

Layered AVG Provisioning over CAI3G

Ericsson Dynamic Activation 1

INTERFACE DESCRIPTION

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1 Introduction

This section is an introduction to this document. It contains information about the prerequisites, purpose, scope, and target group for the document. This section also contains information about typographic conventions used in this document.

1.1 Purpose and Scope

This document describes the supported operations or Customers Service Orders (CSOs) in the provisioning of the Authentication Vector Generation (AVG) service in the CAI3G interface, which is used for provisioning of HSS FE module data. This document also declares the types and occurrences of the attributes used in the operations.

This document is not a tutorial of CAI3G; it must be used together with *Generic CAI3G Interface 1.2*, Reference [2].

1.2 Target Groups

The target groups for this document are as follows:

- System Integrator

For more information about the different target groups, see *Library Overview*, Reference [3].

1.3 Typographic Conventions

Typographic conventions are described in *Library Overview*, Reference [3].

In addition, this document uses the following to indicate operations:

C	Create
S	Set
G	Get
D	Delete

1.4 Prerequisites

To use this document fully, users must meet the following prerequisites:



- Basic knowledge about the Ericsson™ Dynamic Activation (EDA) product.
- Knowledge about *Generic CAI3G Interface 1.2*, Reference [2]

1.5 Namespaces

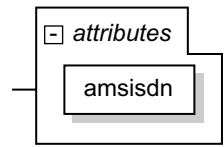
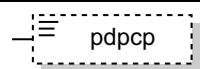

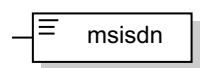
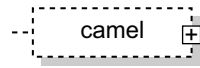
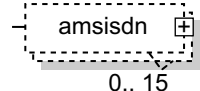
This document refers to the following namespaces:

- CAI3G 1.2 namespace:
`http://schemas.ericsson.com/cai3g1.2/`
- Provisioning namespace:
`http://schemas.ericsson.com/ma/HSS/`

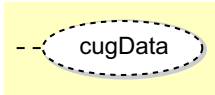
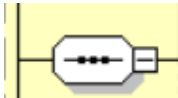
1.6 Legends

The following table shows the legends used in XML schema figures in this specification.

Table 1 Legends Used in XML Schema Figures in This Specification

Legend	Description
	XML attribute
	Optional XML element
	Choice icon
	Mandatory XML element
	Structured element
	Subobject element The occurrence of this element is 0–15.



Legend	Description
	<p>User-defined type</p> <p>This is not a standard XML schema type. It is introduced to describe MO schema structure more clearly. In practice, this type is to be replaced by the corresponding elements.</p>
	<p>Sequence icon</p> <p>A list of elements, the sequence order must be followed.</p>

1.7 Operations

One Managed Object (MO) with four operations are described in this document. See the following table for the commands and valid operations:

Table 2 AVGMultiSC Provisioning MOs

MO	Operation			
	Create	Get	Set	Delete
AVGMultiSC	x	x	x	x

1.8 Web Service Interface

The Web Services Definition Language (WSDL) and XML Schema Definition Language (XSD) files that describe the provisioning interface can be found in `/home/dveinstaller/da/`. It is also possible to download the files and view or store them in an appropriate area by following below instruction:

1. Save the zip file, [Multi_Activation_WSDL_and_XSD_files.zip](#), to a local folder.
2. Unpack the zip file.

1.9 MOType

MOType is a plain text string based on the type `xs:string`. An MO type consists of two parts. One is the namespace of the MO, and the other is the MO name string that is always starting with an alphabetical character in either upper or lower case, followed by zero or more alphabetical characters, digits or underscores.

Those two parts are connected with symbol `@`. The syntax of the MOType string is `MO_Name@MO_Namespace`. The name string of an MO type must follow the regular expression: `[A-Za-z][A-Za-z0-9]*`

The MO name together with the MO namespace must be globally unique.



1.10 MOld

MOld is an Extensible Markup Language (XML) fragment containing the MOld parameter-value pairs that are used to identify an MO instance in the interface data model. CAI3G 1.2 standard supports compound MO identifiers or multiple MO identifier. The following is an example of an MOld:

```
<MOld>
  <msisdn>46455395000</msisdn>
  <imsi>46234563545000</imsi>
</MOld>
```

Example 1 Example of MOld

The MOld is defined as a sequence of `xs:any` element in CAI3G schema file. It is the developers responsibility to define the real schema for this parameter.

