG>][,akey=<AKEY>][,k4number=<K4NUMBER>];
```

Where

- MDN = Mobile Directory Number
- NEWIMSI = New IMSI number
- ESN = Electronic serial number
- IFAC = Authentication flag
- FORCEFLAG = Forced card changing flag
- AKEY = Akey data
- K4NUMBER = K4 Number

Examples

```
Chg-
imsi:mdn="8612345678911",newimsi="460123456789013",ifac=1,forceflag=1,akey="
1234567890123456",k4number=1;
```

```
Chg-
imsi:mdn="8612345678911",newimsi="460123456789013",esn="12345678",ifac=1,for
ceflag=1,akey="1234567890123456",k4number=1;
```

A_HW-HLR_M800-V300R006_RENEW_IMSI-CARD-RB

Rolls back the renewal of a subscriber's IMSI card. It is implemented by the Java method **com.metasolv.cartridge.oss.hw_hlr_m800_v300r006.prov.HLRProvisioning.renewIMSICardRB.**

Table 112: A_HW-HLR_M800-V300R006_RENEW_IMSI-CARD-RB

Parameter Name	Description	Range	Default Value	Type	Class
MCLI	NE logical ID			S	R
OLD_IMSI	IMSI.	7-15 character string.		S	R
MDN	Mobile directory number.	1-15 character string.		S	R
OLD_ESN	The old electronic serial number.			S	O
OLD_IFAC	The old IFAC value, which indicates whether to authenticate or not.	YES, NO		S	R
OLD_FORCEFLAG	The old FORCEFLAG value, which specifies forced card changing.	NOT_FORCE, FORCE	NOT_ FORCE	S	O
OLD_AKEY	The old authentication key.	16 digit hexadecimal value		S	O
OLD_K4NUMBER	The old K4NUMBER value. 0 means that a_key doesn't encrypt by k4;	0 - 255	0	S	O

MML commands/API calls

```
Chg-
imsi:mdn=<MDN>,newimsi=<OLD_IMSI>[,esn=<OLD_ESN>],ifac=<OLD_IFAC>[,forceflag
=<OLD_FORCEFLAG>][,akey=<OLD_AKEY>][,k4number=<OLD_K4NUMBER>];
```

Where

- MDN = Mobile Directory Number
- OLD_IMSI = Old IMSI number of the subscriber before renewing the card.
- OLD_ESN = Old Electronic serial number
- OLD_IFAC = Old Authentication flag

- OLD_FORCEFLAG = Old Forced card changing flag
- OLD_AKEY = Old Akey data
- OLD_K4NUMBER = Old K4 Number

Examples

```
Chg-
imsi:mdn="8612345678911",newimsi="460123456789013",ifac=1,forceflag=1,akey="
1234567890123456",k4number=1;
```

```
Chg-
imsi:mdn="8612345678911",newimsi="460123456789013",esn="12345678",ifac=1,for
ceflag=1,akey="1234567890123456",k4number=1;
```

User exit types

The user defined exit types which maps to the NE error response code are placed in file HW_HLR_M800-V300R006_UserExitTypes.cfg. The following table lists the contents of the file. The user has full control over this file. Additional error codes can be added to this file by the user as and when they are discovered. The user exit types defined in this file must exist in tbl_user_err and should be mapped to a ASAP exit type in tbl_user_err.

Note: If this file is removed or path is incorrect, the user exit type will default to HWHLR_NO_MATCH and this maps to ASAP exit type FAIL.

Table 113: Contents of User exit types cfg file

Error code	User exit type
S0000	HWHLR_SVR_CONTACTED
S0001	HWHLR_OPR_SUCCESS
S0002	HWHLR_LOGIN_SUCCESS
S0004	HWHLR_EXITED
E12	HWHLR_GEN_ERROR
E15	HWHLR_UNKNOWN_CODE
E19	HWHLR_INVALID_ID
E20	HWHLR_INVALID_STR
E24	HWHLR_INVALID_SEP
E25	HWHLR_INVALID_IND

Table 113: Contents of User exit types cfg file

Error code	User exit type
E26	HWHLR_INVALID_PARAM
E27	HWHLR_EXTRA_PARAM
E28	HWHLR_MISS_PARAM
E29	HWHLR_INCONSIST_PARM
E34	HWHLR_RANGE_ERR
E35	HWHLR_INVALID_INFO
E50	HWHLR_NEED_BOOL
E1000	HWHLR_REP_NOUSE
E1001	HWHLR_NEED_LOGIN
E1002	HWHLR_LOGIN_FAIL
E1003	HWHLR_RESERVED1
E1004	HWHLR_RESERVED2
E1005	HWHLR_NO_RIGHT
E1007	HWHLR_SRV_NOSUPP
E1008	HWHLR_ESN_ERR
E1009	HWHLR_AKEY_ERR
E1010	HWHLR_SRVID_ERR
E1011	HWHLR_CCMAX_ERR
E1012	HWHLR_IFACTIVE_ERR
E1013	HWHLR_PINCODE_ERR
E1014	HWHLR_BOXCODE_ERR
E1015	HWHLR_MSCNUM_ERR
E1017	HWHLR_MSAUTH_ERR
E1018	HWHLR_ORIGIN_ERR

Table 113: Contents of User exit types cfg file

Error code	User exit type
E1019	HWHLR_ORIBEGIN_ERR
E1020	HWHLR_FMC_ERR
E1021	HWHLR_DIRECT_ERR
E1022	HWHLR_ODEFAULT_ERR
E1023	HWHLR_RC_ERR
E1024	HWHLR_TDEFAULT_ERR
E1025	HWHLR_TERMINA_ERR
E1026	HWHLR_NO_TEMPNO
E1027	HWHLR_CIC_ERR
E1028	HWHLR_EAFA_ERR
E1029	HWHLR_IMSI_ERR
E1030	HWHLR_MDN_ERR
E1032	HWHLR_FAIL_TRANS
E1033	HWHLR_CFNUM_ERR
E1034	HWHLR_VOICE_ERR
E1035	HWHLR_PILOTNUM_ERR
E1036	HWHLR_MEMBER_ERR
E1037	HWHLR_MBR_NOEXIST
E1038	HWHLR_INPUT_AKEY
E1039	HWHLR_RESERVE_K4
E2001	HWHLR_IMSI_NOAVAIL
E2002	HWHLR_MDN_NOAVAIL
E2003	HWHLR_MDN_NOUSE
E2004	HWHLR_NUM_NOEXIST

Table 113: Contents of User exit types cfg file

Error code	User exit type
E2005	HWHLR_HLRNUM_NOAVL
E2006	HWHLR_NOACC_AVAIL
E2007	HWHLR_DBOPT_FAIL
E2008	HWHLR_OPR_TIMEOUT
E2009	HWHLR_CRECHLD_FAIL
E2010	HWHLR_NW_ERR
E2011	HWHLR_CLIDATA_ERR
E2012	HWHLR_SNDDATA_FAIL
E2013	HWHLR_PROCDATA_FAIL
E2014	HWHLR_QRY_FAIL
E2015	HWHLR_MOD_FAIL
E2016	HWHLR_ADD_FAIL
E2018	HWHLR_NO_REC
E2019	HWHLR_RECORD_EXIST
E2020	HWHLR_NUM_NOEXIST
E2021	HWHLR_NUM_EXIST1
E2022	HWHLR_NO_NUMBER
E2023	HWLR_ADDNUM_10000
E2024	HWHLR_DELNUM_10000
E2025	HWHLR_NUM_EXIST2
E2026	HWHLR_OPR_EXIST
E2027	HWHLR_NO_DEL
E2028	HWHLR_OPR_NOEXIST1
E2029	HWHLR_NAMEPASS_ERR

Table 113: Contents of User exit types cfg file

Error code	User exit type
E2030	HWHLR_ENV_ERR
E2031	HWHLR_OPENFILE_ERR
E2032	HWHLR_IMSI_CAP
E2033	HWHLR_SEG_OVRFLOW
E2034	HWHLR_NONUM_SEG
E2035	HWHLR_OPR_NOEXIST2
