

# SAPC Provisioning over CAI3G

## Ericsson Dynamic Activation 1

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### INTERFACE DESCRIPTION

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# 1 Introduction

This document describes the interface exposed by Ericsson™ Dynamic Activation (EDA) for provisioning of SAPC data.

## 1.1 Purpose and Scope

This document describes the supported Customers Service Orders (CSOs) in the CAI3G interface which is used for provisioning of SAPC data in the layered and monolithic deployment.

CAI3G is an Ericsson propriety interface which enables provisioning of user and subscriber data in telecommunication and IT networks. It is a web service interface based on Simple Object Access Protocol (SOAP) 1.1. This document is not a tutorial of CAI3G, the document must be read together with the Generic CAI3G specification, which is described in *Generic CAI3G Interface 1.2*, Reference [2].

## 1.2 Target Group

The target groups for this document are as follows:

- System Integrator

## 1.3 Typographic Conventions

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

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

<b>C</b>	Create
<b>S</b>	Set
<b>G</b>	Get
<b>D</b>	Delete

## 1.4 Prerequisites

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

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

## 1.5 Namespaces

The following namespaces are referred to in this document:

- CAI3G 1.2 Namespace:

<http://schemas.ericsson.com/cai3g1.2/>

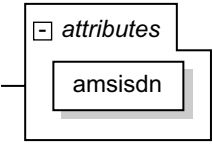


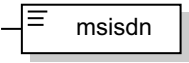
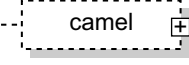
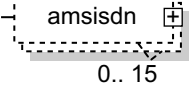
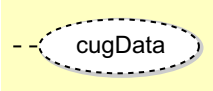
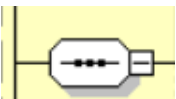
- SAPC Provisioning Namespace:

<http://schemas.ericsson.com/ma/SAPC/>

## 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.
	User-defined type 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.
	Sequence icon A list of elements, the sequence order must be followed.



## 1.7 Operations

See the following table for the operations, or MOs, and valid operations covered in this document.

*Table 2 SAPC Data Provisioning CSOs*

MO	Operations			
	Create	Get	Set	Delete
Subscription	x	x	x	x
Family	x	x	x	x
Dataplan	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/ma/`. 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, [Dynamic 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 MOId

MOId is an Extensible Markup Language (XML) fragment containing the MOId 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 MOId:



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

### *Example 1 Example of MOId*

The MOId 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 MOId 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 MOId. 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 SAPC Subscription

This section covers the `CreateSAPCSubscription` command.

`CreateSAPCSubscription` creates a SAPC subscription.

**Note:** If an error occurs when creating a SAPC subscriber, before reinitiating the SAPC Create command, a `DeleteSAPCSubscription` command needs to be executed to avoid data inconsistency.

### MOType

`SAPCSubscription@http://schemas.ericsson.com/ma/SAPC/`

## 2.1 Request Data

### 2.1.1 Parameters

#### MOId

Table 3 Create SAPC Subscription MOId

Parameter	Type	Occurrence	Description
pcSubscriberId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the subscriber

#### MOAttributes

The parameters that are used in the operation are shown in Figure 1 and Figure 2.



Figure 1 Create SAPC Subscription, Part 1

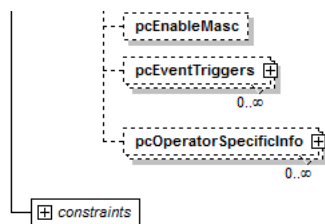


Figure 2 Create SAPC Subscription, Part 2

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

Table 4 Create SAPC Subscription Parameters

Parameter	Type	Occurrence	Description
pcSubscriberId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the subscriber.
pcTrafficId			
	pcTrafficId String maxLength value="255"	Optional (0-n)	The identifiers of the traffic.
pcSubscribedService			
	pcSubscribedService String maxLength value="255"	Optional (0-n)	The available services associated to the subscriber group.
pcBlacklistService			