The MOld is also the key attributes that must be defined in the top-level element, `CreateMODefinition` or `SetMODefinition`, within `MOAttributes` parameter.

Each implementation of CAI3G interface is to define own logic relationship of MOld. It is also the CAI3GAgents responsibility to interpret this parameter correctly by either the hard-coded logic or the dynamic parsing of the schema.



2 Create AVGMultiSC

This section covers the AVG command `CreateAVGMultiSC`.

MOType

AVGMultiSC@http://schemas.ericsson.com/ma/HSS/

2.1 Request Data

Note: It is not allowed to create new services for a subscriber (Multi Service Consumer, AVGMultiSC) when the subscriber (Multi Service Consumer) is involved in an ongoing IMSI Changeover. This applies to both the old and new IMSI.

2.1.1 Parameters

MOId

Table 3 Create AVGMultiSC MOId

Parameter	Type	Occurrence	Description
imsi	String minLength value="6" maxLength value="15" Pattern value="[0-9]*"	Mandatory	The International Mobile Subscriber Identity (IMSI) number of the subscriber
impi	String minLength value="5" maxLength value="70"	Optional ⁽¹⁾	The IMPI number of the subscriber IMPI is only applicable to a MultiSC that subscribes to IMS services.

(1) One of the parameters, *impi*, or *imsi*, must be included in the request. An IMSI must be provisioned if AVG service is provisioned for a subscriber that is also defined in IMS, LTE, CSPS, or AVGMultiSC.

MOAttributes

The parameters that are used in the operation are shown in Figure 1

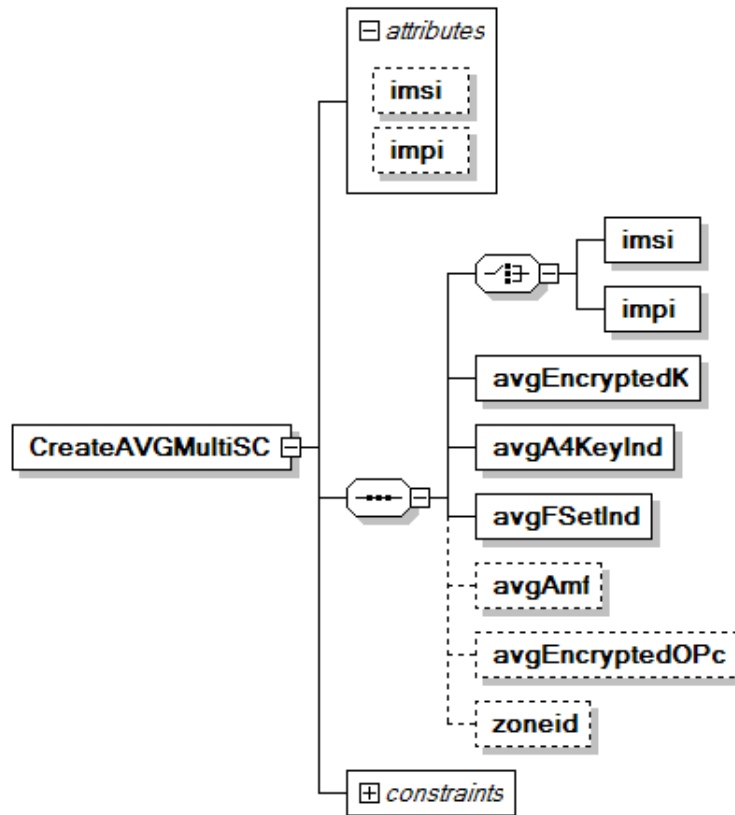


Figure 1 Parameters in Create AVGMultiSC

The following table covers the parameters that can be used in a CreateAVGMultiSC request.

Table 4 Create AVGMultiSC Parameters

Parameter	Type	Occurrence	Description
imsi	String minLength value="6" maxLength value="15" Pattern value="[0-9]*"	Optional ⁽¹⁾	The IMSI number of the subscriber
impi	String minLength value="5" maxLength value="70"	Optional ⁽¹⁾	The IMPI number of the subscriber IMPI is only applicable to a MultiSC that subscribes to IMS services.
avgEncryptedK	String Pattern value="[0-9A-F]{32}"	Mandatory	Contains an encrypted key (K), used for authentication purposes of the MultiSC.