E2036	HWHLR_NUM_NOADD
E2037	HWHLR_NO_REC
E2038	HWHLR_RECNO_256
E2039	HWHLR_CORNUM_NOEXIST
E2040	HWHLR_SYBASE_NORES
E2041	HWHLR_NO_AUTH
E2042	HWHLR_NUMSEG_EXIST
E2043	HWHLR_CORNUM_NOEXIST
E2044	HWHLR_CHLD_EXCEED
E2045	HWHLR_CRECHLD_FAIL
E2046	HWHLR_UNKNOWN_ERR
E2047	HWHLR_AUTH_FAIL
E2048	HWHLR_USRNUM_FAIL
E2049	HWHLR_USRDATA_FAIL
E2050	HWHLR_USRDATA_SHORT
E2051	HWHLR_USRDATA_FAIL
E2052	HWHLR_SNDDATA_FAIL
E2053	HWHLR_RCVDB_FAIL

Table 113: Contents of User exit types cfg file

Error code	User exit type
E2054	HWHLR_PROC_ERR
E2055	HWHLR_FNUM_FAIL
E2056	HWHLR_NOSU_NODEL
E2057	HWHLR_NOSU_NOMOD
E2058	HWHLR_SAMEUSR_120
E2059	HWHLR_OPR_NOEXIST2
E2060	HWHLR_NOSU_NOADD
E2061	HWHLR_NOSU_NODEL1
E2062	HWHLR_NOSU_NOQRY
E2063	HWHLR_QRYCND_ERR
E2064	HWHLR_NOSU_NOOPRADD
E2065	HWHLR_PROCOPR_FAIL
E2066	HWHLR_NUMSEG_256
E2067	HWHLR_NO_QUERY
E2068	HWHLR_NOOTHER_OPR
E3001	HWHLR_OTHER_ERR
E3002	HWHLR_NO_CPPC
E3003	HWHLR_NO_CENTREX
E3004	HWHLR_NO_CFMN
E3005	HWHLR_DATA_NOMOD
E3006	HWHLR_NO_NAEA
E3007	HWHLR_NO_LICENSE
E3008	HWHLR_UNDEF_MSC
E3009	HWHLR_ILLEGAL_LIC

Table 113: Contents of User exit types cfg file

Error code	User exit type
E3010	HWHLR_DEFUSR_FAIL
E3017	HWHLR_ILLEGAL_SSOPR
E3018	HWHLR_UNDEF_MSCID
E3019	HWHLR_MSCTEMP_USE
E3020	HWHLR_TOO_MANY
E3021	HWHLR_NO_ONLY
E3022	HWHLR_PILOT_INUSE
E3023	HWHLR_PILOT_ERR
E3024	HWHLR_OUTOF_MDN
E3025	HWHLR_PILOT_NOMDN
E3026	HWHLR_MDN_NOPILOT
E3027	HWHLR_OTHER_ERR
E3028	HWHLR_OTHER_ERR
E3029	HWHLR_OTHER_ERR
E3030	HWHLR_OTHER_ERR
E3031	HWHLR_OTHER_ERR
E3032	HWHLR_OTHER_ERR
E3033	HWHLR_RFC_NOPILOT
E3034	HWHLR_PILOT_NORFC
E3035	HWHLR_PILOT_NOEXIST
E3037	HWHLR_PILOT_MAXNUM
E3038	HWHLR_ONLYNUM_NODEL
E3039	HWHLR_PILOT_SAMEMDN
E3040	HWHLR_UNSUPP_DATA

Table 113: Contents of User exit types cfg file

Error code	User exit type
E3041	HWHLR_UNSUPP_WPT
E3043	HWHLR_WRONG_TBLNUM
E3044	HWHLR_WRONG_DATA
E3046	HWHLR_UNKNOWN_SUB
E3047	HWHLR_IDENT_SET
E3048	HWHLR_IMSI_EXIST
E3049	HWHLR_INVALID_SS
E3050	HWHLR_INVALID_PARM
E3051	HWHLR_NO_REC
E3052	HWHLR_UNKNOWN_MSG
E3053	HWHLR_UNSUPP_SRV
E3054	HWHLR_REC_EXIST
E3055	HWHLR_NUM_USED
E3056	HWHLR_NOSUB_VLR
E3057	HWHLR_AKEYCONF_ERR
E3058	HWHLR_UNKNOWN_SLOC
E3059	HWHLR_INVALID_VERNO
E3060	HWHLR_NODEF_BEARER
E3061	HWHLR_MDN_NOFND
E3062	HWHLR_MDN_EXIST
E3064	HWHLR_SUCCESS
E3065	HWHLR_REG_FAIL
E3066	HWHLR_FWAREA_RES
E3067	HWHLR_FWNUM_RES

Table 113: Contents of User exit types cfg file

Error code	User exit type
E3068	HWHLR_INVALID_NUM
E3069	HWHLR_FWNUM_ERR
E3070	HWHLR_FWAREA_RES
E3071	HWHLR_FWNUM_ILLEGAL
E3072	HWHLR_NO_CW
E3073	HWHLR_NOSUPP_CW
E3074	HWHLR_NO_SRV
E3076	HWHLR_REC_INUSE
E3077	HWHLR_INVALID_TEMPNO
E3078	HWHLR_DB_NOINIT
E3079	HWHLR_NODEF_TEMP
E3080	HWHLR_NORES_VLR
E3081	HWHLR_NOMOD_TEMP
E3082	HWHLR_NAME_NODEF
E3085	HWHLR_IN_LOCK
E3086	HWHLR_INSERTDB_ERR
E3087	HWHLR_REDEF_SUB
E3088	HWHLR_DB_DISCONN
E3089	HWHLR_MEM_NO
E3090	HWHLR_NO_RESMSG
E3091	HWHLR_UNEXPECT_MSG
E3093	HWHLR_NOPROV_CF
E3094	HWHLR_NOPROV_CW
E3095	HWHLR_NO_BSERV

Table 113: Contents of User exit types cfg file

Error code	User exit type
E3097	HWHLR_NOSUB_VLR
E3105	HWHLR_SKEY_EQUI
E3106	HWHLR_DBOP_FAIL
E3107	HWHLR_HDB_QUIT
E3108	HWHLR_TEMP_EXIST
E3109	HWHLR_NO_DND
E3110	HWHLR_MDN_INUSE
E3111	HWHLR_USRDATA_ERR
E3112	HWHLR_VMBOX_EMPTY
E3113	HWHLR_SRV_NOPROV
E3114	HWHLR_FWAREA_RES
E3115	HWHLR_IMSI_HLR_NOMAT
E3116	HWHLR_MDN_HLR_NOMAT
E3117	HWHLR_MDN_CONFLICT
E3118	HWHLR_USRST_OPEN
E3119	HWHLR_USRST_CLOSE
E3120	HWHLR_VMR_INP
E3121	HWHLR_VMR_NOINP
E3122	HWHLR_REC_NODEL
E3123	HWHLR_K4_INUSE
E3124	HWHLR_VLRTP_INUSE
E3125	HWHLR_UIMID_INUSE
E3126	HWHLR_NOCALL_ORIG
E3127	HWHLR_NOCALL_TERM

Table 113: Contents of User exit types cfg file

Error code	User exit type
E3128	HWHLR_MDN_NOEXIST
E3129	HWHLR_REGVMR_FAIL
E3130	HWHLR_ONLY_FWLOCAL
E3131	HWHLR_ONLY_FWDN
E3132	HWHLR_ONLY_FWDNLOC
E3133	HWHLR_ONLY_FWHCNTRY
E3134	HWHLR_ONLY_FWSNUM
E3135	HWHLR_EA_NOORIG
E3136	HWHLR_NOCIC_OLP
E3137	HWHLR_INVALID_TCCODE
E3138	HWHLR_SYSAUTH_OFF
E3139	HWHLR_UNDEF_VLRTP
E3140	HWHLR_SWOFFST_NOOPEN
E3141	HWHLR_NOQRY_ST
E3142	HWHLR_LENNUM_WRONG
E3143	HWHLR_NOMOD_LENNUM
E3144	HWHLR_NOENABLE_ST
E3145	HWHLR_RFC_ERR
E3146	HWHLR_LOAD_AKEY
E3147	HWHLR_UNDEF_CTXID
E3148	HWHLR_CFMN_RCVSMS
E3149	HWHLR_NO_NNAN
E3150	HWHLR_MSCID_RNGOLP
E3153	HWHLR_NO_VP

Table 113: Contents of User exit types cfg file

Error code	User exit type
E3154	HWHLR_NO_USCF
E3155	HWHLR_NO_CRBT
E3156	HWHLR_NO_AUC
E3157	HWHLR_NUM_INUSE
E3158	HWHLR_ATTMSC_FAIL
E3159	HWHLR_UPDNAM_FAIL
E3160	HWHLR_NO_ACTMIN
E3161	HWHLR_COMM_FAIL
E3162	HWHLR_VERF_FAIL
E3163	HWHLR_SPCCHG_FAIL
E3164	HWHLR_VALID_FAIL
E3165	HWHLR_OTHERNE_FAIL
E3166	HWHLR_QRYNAM_FAIL
E3167	HWHLR_UNDEF_TEMPNO
E3168	HWHLR_UNDEF_TPDATA
E3169	HWHLR_TIME_EXP
E3170	HWHLR_NO_OTASP
E3171	HWHLR_REC_OVRSCOPE
E3172	HWHLR_NO_AUC
E3173	HWHLR_USCFREG_FAIL
E3174	HWHLR_VMAIL_NOPROV
E3175	HWHLR_USCF_NOORIG
E3176	HWHLR_USCF_NOTERM
E3177	HWHLR_FDIG_NOZERO

Table 113: Contents of User exit types cfg file

Error code	User exit type
E3178	HWHLR_UNKNOWN_K4
E3179	HWHLR_INPUT_ESN
E3180	HWHLR_ESN_NOOLP
E3181	HWHLR_NOMOD_INVLDIN
E3185	HWHLR_WP_NOEXIST

4

Service Definition