Parameter		Type	Occurrence	Description
	pcBlacklistService	String maxLength value="255"	Optional (0-n)	The denied services associated to the subscriber group.
pcFamilyId		String minLength value="1" maxLength value="32"	Optional (0-1)	A family to which the subscriber belongs.
pcGroup				
	pcGroupId	String maxLength value="255"	Mandatory	The identifier of the subscriber group.
	pcGroupPriority	nonNegativeInteger	Optional (0-1)	A priority level assigned to the group.
	pcGroupStartDate	String maxLength value="255"	Optional (0-1)	The start date and time when the group applies for the subscriber.
	pcGroupEndDate	String maxLength value="255"	Optional (0-1)	The end date and time when the group applies for the subscriber.
pcNotificationData				
	pcNotificationSMS			
	pcNotificationSMS	String maxLength value="255"	Optional (0-n)	A type of mechanism used when sending notifications to the subscriber.
	pcNotificationEmail <sup>(1)</sup>			
	pcNotificationEmail	String maxLength value="255"	Optional (0-n)	The receipt email where the notification is sent to
pcLimitUsage		String maxLength value="2680"	Optional (0-1)	Limit use of group.  For example, {"reportingGroups": [{"name": "88888", "absoluteLimits": {"bidirVolume": 600, "time": 100}}]}
pcAccumulatedData <sup>(2)</sup>		String maxLength value="65536"	Optional (0-1)	The accumulated consumed usage per reporting group or independent of reporting group.  The following fields cannot be included in the JSON structure when provisioning this parameter: <ul style="list-style-type: none"> <li>isFromFamily</li> <li>sessionAccumulated</li> </ul>
pcSubscriberQualificationData				



Parameter		Type	Occurrence	Description
	pcQoSProfileId	String maxLength value="255"	Optional (0-1)	A type of a subject profile that returns an identity statically known by the PCRF.
	pcContentFilteringProfileId	String maxLength value="255"	Optional (0-1)	A content filtering profile identity.
	pcCustomerId	String maxLength value="255"	Optional (0-1)	The customers identity.
	pcRoutingProfileId <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	A routing profile identity.
	pcSubscriberChargingProfile			
	pcSubscriberChargingProfileId	String maxLength value="255"	Optional (0-1)	The subscribers charging profile identity.
	pcSubscriberChargingProfileName	String maxLength value="255"	Optional (0-1)	The subscribers charging profile name.
	pcBearerQoSProfileName			
	pcMaxBearerQoSProfileName	String maxLength value="255"	Optional (0-1)	The maximum bearer qos profile name.
	pcMinBearerQoSProfileName	String maxLength value="255"	Optional (0-1)	The minimum bearer qos profile name.
	pcServiceToRedirect <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	The services used to redirect to the server.
	pcGeneralProfileName <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	A general profile name.
	pcSubscriberChargingSystemName	String maxLength value="255"	Optional (0-1)	Subscriber Charging System Name
	pcMpsProfileName <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	The Multimedia Priority Services Profile to use. For example: PublicHealth
	pcSpId <sup>(1)</sup>	Integer minInclusive value="1" maxInclusive value="256"	Optional (0-1)	Subscriber Profile ID for RAT/Frequency Selection Priority. For example: 100
	pcPresenceAreaName	Integer minInclusive value="0" maxInclusive value="16777215"	Optional (0-1)	The name of a SRA (Sx-presence Reporting Area). SRA contains the configuration of each SRA assigned to subscribers or subscribers for reporting when the user enters or leaves the area. For example: 10000



Parameter		Type	Occurrence	Description
	pcPdnGwName	String maxLength value="255"	Optional (0-1)	The name of a PDN-GW.  For example: ggsnNodeHostname.ggsnNodeHostRealm.com
	pcEnableMasc	Boolean {true, false}	Optional (0-1)	If pcEnableMasc is true, the Ericsson Modem Assisted Service Classification (MASC) service is enabled.
	pcEventTriggers	Integer minInclusive value="0" maxInclusive value="23"	Optional (0-n)	Events subscribed by SAPC to receive a notification from the PCEF, BBERF, and SGSN-MME, when the subscribed events occur.
pcOperatorSpecificInfo				
	pcOperatorSpecificInfo	String maxLength value="255"	Optional (0-n)	List of specific subscriber information according to operator needs. This field can be used to extend the subscriber information with new information fields to be used in policy conditions. Each field consists of a field name and a corresponding value according to the syntax <name>:<value>  For example: age:34

(1) The parameter is not supported from monolithic SAPC 17A and above.