Parameter	Type	Occurrence	Description
avgA4KeyInd	Integer minInclusive value="1" maxInclusive value="512"	Mandatory	Contains reference to the A4 key, used when encrypting the key (K) associated to the MultiSC. Defined through a configuration interface, refer to Reference [4]
avgFSetInd	Integer minInclusive value="0" maxInclusive value="15"	Mandatory	Contains reference to an algorithm, used when generating authentication vectors for the MultiSC. Defined through a configuration interface, refer to Reference [4].
avgAmf	String Pattern value="[0-9 A-F]{4}"	Optional	Contains reference to the Authentication Management Field associated to the MultiSC. Default value is 0000.
avgEncryptedOPc	String (case-sensitive string) Pattern value="[0-9 A-F]{32}"	Optional	This attribute is used for storing the encrypted value of the OPc.
zoneid	Integer minInclusive value="0" maxInclusive value="65535"	Optional	This attribute indicates the geographical area that the MultiSC belongs to. If AVG is added to an already existing MultiSC, this zoneid will be ignored.

(1) One of the parameters, *impi*, or *imsi*, must be included in the request. An *IMSI* must be provisioned if *AVG* service is provisioned for a subscriber that is also defined in *IMS*, *LTE*, *CSPS*, or *AVGMultiSC*.

2.2 Examples

Request Example

This section gives an example of a `CreateAVGMultiSC` request, as shown in Example 2.



```

<soapenv:Envelope
  xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/" xmlns:hss="http://schemas.ericsson.com/ma/
  <soapenv:Header>
    <cai3g:SessionId>150466530</cai3g:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3g:Create>
      <cai3g:MOTType>AVGMultiSC@http://schemas.ericsson.com/ma/HSS</cai3g:MOTType>
      <cai3g:MOId>
        <!--You have a CHOICE of the next 2 items at this level-->
        <hss:imsi>123456</hss:imsi>
        <hss:impi>sip:user@ims.operator.org</hss:impi>
      </cai3g:MOId>
      <cai3g:MOAttributes>
        <hss:CreateAVGMultiSC imsi=123456 impi=sip:user@ims.operator.org>
        <!--You have a CHOICE of the next 2 items at this level-->
        <hss:imsi>123456</hss:imsi>
        <hss:impi>sip:user@ims.operator.org</hss:impi>
        <hss:avgEncryptedK>1234567890ABCDEF1234567890ABCDEF
        </hss:avgEncryptedK>
        <hss:avgA4KeyInd>2</hss:avgA4KeyInd>
        <hss:avgFSetInd>1</hss:avgFSetInd>
        <!--Optional:-->
        <hss:avgAmf>0001</hss:avgAmf>
        <hss:zoneid>128</hss:zoneid>
      </hss:CreateAVGMultiSC>
    </cai3g:MOAttributes>
  </cai3g:Create>
</soapenv:Body>
</soapenv:Envelope>

```

Example 2 Create AVGMultiSC Request Message

An AVG subscription with IMSI 123456 is initiated.

Response Example

This section gives an example of a CreateAVGMultiSC response message, as shown in Example 3.

```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>150466530</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:CreateResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOId>
        <hss:imsi xmlns:hss="http://schemas.ericsson.com/ma/HSS/">123456
        </hss:imsi>
      </ns2:MOId>
    </ns2:CreateResponse>
  </S:Body>
</S:Envelope>

```

Example 3 Create AVGMultiSC Response Message



3 Set AVGMultiSC

This section covers the AVG command `SetAVGMultiSC`.

MOType

`AVGMultiSC@http://schemas.ericsson.com/ma/HSS/`

3.1 Request Data

3.1.1 Parameters

MOId

Table 5 Set AVGMultiSC MOId

Parameter	Type	Occurrence	Description
imsi	String minLength value="6" maxLength value="15" Pattern value="[0-9]*"	Mandatory	The International Mobile Subscriber Identity (IMSI) number of the subscriber
impi	String minLength value="5" maxLength value="70"	Optional ⁽¹⁾	The IMPI number of the subscriber IMPI is only applicable to a MultiSC that subscribes to IMS services.

(1) One of the parameters, impi, or imsi, must be included in the request.