The Huawei HLR cartridge contains a set of CSDLs that map to one or more ASDL commands. You can also create additional CSDLs that map to existing and newly-created ASDLs. An upstream system can assemble any of these CSDL commands onto a work order for provisioning.

This chapter presents detailed information on the CSDL parameters that we provide in this cartridge. The following table lists and describes the type of parameter information that is included.

Table 114: ASDL parameter information

Item	Description
Parameter Name	Identifies the parameter that is configured for the stated service.
Description	Describes the parameter.
Range	Describes or lists the range of values that can be used to satisfy this parameter.
Default Value	Configures a default value for the parameter so that it is not mandatory for the upstream system to provide a value.

Table 114: ASDL parameter information

Item	Description
Type	Indicates one of the following parameter types: ◆ S—Scalar, specifies the parameter label transmitted on the ASDL command. Scalar parameters are conventional name-value pair parameters. ◆ C—Compound, specifies the base name of the compound parameter transmitted on the ASDL command. A compound parameter contains structures or arrays of information that are represented by a particular structure name or compound parameter name. Each compound parameter can contain a large number of elements. If you use compound parameters, you only require a single entry in the ASAP translation tables to call the compound parameter and all its associated parameter elements. ◆ I—Indexed, identifies a parameter that contains a sequential numerical index value to tell the SARM that it should execute the same operation (for example, an ASDL command) for all occurrences of that index. Consequently, if there are several options on a particular CSDL command (OPT1, OPT2, OPT3, etc.), you can specify the OPT parameter as an indexed parameter. When you specify the OPT parameter as an indexed parameter, the SARM generates several occurrences of that same ASDL command and each command has a different value for the option being transmitted to the NEP. For more information on parameter types, refer to the *ASAP Developer's Reference*.
Class	Indicates one of the following parameter classifications: ◆ R—Required scalar parameter ◆ O—Optional scalar parameter ◆ C—Required compound parameter ◆ N—Optional compound parameter ◆ M—Mandatory indexed parameter ◆ I—Optional indexed parameter ◆ S—Parameter count

For a detailed description of the Required and Optional parameter classifications, refer to the *ASAP System Configuration and Management Guide.*

Common Service Description Layer (CSDL) commands

This cartridge provides the following CSDL commands:

This cartridge provides the following CSDL Commands:

- C_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-PILOT-NUMBER
- C_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE
- C_HW-HLR_M800-V300R006_CHECK_DATA-CONSISTENCY
- C_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER
- C_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER-PILOT-NUMBER
- C_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_MDN
- C_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS
- C_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS
- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION

- C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE
- C_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE
- C_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_CODE-MUTUAL-INQUIRY
- C_HW-HLR_M800-V300R006_QUERY_CRBT-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_DO-NOT-DISTURB-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_MSC-ROAMING-RESTRICTIONS
- C_HW-HLR_M800-V300R006_QUERY_NNAN-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_ONLY-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-AUTHENTICATE-DATA
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-FORWADING-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-WAITING-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CENTREX-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CFMN-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CONFERENCE-CALL-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CPPC-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-DATA-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-EQUAL-ACCESS
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-LOCK-STATE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PILOT-NUMBER
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PREFERRED-LANGUAGE
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PROPERTY
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-RESTRICTIONS
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-ROAMING-POSITION
- C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-TELESERVICE
- C_HW-HLR_M800-V300R006_QUERY_SUPPLEMENTARY-SERVICE
- C_HW-HLR_M800-V300R006_QUERY_TEMPLATE-NAME-NID-SID
- C_HW-HLR_M800-V300R006_QUERY_USCF-SERVICE
- C_HW-HLR_M800-V300R006_RENEW_IMSI-CARD

C_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-PILOT-NUMBER

Adds a subscriber's pilot number.