(2) The pcAccumulatedData is normally set by SAPC instead of provisioning. Updating this parameter value requires SAPC support and the correct JSON structure.

## 2.2

## Examples

### Request Example

This section gives an example of a CreateSAPCSubscription request message, as shown in Example 2.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>SAPCSubscription@http://schemas.ericsson.com/ma/SAPC/</cai3:MOType>
      <cai3:MOId>
        <sapc:pcSubscriberId>123456</sapc:pcSubscriberId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <sapc:CreateSAPCSubscription pcSubscriberId="123456">
          <sapc:pcSubscriberId>123456</sapc:pcSubscriberId>
          <sapc:pcTrafficId pcTrafficId="123456">
            <sapc:pcTrafficId>123456</sapc:pcTrafficId>
          </sapc:pcTrafficId>
          <sapc:pcSubscribedService pcSubscribedService="SubsService1">
            <sapc:pcSubscribedService>SubsService1</sapc:pcSubscribedService>
          </sapc:pcSubscribedService>
          <sapc:pcBlacklistService pcBlacklistService="BlkService1">
            <sapc:pcBlacklistService>BlkService1</sapc:pcBlacklistService>
          </sapc:pcBlacklistService>
          <sapc:pcFamilyId>Family1</sapc:pcFamilyId>
        </sapc:CreateSAPCSubscription>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```



```

<sapc:pcGroup pcGroupId="Group1">
  <sapc:pcGroupId>Group1</sapc:pcGroupId>
  <sapc:pcGroupPriority>1</sapc:pcGroupPriority>
  <sapc:pcGroupStartDate>01-01-2012T22:00:00</sapc:pcGroupStartDate>
  <sapc:pcGroupEndDate>01-01-2015</sapc:pcGroupEndDate>
</sapc:pcGroup>
<sapc:pcNotificationData>
  <sapc:pcNotificationSMS pcNotificationSMS="+34600123456">
    <sapc:pcNotificationSMS>+34600123456</sapc:pcNotificationSMS>
  </sapc:pcNotificationSMS>
  <sapc:pcNotificationEmail pcNotificationEmail="subscriber1@operator.
    network.com">
    <sapc:pcNotificationEmail>subscriber1@operator.network.com
    </sapc:pcNotificationEmail>
  </sapc:pcNotificationEmail>
</sapc:pcNotificationData>
<sapc:pcLimitUsage>{"reportingGroups":[{"name":",
  88888", "absoluteLimits":{"bidirVolume":600
  , "time":100}}]}
</sapc:pcLimitUsage>
<sapc:pcSubscriberQualificationData>
  <sapc:pcQoSProfileId>111</sapc:pcQoSProfileId>
  <sapc:pcContentFilteringProfileId>222
  </sapc:pcContentFilteringProfileId>
  <sapc:pcCustomerId>KKJ876JHL98</sapc:pcCustomerId>
  <sapc:pcRoutingProfileId>333</sapc:pcRoutingProfileId>
  <sapc:pcSubscriberChargingProfile>
    <sapc:pcSubscriberChargingProfileId>444
    </sapc:pcSubscriberChargingProfileId>
    <sapc:pcSubscriberChargingProfileName>SubsChargingProfile1
    </sapc:pcSubscriberChargingProfileName>
  </sapc:pcSubscriberChargingProfile>
  <sapc:pcBearerQoSProfileName>
    <sapc:pcMaxBearerQoSProfileName>QosProfileHigh
    </sapc:pcMaxBearerQoSProfileName>
    <sapc:pcMinBearerQoSProfileName>QosProfileLow
    </sapc:pcMinBearerQoSProfileName>
  </sapc:pcBearerQoSProfileName>
  <sapc:pcServiceToRedirect pcServiceToRedirect="Service1">
    <sapc:pcServiceToRedirect>Service1</sapc:pcServiceToRedirect>
  </sapc:pcServiceToRedirect>
  <sapc:pcGeneralProfileName>SCEFixedAccessProfile1
  </sapc:pcGeneralProfileName>
  <sapc:pcSpId>256</sapc:pcSpId>
  <sapc:pcPresenceAreaName>16777215</sapc:pcPresenceAreaName>
  <sapc:pcPdnGwName>KarlskronaGw1</sapc:pcPdnGwName>
</sapc:pcSubscriberQualificationData>
<sapc:pcEnableMasc>true</sapc:pcEnableMasc>
<sapc:pcEventTriggers pcEventTriggers="0">
  <sapc:pcEventTriggers>0</sapc:pcEventTriggers>
</sapc:pcEventTriggers>
<sapc:pcEventTriggers pcEventTriggers="23">
  <sapc:pcEventTriggers>23</sapc:pcEventTriggers>
</sapc:pcEventTriggers>
<sapc:pcOperatorSpecificInfo pcOperatorSpecificInfo="age:34">
  <sapc:pcOperatorSpecificInfo>age:34</sapc:pcOperatorSpecificInfo>
</sapc:CreateSAPCSubscription>
</cai3:MOAttributes>
</cai3:Create>
</soapenv:Body>
</soapenv:Envelope>