The parameters that are used in the operation are shown in Figure 2

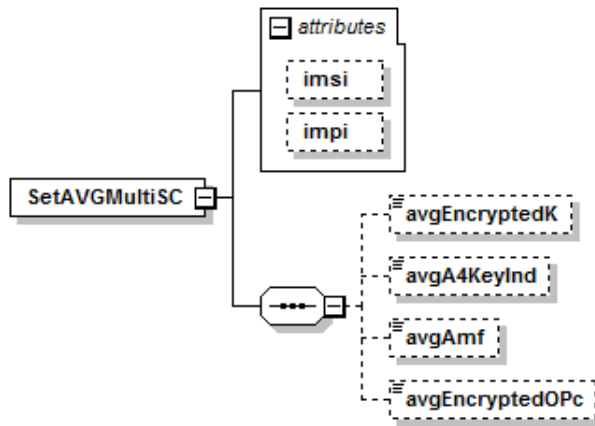


Figure 2 Parameters in Set AVGMultiSC

The following table covers the parameters that can be used in a SetAVGMultiSC request.

Table 6 Set AVGMultiSC Parameters

Parameter	Type	Occurrence	Description
imsi	String minLength value="6" maxLength value="15" Pattern value="[0-9]*"	Optional ⁽¹⁾	The IMSI number of the subscriber
impi	String minLength value="5" maxLength value="70"	Optional ⁽¹⁾	The IMPI number of the subscriber IMPI is only applicable to a MultiSC that subscribes to IMS services.
avgEncryptedK	String Pattern value="[0-9 A-F]{32}"	Optional	Contains an encrypted key (K), used for authentication purposes of the MultiSC. ⁽²⁾
avgA4KeyInd	Integer minInclusive value="1" maxInclusive value="512"	Optional	Contains reference to the A4 key, used when encrypting the key (K) associated to the MultiSC. Defined through a configuration interface, refer to Reference [4] ⁽³⁾⁽⁴⁾ .



Parameter	Type	Occurrence	Description
avgAmf	String Pattern value="[0-9 A-F]{4}"	Optional	Contains reference to the Authentication Management Field associated to the MultiSC.
avgEncryptedOPc	String (case-sensitive string) Pattern value="[0-9 A-F]{32}"	Optional	This attribute is used for storing the encrypted value of the OPc.

(1) One of the parameters, *impi*, or *imsi*, must be included in the request.

(2) When this attribute is changed, *avgA4KeyInd* must be modified so, that is, both parameters must be present in the Set AVGMultiSC CSO.

(3) When this attribute is changed, *avgEncryptedK* must be modified so, that is, both parameters must be present in the Set AVGMultiSC CSO.

(4) If the *avgEncryptedOPc* is defined and *avgA4KeyInd* is modified, *avgEncryptedOPc* must also be modified, that is, both attributes must be present in the Set AVGMultiSC CSO.

3.2 Examples

Request Example

This section gives an example of a SetAVGMultiSC request, as shown in Example 4.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:hss="http://schemas.ericsson.com/ma/HSS/">
  <soapenv:Header>
    <cai3g:SessionId>150466530</cai3g:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3g:Set>
      <cai3g:MOType>AVGMultiSC@http://schemas.ericsson.com/ma/HSS/
    </cai3g:MOType>
    <cai3g:MOId>
      <!--You have a CHOICE of the next 2 items at this level-->
      <hss:imsi>123456</hss:imsi>
      <hss:impi>sip:user@ims.operator.org</hss:impi>
    </cai3g:MOId>
    <cai3g:MOAttributes>
      <hss:SetAVGMultiSC imsi=123456
        impi=sip:user@ims.operator.org>
      <!--Optional:-->
      <hss:avgEncryptedK>1234567890ABCDEF1234567890ABCDEF
    </hss:avgEncryptedK>
      <!--Optional:-->
      <hss:avgA4KeyInd>2</hss:avgA4KeyInd>
      <!--Optional:-->
      <hss:avgAmf>0001</hss:avgAmf>
    </hss:SetAVGMultiSC>
    </cai3g:MOAttributes>
  </cai3g:Set>
</soapenv:Body>
</soapenv:Envelope>
```

Example 4 Set AVGMultiSC Request Message

The AVG subscription with IMSI 123456 has been updated.



Response Example

This section gives an example of a SetAVGMultiSC response message, as shown in Example 5.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>150466530</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:SetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>
```

Example 5 *Set AVGMultiSC Response Message*



4 Get AVGMultiSC

This section covers the AVG command `GetAVGMultiSC`.