Table 115: C_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-PILOT-NUMBER

Parameter Name	Description	Range	Default Value	Type	Class
CNIPPILOTNUMBER	Calling Number Identification Presentation of Pilot number.	False (do not display it), True (display it)	false	S	O
MEMBER	Member number. 32bit decimal system number.	1-32		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
PILOTNUMBER	Pilot number.	1-15 character string		S	R
STATUS	Member's status.	ACTIVE, INACTIVE	ACTIVE	S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 116: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-PILOT-NUMBER	A_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-PILOT-NUMBER

C_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE

Adds subscriber with template.

Table 117: C_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE

Parameter Name	Description	Range	Default Value	Type	Class
AKEY	Authentication key. 16 digit hexadecimal value.			S	O
ESN	Electronic serial number.			S	O
IFAC	Specifies whether or not to perform authentication.	YES, NO		S	R
IMSI	IMSI.	7-15 character string		S	R
K4NUMBER	0 means that a_key doesn't encrypt by k4;.	0-255	0	S	O
MDN	Mobile directory number.	1-15 character string		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
SHAREALLOW	Specifies whether to allow the SSD to share user-level switch or not. When IFAC = YES, it is mandatory, when IFAC = NO, it is optional.	NOT_ALLOWED, ALLOWED		S	O
SSDREFACC	Specifies whether user access is permanently rejected. When IFAC = YES, it is mandatory, when IFAC = NO, it is optional. SSD updating failed.	NOT_REJECT, REJECT		S	O
TEMPNO	Template number.			S	R
VOICE	Voice mailbox number.	1-16 character string		S	O

Table 117: C_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE

Parameter Name	Description	Range	Default Value	Type	Class
VP	Specifies whether voice privacy user-level switch is allowed.	NOT_ALLOWED, ALLOWED		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 118: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE	A_HW-HLR_M800-V300R006_ADD_SUBSCRIBER-WITH-TEMPLATE

C_HW-HLR_M800-V300R006_CHECK_DATA-CONSISTENCY

Checks data consistency.

Table 119: C_HW-HLR_M800-V300R006_CHECK_DATA-CONSISTENCY

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 120: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_CHECK_DATA-CONSISTENCY	A_HW-HLR_M800-V300R006_CHECK_DATA-CONSISTENCY

C_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER

Deletes a subscriber.

Table 121: C_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER

Parameter Name	Description	Range	Default Value	Type	Class
FORCEFLAG	Flag for the forced deletion of a subscriber.	NOT_FORCE, FORCE	NOT_FORCE	S	O
MDN	Mobile directory number.	1-15 character string		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 122: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER	A_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER

C_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER-PILOT-NUMBER

Deletes a subscriber's pilot number.

Table 123: C_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER-PILOT-NUMBER

Parameter Name	Description	Range	Default Value	Type	Class
MEMBER	Member number. 32bit decimal system number.	1-32		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
PILOTNUMBER	Pilot number.	1-15 character string		S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 124: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER-PILOT-NUMBER	A_HW-HLR_M800-V300R006_DELETE_SUBSCRIBER-PILOT-NUMBER

C_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE

Modifies CRBT services.

Table 125: C_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CRBT	CRBT services.	1 (unsubscribed), 2 (subscribed but inactive), 3 (subscribed and active).		S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O

Table 125: C_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 126: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_CRBT-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE

Modifies the Do-Not-Disturb service.

Table 127: C_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
DNDACTI	Do not disturb service activation status.	0 (Deactivation), 1 (Activation).		S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 128: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_DO-NOT-DISTURB-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_MDN

Modifies the MDN.

Table 129: C_HW-HLR_M800-V300R006_MODIFY_MDN

Parameter Name	Description	Range	Default Value	Type	Class
NEWMDN	The new MDN.	1-15 character string.		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
OLDMDN	The old MDN to be modified.	1-15 character string.		S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 130: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_MDN	A_HW-HLR_M800-V300R006_MODIFY_MDN

C_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS

Modifies MSC roaming restrictions.

Table 131: C_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI.Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
ROAMFLAG	Roaming restriction flag.	0 (international roaming restriction), 1 (national roaming restriction), 2 (regional roaming restriction)		S	R
TEMPNO	MSC template number. If ROAMFLSAG = 2, at least one MSC template number must be input. In other cases, template numbers are optional.	0 - 254		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 132: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS	A_HW-HLR_M800-V300R006_MODIFY_MSC-ROAMING-RESTRICTIONS

C_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE

Modifies NNAN services.

Table 133: C_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
NNAN	NNAN service.	1 (unsubscribed), 2 (subscribed but inactive), 3 (subscribed and active).		S	R
NNANOPTION	NNAN service option.	true (transmit), false (not transmit).		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 134: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_NNAN-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE

Modify ONLY service subscriptions.

Table 135: C_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CNIPPILOTNUMBER	CNIP (Calling Number Identification Presentation) Pilot number. When status = UNSUBSCRIBED, it is mandatory. When status = SUBSCRIBED_BUT_INACTIVE or SUBSCRIBED_AND_ACTIVE, it is optional and should use the default value FALSE.	FALSE (do not display), TRUE (display it).		S	O
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
MDNASPILOTNUMBER	Specifies whether to use the MDN as a pilot number or not.	TRUE, FALSE		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
PILOTNUMBER	Pilot number.			S	O
STATUS	ONLY service.	UNSUBSCRIBED, SUBSCRIBED_BUT_INACTIVE, SUBSCRIBED_AND_ACTIVE		S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 136: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_ONLY-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA

Modifies subscriber authentication data.

Table 137: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI.			S	R
MSAUTH	Authentication ability of mobile station.	AUTHENTICATE, NOT_AUTHENTICATE		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
SHAREALLOW	Specifies whether to allow the SSD to share user-level switch or not. When MSAUTH equals AUTHENTICATE, it is mandatory, otherwise optional.	NOT_ALLOWED, ALLOWED		S	O
SSDREFACC	Specifies whether user access is permanently rejected. When IFAC = YES, it is mandatory, when IFAC = NO, it is optional. SSD updating failed.	NOT_REJECT, REJECT		S	O

Table 137: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA

Parameter Name	Description	Range	Default Value	Type	Class
VP	Specifies whether voice privacy user-level switch is allowed.	NOT_ALLOWED, ALLOWED		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 138: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-AUTHENTICATE-DATA

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE

Modifies a subscriber's call forwarding service.

Table 139: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CFNUM	Forwarding number. 1-32 character string (digital only).			S	O
CFSCODE	Forwarding service number.	CFB, CFD, CFNA, CFU		S	R
IFACTIVE	The active state of a subscriber's call forwarding service.	REGISTER, DEACTIVATE, ACTIVATE		S	O
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O

Table 139: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
VOICE	Specifies whether to forward to voice message.	FORWARDED, NOT_FORWARDED		S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 140: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-FORWADING-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE

Modifies a subscriber's call waiting service.