MOType

`AVGMultiSC@http://schemas.ericsson.com/ma/HSS/`

4.1 Request Data

4.1.1 Parameters

The following table covers the parameters that can be sent in a `GetAVGMultiSC` request.

Table 7 Get AVGMultiSC Parameters

Parameter	Type	Occurrence	Description
impi	String minLength value="6" maxLength value="15" Pattern value="[0-9]*"	Optional ⁽¹⁾	The IMPI number of the subscriber IMPI is only applicable to a MultiSC that subscribes to IMS services.
imsi	String minLength value="5" maxLength value="70"	Optional ⁽¹⁾	The IMSI number of the subscriber

(1) One of the parameters, impi, or imsi, must be included in the request.

4.2 Response Data

4.2.1 Parameters

MOId

Table 8 *Get Response AVGMultiSC Parameters*

Parameter	Type	Occurrence	Description
impi	String minLength value="6" maxLength value="15" Pattern value="[0-9]*"	Optional ⁽¹⁾	The IMPI number of the subscriber IMPI is only applicable to a MultiSC that subscribes to IMS services.
imsi	String minLength value="5" maxLength value="70"	Optional ⁽¹⁾	The IMSI number of the subscriber

(1) One of the parameters, impi, or imsi, must be included in the request.

MOAttributes

The parameters that are used in the operation are shown in Figure 3.

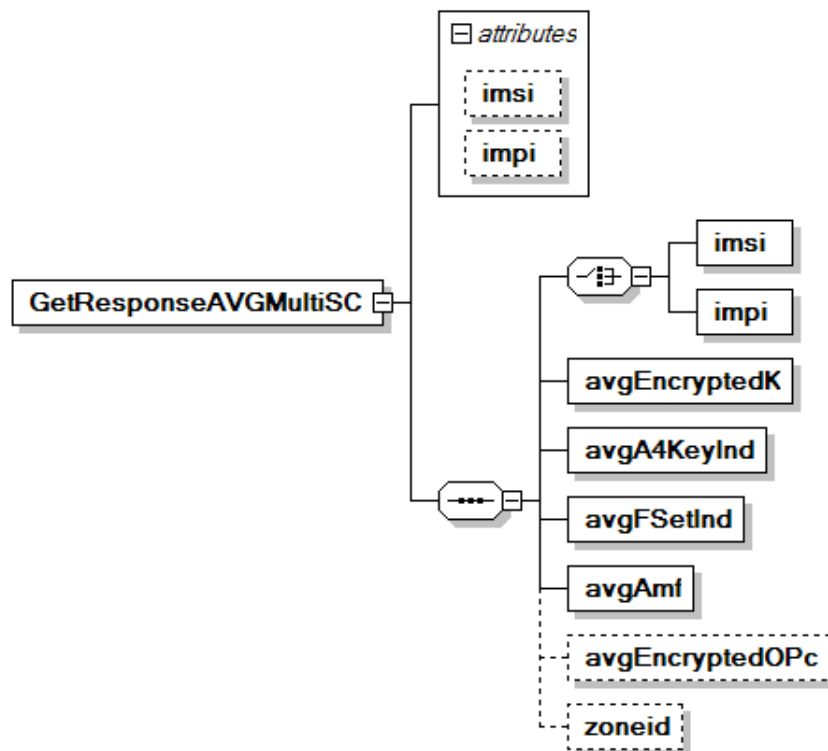


Figure 3 *Parameters in Get Response AVGMultiSC*

The following table covers the parameters that can be received in a GetAVGMultiSC response.