Table 141: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CWACTI	Call waiting service activation status. 0: Deactivation 1:Activation.			S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 142: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CALL-WAITING-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE

Modifies a subscriber's CENTREX services.

Table 143: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CENTREXFLAG	Specifies whether to support Centrex service.	SUPPORT, NOT_SUPPORT		S	R
CENTREXID	Centrex ID.	0-65534		S	O
CENTREXORI	The Centrex out right.	FORBIDDEN, PERMITTED		S	O
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 144: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CENTREX-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE

Modifies the subscriber's CFMN service.

Table 145: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CFMNFLAG	Specifies whether to support CFMN service.	1 (unsupported), 2 (supported and deactivated, 3 (supported and activated)		S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 146: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CFMN-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

Modifies a subscriber's conference call service.

Table 147: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CCMAX	The maximum number of subscribers for a conference call.	3-32		S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN.Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE Logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 148: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE

Modifies the subscriber's CPPC service.

Table 149: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CPPCFLAG	Specifies whether CPPC service is supported.	1 (supported), 0 (unsupported)		S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 150: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-CPPC-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Modifies subscriber data services.

Table 151: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
ADS1	Asynchronous Data Service (9.6 kbps) =0x0004,// Asynchronous Data rate set 1. Possible values: FALSE (not subscribed), TRUE (subscribed).			S	O
ADS2	Asynchronous Data Service (14.4 or 9.6 kbps) = 0x000C.	FALSE (not subscribed), TRUE (subscribed).		S	O
ADSR1	Asynchronous Data Service, Revision 1 (9.6 or 14.4 kbps).	FALSE (not subscribed), TRUE (subscribed).		S	O
EHSP	Enhanced Variable Rate Voice Service. (8 kbps) =0x0003, //EVRC	FALSE (not subscribed), TRUE (subscribed).		S	O
G3AF1	Group 3 Analog Facsimile (Rate Set 1).	FALSE (not subscribed), TRUE (subscribed).		S	O
G3AF2	Group 3 Analog Facsimile (Rate Set 2).	FALSE (not subscribed), TRUE (subscribed).		S	O
G3F1	Group 3 Facsimile (9.6 kbps)=0x0005, //Group 3 Fax rate set 1.	FALSE (not subscribed), TRUE (subscribed).		S	O
G3F2	Group 3 Facsimile (14.4 or 9.6 kbps)=0x000D, // Group 3 Fax rate set 2.	FALSE (not subscribed), TRUE (subscribed).		S	O
G3FR1	Group 3 Facsimile, Revision 1 (9.6 or 14.4 kbps).	FALSE (not subscribed), TRUE (subscribed).		S	O

Table 151: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
HSP13	High Rate Voice Service. (13 kbps)=0x0011, //13K high rate voice service.	FALSE (not subscribed), TRUE (subscribed).		S	O
HSPDS11	High Speed Packet Data Service (RS1 forward, RS1 reverse) = 0x0016, //High Speed Packet Data Service: Internet or ISO Protocol Stack (RS1 forward, RS1 reverse). Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed).		S	O
HSPDS12	High Speed Packet Data Service (RS1 forward, RS2 reverse) = 0x0017, //High Speed Packet Data Service: Internet or ISO Protocol Stack (RS1 forward, RS2 reverse). Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed).		S	O
HSPDS21	High Speed Packet Data Service (RS2 forward, RS1 reverse) = 0x0018, //High Speed Packet Data Service: Internet or ISO Protocol Stack (RS2 forward, RS1 reverse). Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed).		S	O

Table 151: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
HSPDS22	High Speed Packet Data Service (RS2 forward, RS2 reverse) = 0x0019, //High Speed Packet Data Service: Internet or ISO Protocol Stack (RS2 forward, RS2 reverse). Use of this value is outside the scope of this version of this standard.	FALSE (not subscribed), TRUE (subscribed).		S	O
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	Mobile directory number. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
MSLB13	Mobile Station Loopback (13kbps) = 0x0009, //13K loopback.	FALSE (not subscribed), TRUE (subscribed)		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
PDS1	144 kbps Packet Data Service, Internet or ISO Protocol Stack=0x0021, //High Speed Packet Data, 144 Kbps.	FALSE (not subscribed), TRUE (subscribed)		S	O
PDS2	Packet Data Service: Internet or ISO Protocol Stack (14.4 kbps) = 0x000F //.	FALSE (not subscribed), TRUE (subscribed)		S	O
PDS3	Packet Data Service: CDPD Protocol Stack (14.4kbps) =0x0010 //.	FALSE (not subscribed), TRUE (subscribed)		S	O
SMS1	Short Message Services (Rate Set 1) = 0x0006, // SMS rate set 1.	FALSE (not subscribed), TRUE (subscribed)		S	O

Table 151: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
SMS2	Short Message Services (Rate Set 2) = 0x000E, // SMS rate set 2.	FALSE (not subscribed), TRUE (subscribed)		S	O
SP13	SPEECH_13K=0x8000, //13K speech.	FALSE (not subscribed), TRUE (subscribed)		S	O
SP8	Basic Variable Rate Voice Service. (8 kbps)=0x0001, //8K speech.	FALSE (not subscribed), TRUE (subscribed)		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 152: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-DATA-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS

Modifies the subscriber's equal access.

Table 153: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS

Parameter Name	Description	Range	Default Value	Type	Class
EAFA	EA subscribing state.	1 or 3.1. (not authorized), or 3. (authorized and activated)		S	R

Table 153: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
INTERCIC	International long distance operator logo identifier. If EAFA is 3, the parameter can be added. If EAFA is 3, either intercic or nationalcic must be selected. If EAFA is 1, the parameter cannot be added.			S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NATIONALCIC	National long distance operator logo identifier. If EAFA is 3, the parameter can be added; If EAFA is 3, either intercic or nationalcic must be selected; If EAFA is 1, the parameter cannot be added.			S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 154: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-EQUAL-ACCESS

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE

Modifies the subscriber's intelligent service.

Table 155: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CFB	Call Forwarding on mobile subscriber Busy service subscription.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
CFNA	Call Forwarding No Answer service subscription.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
CFU	Call Forwarding Unconditional service subscription.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
DPPC	Subscriber activate/ deactivate operation allowed.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
FCN	Call failure notification.	SUBSCRIBED, NOT_SUBSCRIBED		S	O
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string.		S	O
MDN	Mobile directory number. Either IMSI or MDN is mandatory.			S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
SCPNO	SCP number.	1-4		S	R
SERVICEFLAG	The subscribing status of the intelligent service.	UNSUBSCRIBED, SUBSCRIBED_BUT_INACTIVATED, SUBSCRIBED_AND_ACTIVATED		S	R
SERVICEID	Service ID.	1-65535		S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 156: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-IN-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE

Modifies the subscriber's lock state.