Table 9 *Get Response AVGMultiSC Parameters*

Parameter	Type	Occurrence	Description
imsi	String minLength value="6" maxLength value="15" Pattern value="[0-9]*"	Optional ⁽¹⁾	The IMSI number of the subscriber
impi	String minLength value="5" maxLength value="70"	Optional ⁽¹⁾	The IMPI number of the subscriber IMPI is only applicable to a MultiSC that subscribes to IMS services.
avgEncryptedK	String Pattern value="[0-9A-F]{32}"	Mandatory	Contains an encrypted key (K), used for authentication purposes of the MultiSC.
avgA4KeyInd	Integer minInclusive value="1" maxInclusive value="512"	Mandatory	Contains reference to the A4 key, used when encrypting the key (K) associated to the MultiSC. Defined through a configuration interface, refer to Reference [4].
avgFSetInd	Integer minInclusive value="0" maxInclusive value="15"	Mandatory	Contains reference to an algorithm, used when generating authentication vectors for the MultiSC. Defined through a configuration interface, refer to Reference [4].
avgAmf	String Pattern value="[0-9A-F]{4}"	Mandatory	Contains reference to the Authentication Management Field associated to the MultiSC.
avgEncryptedOPc	String (case-sensitive string) Pattern value="[0-9A-F]{32}"	Optional	This attribute is used for storing the encrypted value of the OPc.
zoneid	Integer minInclusive value="0" maxInclusive value="65535"	Optional	This attribute indicates the geographical area that the MultiSC belongs to.

(1) One of the parameters, impi, or imsi, must be included in the request.

4.3 Examples

Request Example

This section gives an example of a `GetAVGMultiSC` request, as shown in Example 6.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:hss="http://schemas.ericsson.com/ma/HSS/">
  <soapenv:Header>
    <cai3g:SessionId>150466530</cai3g:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3g:Get>
      <cai3g:MOType>AVGMultiSC@http://schemas.ericsson.com/ma/HSS/</cai3g:MOType>
      <cai3g:MOId>
        <!--You have a CHOICE of the next 2 items at this level-->
        <hss:imsi>123456</hss:imsi>
        <hss:impi>sip:user@ims.operator.org</hss:impi>
      </cai3g:MOId>
    </cai3g:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 6 Get AVGMultiSC Request Message

Response Example

This section gives an example of a GetAVGMultiSC response message, as shown in Example 7.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <soapenv:Header>
    <cai3g:SessionId>150466530</cai3g:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <ns2:GetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOAttributes>
        <ns:GetResponseAVGMultiSC imsi=123456
          xmlns:ns="http://schemas.ericsson.com/ma/HSS/">
          <ns:imsi>123456</ns:imsi>
          <ns:avgEncryptedK>1234567890ABCDEF1234567890ABCDEF</ns:avgEncryptedK>
          <ns:avgA4KeyInd>2</ns:avgA4KeyInd>
          <ns:avgFSetInd>1</ns:avgFSetInd>
          <ns:avgAmf>0001</ns:avgAmf>
          <ns:zoneid>128</ns:zoneid>
        </ns:GetResponseAVGMultiSC>
      </ns2:MOAttributes>
    </ns2:GetResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 7 Get AVGMultiSC Response Message

The AVG subscription with IMSI 123456 is printed.



5 Delete AVGMultiSC

This section covers the AVG command `DeleteAVGMultiSC`.

This command is always capable of removing an AVG service, even if a previous `Create` or `Delete` has failed.

MOType

`AVGMultiSC@http://schemas.ericsson.com/ma/HSS/`

5.1 Request Data

5.1.1 Parameters

MOId

The following table covers the parameters that can be used in a `DeleteAVGMultiSC` request.

Table 10 Delete AVGMultiSC MOId

Parameter	Type	Occurrence	Description
imsi	String minLength value="6" maxLength value="15" Pattern value="[0-9]*"	Mandatory	The International Mobile Subscriber Identity (IMSI) number of the subscriber
impi	String minLength value="5" maxLength value="70"	Optional ⁽¹⁾	The IMPI number of the subscriber IMPI is only applicable to a MultiSC that subscribes to IMS services.

(1) One of the parameters, impi, or imsi, must be included in the request.

MOAttributes



5.2 Examples

Request Example

This section gives an example of a DeleteAVGMultiSC request, as shown in Example 8.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:hss="http://schemas.ericsson.com/ma/HSS/">
  <soapenv:Header>
    <cai3g:SessionId>150466530</cai3g:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3g:Delete>
      <cai3g:MOType>AVGMultiSC@http://schemas.ericsson.com/ma/HSS/</cai3g:MOType>
      <cai3g:MOId>
        <!--You have a CHOICE of the next 2 items at this level-->
        <hss:imsi>123456</hss:imsi>
        <hss:impi>sip:user@ims.operator.org</hss:impi>
      </cai3g:MOId>
    </cai3g:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 8 Delete AVGMultiSC Request Message

The AVG subscription with IMSI 123456 is deleted.