Table 157: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE

Parameter Name	Description	Range	Default Value	Type	Class
ACCOUNTLOCK	Delinquent account lock type.	UNLOCKED, INCOMING_CALL_LOCK, OUTGOING_CALL_LOCK, INCOMING_AND_OUTGOING CALL_LOCK		S	O
DUPLOCK	Duplication lock type.	LOCKED, UNLOCKED		S	O
MDN	MDN.	1-15 character string		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
STOLENLOCK	Stolen lock type.	LOCKED, UNLOCKED		S	O
USERLOCK	User lock type.	UNLOCKED, INCOMING_CALL_LOCK, OUTGOING_CALL_LOCK		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 158: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-LOCK-STATE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

Modifies the subscriber's Message Waiting Notification service.

Table 159: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
MWNACTI	Beep tone that designates the active state of message waiting notification.	0 (Deactivation), 1 (Activation)		S	R
MWNATPACTI	Alert tone that designates the active state of message waiting notification.	0 (Deactivation), 1 (Activation)		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 160: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER

Modifies a subscriber's pilot number.

Table 161: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER

Parameter Name	Description	Range	Default Value	Type	Class
CNIPPILOTNUMBER	Calling Number Identification Presentation of pilot number.	False (do not display it), True (display it)		S	O
MEMBER	Member number.			S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
PILOTNUMBER	Pilot number.	1-15 character string		S	R
STATUS	Members.			S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 162: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PILOT-NUMBER

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE

Modifies the subscriber's preferred language.

Table 163: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Table 163: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE

Parameter Name	Description	Range	Default Value	Type	Class
PL	Subscribers preferred language.	ENGLISH,FRENCH,SPANISH,GERMAN,PORTUGUESE,MANDARIN,CANTONESE,HANGUL,BAHASA,HINDI,URDU,TAGALOG,YORUBA,SWAHILI,GAELIC,HEBREW,NIHONGO,RUSSIAN,ARABIC,DUTCH,ITALIAN,POLISH,VIETNAMESE,GREEK,YIDDISH,THAI,LAOTIAN,PERSIAN,FRENCH,CREOLE,ARMENIAN,NAVAHO,HUNGARIAN,MON-KHMER,GUJARATHI,UKRANIAN,CZECH,PENNSYLVANIA,DUTCH,MIAO,NORWEGIAN,SLOVAK,SWEDISH,SERBIAN,KRU,RUMANIAN,LITHUANIAN,FINNISH,PUNJABI,FORMOSAN,CROATIAN,BOSNIAN,TURKISH,LLOCANO,BENGALI,DANISH,FLEMISH,SYRIAN,TAMIL,SAMOAN,MALAYALAM,CAJUN,AMHARIC		S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 164: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PREFERRED-LANGUAGE

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY

Modifies the subscriber's property.

Table 165: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY

Parameter Name	Description	Range	Default Value	Type	Class
CLASS	The mobile subscriber class value.	0 (ordinary subscriber), 2-255 (wireless payphone value)		S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 166: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-PROPERTY

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS

Modifies subscriber restrictions.

Table 167: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
DIRECT	Direct. Can only can be set when SMS origination restriction supports initial sending short message service.	0 (Block direct), 1 (Allow direct)		S	O
FMC	Forcedly pass through message center. Can only be set when SMS origination restriction supports initial sending short message service.	0 (No effect) , 1 (Force Indirect)		S	O
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	Remote network element name.			S	R
ODEFAULT	ODEFAULT value. Can only can be set when SMS origination restriction supports initial sending short message service.	0 (Block all), 2 (Allow special), 3 (Allow all)		S	O

Table 167: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
ORIBEGIN	Allow long distance area code. Possible values: 1-15 character string. If ORIGIN = ALLOW_ONLY_ LEADING_DIGITS or ALLOW_LEADING_ DIGITS_AND_LOCAL _CALLS_ONLY or SINGLE_DIRECTORY , it is mandatory. Else optional.			S	O
ORIGIN	Origination restriction. Possible values are: ORIGINATION_ DENIED, ALLOW_LOCAL_ CALLS_ONLY, ALLOW_ONLY_ LEADING_DIGITS, ALLOW_LEADING_ DIGITS_AND_LOCAL _CALLS_ONLY, ALLOW_NATIONAL_ LONG_DISTANCE, ALLOW_ INTERNATIONAL_ CALLS, SINGLE_ DIRECTORY.			S	O
RC	RC. Can only be set when SMS termination restriction supports short message receiving service.	0 (Block), 1 (Allow)		S	O
TDEFAULT	TDEFAULT value. Only can be set when SMS termination restriction supports short message receiving service.	0 (Block all), 2 (Allow special), 3 (Allow all)		S	O

Table 167: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
TERMINA	Incoming restriction.	1 (Termination denied), 2 (Unrestricted)		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 168: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-RESTRICTIONS

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION

Modifies the subscriber's roaming position.

Table 169: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
MSCID	MSC identification. If the MSCID value is set to null, the MSCID value is "null" or "NULL". If this parameter is not input, the MSCID value remains unchanged.	"null" or "NULL" or a 6-digit hexadecimal number		S	O

Table 169: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION

Parameter Name	Description	Range	Default Value	Type	Class
MSCIN	MSC identity. If the MSCIN parameter is set to null, the MSCIN value is null or NULL. If no parameter is supplied, this indicates that the MSCIN value is not changed.	"null" or "NULL" or 1-15 digits		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
PCSSN	Signaling sub-system number. If PCSSN is set to null, the PCSSN value is "null" or "NULL". If this parameter is not input, the PCSSN value remains unchanged.	null or NULL or a 10-digit hexadecimal number		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 170: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-ROAMING-POSITION

C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE

Modifies subscriber teleservices.

Table 171: C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
SMMOPP	Short message MO_PP.	TRUE, FALSE		S	O
SMMTPP	Short message MT_PP.	TRUE, FALSE		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 172: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUBSCRIBER-TELESERVICE

C_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE

Modifies a subscriber's supplementary services.

Table 173: C_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CC	Conference call.	TRUE, FALSE		S	O

Table 173: C_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CFB	CFB.	TRUE, FALSE		S	O
CFD	Hidden condition forwarding.	TRUE, FALSE		S	O
CFNA	CFNR.	TRUE, FALSE		S	O
CFU	CFU.	TRUE, FALSE		S	O
CNIO	Caller identification restriction override.	TRUE, FALSE		S	O
CNIP	Caller identification display.	TRUE, FALSE		S	O
CNIR	Caller number identification restriction.	TRUE, FALSE		S	O
CNIRMODE	Number identification restriction modes.	PERMANENTLY_ ACTIVATE, TEMPORARILY_ ACTIVATE, TEMPORARILY_ DEACTIVATE		S	O
CT	Call transfer.	TRUE, FALSE		S	O
CW	Call waiting.	TRUE, FALSE		S	O
DND	Do not disturb.	TRUE, FALSE		S	O
FA	Reserved.			S	O
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MAH	Reserved.			S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
MWN	Announcement waiting message.	TRUE, FALSE		S	O

Table 173: C_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
PACA	Priority Access and Channel Assignment.	TRUE, FALSE		S	O
PACALEVEL	PACA (Priority Access Channel Assignment) level.	1-15, 0 = not available		S	O
PCA	Reserved.			S	O
PL	Preferred language.	TRUE, FALSE		S	O
RFC	Remote feature control.	TRUE, FALSE		S	O
SCA	Reserved.			S	O
SPINA	Subscriber PIN access.	TRUE, FALSE		S	O
SPINI	Subscriber PIN intercept.	TRUE, FALSE		S	O
VMR	Voice message retrieval.	TRUE, FALSE		S	O
VP	Reserved.			S	O
WC3	Three Party Service.	TRUE, FALSE		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 174: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_SUPPLEMENTARY-SERVICE

C_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE

Modifies USCF services.

Table 175: C_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
USCFDN	USCF forwarding number. When USCFDN = 3, it can be input.	1-32 digits character string		S	O
USCFMS	USCF forward the incoming call to the destination provided by mobile.	1 (not authorized); 3 (authorized and activated)		S	O
USCFNR	USCF forward the incoming call to a network registered destination	1 (not authorized); 3 (authorized and activated)		S	O
USCFVM	USCF forward the incoming call to voice mail.	1 (not authorized); 3 (authorized and activated)		S	O

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 176: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE	A_HW-HLR_M800-V300R006_MODIFY_USCF-SERVICE

C_HW-HLR_M800-V300R006_QUERY_CODE-MUTUAL-INQUIRY

Queries the Code Mutual Inquiry.

Table 177: C_HW-HLR_M800-V300R006_QUERY_CODE-MUTUAL-INQUIRY

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 178: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_CODE-MUTUAL-INQUIRY	A_HW-HLR_M800-V300R006_QUERY_CODE-MUTUAL-INQUIRY

C_HW-HLR_M800-V300R006_QUERY_CRBT-SERVICE

Queries CRBT services.

Table 179: C_HW-HLR_M800-V300R006_QUERY_CRBT-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 180: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_CRBT-SERVICE	A_HW-HLR_M800-V300R006_QUERY_CRBT-SERVICE

C_HW-HLR_M800-V300R006_QUERY_DO-NOT-DISTURB-SERVICE

Queries the Do-Not-Disturb service.

Table 181: C_HW-HLR_M800-V300R006_QUERY_DO-NOT-DISTURB-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 182: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_DO-NOT-DISTURB-SERVICE	A_HW-HLR_M800-V300R006_QUERY_DO-NOT-DISTURB-SERVICE

C_HW-HLR_M800-V300R006_QUERY_MSC-ROAMING-RESTRICTIONS

Queries MSC roaming restrictions.

Table 183: C_HW-HLR_M800-V300R006_QUERY_MSC-ROAMING-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 184: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_MSC-ROAMING-RESTRICTIONS	A_HW-HLR_M800-V300R006_QUERY_MSC-ROAMING-RESTRICTIONS

C_HW-HLR_M800-V300R006_QUERY_NNAN-SERVICE

Queries NNAN services.

Table 185: C_HW-HLR_M800-V300R006_QUERY_NNAN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 186: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_NNAN-SERVICE	A_HW-HLR_M800-V300R006_QUERY_NNAN-SERVICE

C_HW-HLR_M800-V300R006_QUERY_ONLY-SERVICE

Queries ONLY service subscriptions.

Table 187: C_HW-HLR_M800-V300R006_QUERY_ONLY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 188: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_ONLY-SERVICE	A_HW-HLR_M800-V300R006_QUERY_ONLY-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-AUTHENTICATE-DATA

Queries the subscriber's authentication data.

Table 189: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-AUTHENTICATE-DATA

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 190: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-AUTHENTICATE-DATA	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-AUTHENTICATE-DATA

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-FORWADING-SERVICE

Queries a subscriber's call forwarding service.

Table 191: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-FORWADING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
CFSCODE	Call forward service code.	CFB, CFD, CFNA, CFU		S	R
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O

Table 191: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-FORWADING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 192: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-FORWADING-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-FORWADING-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-WAITING-SERVICE

Queries a subscriber's call waiting service.

Table 193: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-WAITING-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 194: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-WAITING-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CALL-WAITING-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CENTREX-SERVICE

Queries a subscriber's CENTREX services.

Table 195: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CENTREX-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 196: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CENTREX-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CENTREX-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CFMN-SERVICE

Queries the subscriber's CFMN service.

Table 197: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CFMN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 198: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CFMN-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CFMN-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

Queries a subscriber's conference call service.

Table 199: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O

Table 199: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 200: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CONFERENCE-CALL-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CONFERENCE-CALL-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CPPC-SERVICE

Queries the subscriber's CPPC service.

Table 201: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CPPC-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 202: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CPPC-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-CPPC-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-DATA-SERVICE

Queries subscriber data services.

Table 203: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-DATA-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 204: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-DATA-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-DATA-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-EQUAL-ACCESS

Queries the subscriber equal access.

Table 205: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-EQUAL-ACCESS

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string.		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 206: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-EQUAL-ACCESS	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-EQUAL-ACCESS

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE

Queries the subscriber's intelligent service.

Table 207: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O

Table 207: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 208: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-IN-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-LOCK-STATE

Queries the subscriber's lock state.

Table 209: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-LOCK-STATE

Parameter Name	Description	Range	Default Value	Type	Class
MDN	MDN.	1-15 character string.		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 210: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-LOCK-STATE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-LOCK-STATE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

Queries the subscriber's Message Waiting Notification service.

Table 211: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 212: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-MSG-WAIT-NOTIFICATION-SERVICE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PILOT-NUMBER

Queries a subscriber's pilot number.

Table 213: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PILOT-NUMBER

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R
PILOTNUMBER	Pilot number.	1-15 character string.		S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 214: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PILOT-NUMBER	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PILOT-NUMBER

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PREFERRED-LANGUAGE

Queries the subscriber's preferred language.

Table 215: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PREFERRED-LANGUAGE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	Remote network element name.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 216: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PREFERRED-LANGUAGE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PREFERRED-LANGUAGE

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PROPERTY

Queries the subscriber's property.

Table 217: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PROPERTY

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 218: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PROPERTY	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-PROPERTY

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-RESTRICTIONS

Queries subscriber restrictions.

Table 219: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O

Table 219: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-RESTRICTIONS

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 220: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-RESTRICTIONS	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-RESTRICTIONS

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-ROAMING-POSITION

Queries the subscriber's roaming position.

Table 221: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-ROAMING-POSITION

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 222: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-ROAMING-POSITION	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-ROAMING-POSITION

C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-TELESERVICE

Queries subscriber teleservices.

Table 223: C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-TELESERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 224: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-TELESERVICE	A_HW-HLR_M800-V300R006_QUERY_SUBSCRIBER-TELESERVICE

C_HW-HLR_M800-V300R006_QUERY_SUPPLEMENTARY-SERVICE

Queries a subscriber's supplementary services.

Table 225: C_HW-HLR_M800-V300R006_QUERY_SUPPLEMENTARY-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 226: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_SUPPLEMENTARY-SERVICE	A_HW-HLR_M800-V300R006_QUERY_SUPPLEMENTARY-SERVICE

C_HW-HLR_M800-V300R006_QUERY_TEMPLATE-NAME-NID-SID

Queries template name/number of NID and SID/configuration information.