Response Example

This section gives an example of a DeleteAVGMultiSC response message, as shown in Example 9.

```
<S:Envelope
  xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>150466530</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:DeleteResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOId>
        <hss:imsi xmlns:hss="http://schemas.ericsson.com/ma/HSS/">
          123456</hss:imsi>
        </ns2:MOId>
      </ns2:DeleteResponse>
    </S:Body>
</S:Envelope>
```

Example 9 Delete AVGMultiSC Response Message



6 Faults and Errors

The generic structure for fault responses is covered in *Generic CAI3G Interface 1.2*, Reference [2]. That document also covers the generic fault codes, which are applicable to all CAI3G operations.

This section covers the subordinate CAI3G errors. They can appear in the `errorcode` element in the error message.

Only AVG specific error codes are described in this section. These error codes are included in the Fault type `AVGFault`.

For generic error codes, and information about the different Fault types, see *CAI3G Implementation*, Reference [5].

6.1 Subordinate AVG Error Codes

The following table covers subordinate error codes for AVG commands over the CAI3G interface.

Table 11 Subordinate AVG Error Codes

Error Code	Error Message	Description	MO	Operation
12006	DATABASE LOCKED FOR BACKUP	This information varies depending on the actual error.	AVGMultiSC	C/S/D
12013	OPERATION FAILED, ROLLBACK HAS BEEN PERFORMED SUCCESSFULLY	This information varies depending on the actual error.	AVGMultiSC	C
12014	OPERATION FAILED, ROLLBACK WAS UNSUCCESSFUL	This information varies depending on the actual error.	AVGMultiSC	C
13001	SERVICE NOT DEFINED	This information varies depending on the actual error.	AVGMultiSC	S/G/D
13002	SERVICE ALREADY DEFINED	IMSI defined and AVG service exist	AVGMultiSC	C
13002	SERVICE ALREADY DEFINED	IMPI defined and AVG service exist	AVGMultiSC	C
13003	IDENTITY MISMATCH	IMPI derived from IMSI	AVGMultiSC	C
		IMSI changeover ongoing	AVGMultiSC	C
13006	INCONSISTENT DATA IN CUDB	This information varies depending on the actual error.	AVGMultiSC	C/S/G/D
14001	CONSTRAINT VIOLATION	Incompatible MO Attributes	AVGMultiSC	C/S



6.2 CAI3G Error Message Example

The following, shown in Example 10, is an example of a CAI3G error message.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>a829efcb5c0d4a57a359db1112b1fe26</cai3g:SessionId>
    <cai3g:TransactionId>22</cai3g:TransactionId>
    <cai3g:SequenceId>568498212</cai3g:SequenceId>
  </S:Header>
  <S:Body>
    <ns2:Fault xmlns:ns2="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:ns3="http://www.w3.org/2003/05/soap-envelope">
      <faultcode>ns2:Server</faultcode>
      <faultstring>This is a server fault</faultstring>
      <detail>
        <Cai3gFault:Cai3gFault xmlns="http://schemas.ericsson.com/cai3g1.2/"
xmlns:Cai3gFault="http://schemas.ericsson.com/cai3g1.2/">
          <faultcode>4006</faultcode>
          <faultreason>
            <reasonText>External error.</reasonText>
          </faultreason>
          <faultrole>MF</faultrole>
          <details>
            <AVGFault:AVGFault xmlns="http://schemas.ericsson.com/pg/1.0"
xmlns:AVGFault="http://schemas.ericsson.com/pg/1.0">
              <errorcode>13002</errorcode>
              <errormessage>SERVICE ALREADY DEFINED</errormessage>
              <errordetails>IMSI defined and AVG service exists -
[Processed by PG Node: CL24-PL-3]</errordetails>
            </AVGFault:AVGFault>
          </details>
        </Cai3gFault:Cai3gFault>
      </detail>
    </ns2:Fault>
  </S:Body>
</S:Envelope>
```

Example 10 CAI3G Error Message



Reference List

Ericsson Documents

- [1] *Glossary of Terms and Acronyms*, 0033-CSH 109 628 Uen
- [2] *Generic CAI3G Interface 1.2 Specification*, 2/155 19-FAY 302 0003 Uen
- [3] *Library Overview*, 18/1553-CSH 109 628 Uen
- [4] *Administration of User Data in AVG*, 1/198 17-APR 901 0320/2 Uen
- [5] *CAI3G Implementation*, 26/155 19-CSH 109 628 Uen