Table 227: C_HW-HLR_M800-V300R006_QUERY_TEMPLATE-NAME-NID-SID

Parameter Name	Description	Range	Default Value	Type	Class
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 228: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_TEMPLATE-NAME-NID-SID	A_HW-HLR_M800-V300R006_QUERY_TEMPLATE-NAME-NID-SID

C_HW-HLR_M800-V300R006_QUERY_USCF-SERVICE

Queries USCF services.

Table 229: C_HW-HLR_M800-V300R006_QUERY_USCF-SERVICE

Parameter Name	Description	Range	Default Value	Type	Class
IMSI	IMSI. Either IMSI or MDN is mandatory.	7-15 character string		S	O
MDN	MDN. Either IMSI or MDN is mandatory.	1-15 character string		S	O
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 230: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_QUERY_USCF-SERVICE	A_HW-HLR_M800-V300R006_QUERY_USCF-SERVICE

C_HW-HLR_M800-V300R006_RENEW_IMSI-CARD

Renews the subscriber's IMSI card.

Table 231: C_HW-HLR_M800-V300R006_RENEW_IMSI-CARD

Parameter Name	Description	Range	Default Value	Type	Class
AKEY	Authentication key. 16 digit hexadecimal value.			S	O
ESN	Electronic serial number.			S	O
FORCEFLAG	Flag for forced card changing.	NOT_FORCE, FORCE	NOT_FORCE	S	O
IFAC	Specifies whether or not to perform authentication.	YES, NO		S	R
K4NUMBER	0 means that a_key does not encrypt by k4.	0 - 255	0	S	O
MDN	MDN.	1-15 character string		S	R
NEWIMSI	IMSI.	7-15 character string.		S	R
NE_ID_HW-HLR_M800-V300R006	NE logical ID.			S	R

Mapping to ASDLs

The following table illustrates the CSDL to ASDL mapping for this service.

Table 232: CSDL to ASDL Mapping

CSDL	ASDL
C_HW-HLR_M800-V300R006_RENEW_IMSI-CARD	A_HW-HLR_M800-V300R006_RENEW_IMSI-CARD

5

Configuring ASAP to Support Additional NE Instances

You can configure ASAP to support the Huawei HLR - NEP configuration using the Service Activation Configuration Tool (SACT). Refer to the *ASAP System Configuration and Management Guide* fore more information.

Below is an example of the Activation.Configuration.XML file for the Huawei HLR cartridge.

```
<?xml version="1.0" encoding="UTF-8"?>
<!--Sample XML file generated by XML Spy v4.3 U (http://www.xmlspy.com)-->
<activationConfig xmlns="http://www.metasolv.com/ServiceActivation/2003/
ActivationConfig" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.metasolv.com/ServiceActivation/2003/
ActivationConfig
C:\data\ASAP\4.6\xsd\ActivationConfig.xsd">
    <connectionPool name="HWHLRPOL">
        <device name="huawei_hlr_M800-V300R006_socket_dev1">
            <environment>MY_ASAP_SYS</environment>
            <lineType>SOCKET_CONNECTION</lineType>
        </device>
    </connectionPool>
    <element name="HW-HLR_M800-V300R006_HOST">
        <technology>HW-HLR</technology>
        <softwareLoad>M800-V300R006</softwareLoad>
        <nepServerName>$NEP</nepServerName>
        <primaryPool>HWHLRPOL</primaryPool>
        <maximumConnections>1</maximumConnections>
        <dropTimeout>2</dropTimeout>
        <spawnThreshold>10</spawnThreshold>
        <killThreshold>8</killThreshold>
        <routingElement name="HW-HLR_M800-V300R006_HOST">
            <atomicService/>
        </routingElement>
        <communicationParameter>
            <label>HOST_IPADDR</label>
            <value>
                <value>172.16.12.200</value>
            </value>
            <description>The host name or IP address of the remote NE.</
description>
            <deviceName>COMMON_DEVICE_CFG</deviceName>
```

```
            <lineType>SOCKET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
            <label>PORT</label>
            <value>
                <value>9999</value>
            </value>
            <description>Port number to connect on remote NE host.</
description>
            <deviceName>COMMON_DEVICE_CFG</deviceName>
            <lineType>SOCKET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
            <label>OPEN_TIMEOUT</label>
            <value>
                <value>20</value>
            </value>
            <description>Connection timeout in seconds.</description>
            <deviceName>COMMON_DEVICE_CFG</deviceName>
            <lineType>SOCKET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
            <label>READ_TIMEOUT</label>
            <value>
                <value>5</value>
            </value>
            <description>Read timeout in seconds.</description>
            <deviceName>COMMON_DEVICE_CFG</deviceName>
            <lineType>SOCKET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
            <label>LOGINID</label>
            <value>
                <value>ASAP</value>
            </value>
            <description>Login User Name.</description>
            <deviceName>COMMON_DEVICE_CFG</deviceName>
            <lineType>SOCKET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
            <label>PASSWORD</label>
            <value>
                <value>AsP98wy</value>
            </value>
            <description>Password for the User.</description>
            <deviceName>COMMON_DEVICE_CFG</deviceName>
            <lineType>SOCKET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
            <label>CMD_RESPONSE_FILE</label>
            <value>
                <value>/config/HW_HLR_M800-V300R006_CmdResponse.cfg</value>
```

```
            </value>
            <description>Command response file used in loopback mode</
description>
            <deviceName>COMMON_DEVICE_CFG</deviceName>
            <lineType>SOCKET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
            <label>USER_ERROR_TYPES_FILE</label>
            <value>
                <value>/config/HW_HLR_M800-V300R006_UserExitTypes.cfg</value>
            </value>
            <description>The User Exit types file. This file is relative to
ASAP_BASE directory.</description>
            <deviceName>COMMON_DEVICE_CFG</deviceName>
            <lineType>SOCKET_CONNECTION</lineType>
        </communicationParameter>
        <communicationParameter>
            <label>QUERY_RESPONSE_MAP_FILE</label>
            <value>
                <value>/config/HW_HLR_M800-V300R006_QueryMap.cfg</value>
            </value>
            <description>The query response mapping file. This file is relative
to  ASAP_BASE directory.</description>
            <deviceName>COMMON_DEVICE_CFG</deviceName>
            <lineType>SOCKET_CONNECTION</lineType>
        </communicationParameter>
    </element>
</activationConfig>
```

Extracting source files

Before you can access an XML file to modify it, you must extract it from the sar file. Use the following procedure to extract source files from the sar file.

To extract source files

1. If necessary, create a repository directory under /Huawei, copy the .sar file to the new directory and un-jar the sar file, as described by Step 1 through Step 4 in “Modifying huawei_hlr_M800-V300R006_ne_config.xml” on page 12.
2. After you un-jar the sar file, you can access the XML files.

Loading a new XML file

When you finish modifying an XML, you must create a new sar file, then restart the cartridge using the new file.

Follow the instructions in “Modifying huawei_hlr_M800-V300R006_ne_config.xml” on page 12 for directions on loading a new XML file.