```

### Example 2 Create SAPC Subscription Request Message

A SAPC subscription with subscriberId identifier 123456 and trafficId identifier 123456 is initiated. Other SAPC service data is assigned to it.

### Response Example

This section gives an example of a CreateSAPCSubscription 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>d78e0fd9ff6c436984bd4d998633487a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:CreateResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOId>
        <sapc:pcSubscriberId xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">123456
        </sapc:pcSubscriberId>
      </ns2:MOId>
    </ns2:CreateResponse>
  </S:Body>
</S:Envelope>
```

**Example 3**    *Create SAPC Subscription Response Message*







## 3 Get SAPC Subscription

This section covers the `GetSAPCSubscription` command.

`GetSAPCSubscription` retrieves a SAPC subscription.

### **MOType**

`SAPCSubscription@http://schemas.ericsson.com/ma/SAPC/`

## 3.1 Request Data

### 3.1.1 Parameters

The following table covers the parameters that can be received in a `GetSAPCSubscription` request.

*Table 5 Get SAPC Subscription Parameters*

Parameter	Type	Occurrence	Description
pcSubscriberId	String minLength value="1" maxLength value="32"	Mandatory	The administrative identifier of the subscriber.

## 3.2 Response Data

### **MOId**

N/A

### **MOAttributes**

The parameters that are used in the operation are shown in Figure 3 and Figure 4.

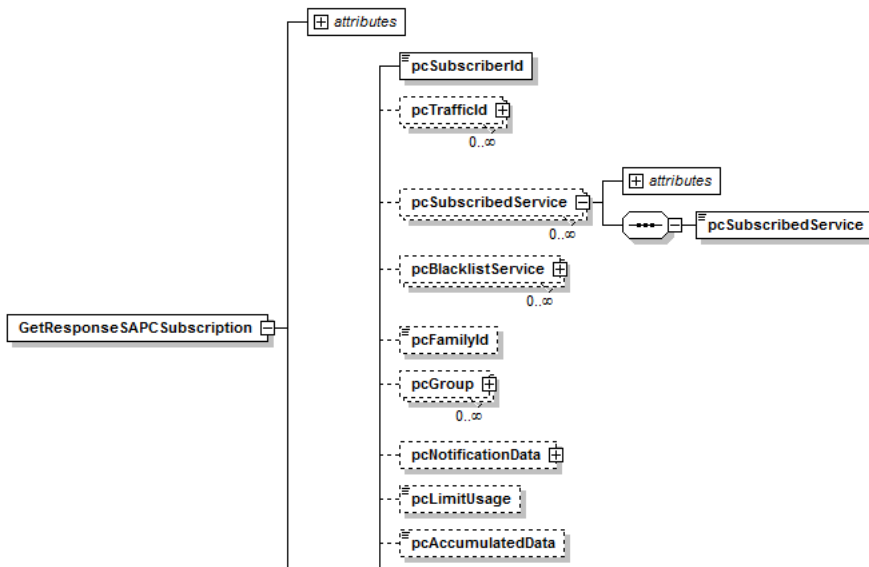


Figure 3 Get SAPC Subscription, Part 1

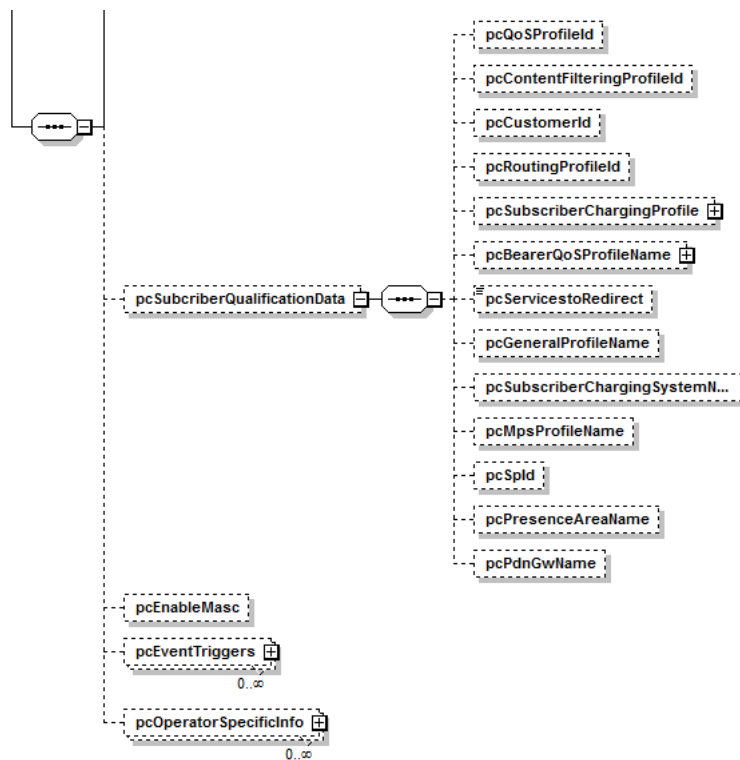


Figure 4 Get SAPC Subscription, Part 2

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



Table 6 Get SAPC Subscription Parameters

Parameter		Type	Occurrence	Description	
pcSubscriberId		String minLength value="1"  maxLength value="32"	Mandatory	The administrative identifier of the subscriber.	
pcTrafficId					
	pcTrafficId	String  maxLength value="255"	Optional (0-n)	The Traffic identifiers	
pcSubscribedService					
	pcSubscribedService	String  maxLength value="255"	Optional (0-n)	The available services associated to the subscriber group.	
pcBlacklistService					
	pcBlacklistService	String  maxLength value="255"	Optional (0-n)	The denied services associated to the subscriber group.	
pcFamilyId		String minLength value="1"  maxLength value="32"	Optional (0-1)	A family to which the subscriber belongs.	
pcGroup					
	pcGroupId	String  maxLength value="255"	Mandatory	Identifier of the subscriber group.	
	pcGroupPriority	nonNegativeInteger	Optional (0-1)	A priority level assigned to the group.	
	pcGroupStartDate	String  maxLength value="255"	Optional (0-1)	The start date and time when the group applies for the subscriber.	
	pcGroupEndDate	String  maxLength value="255"	Optional (0-1)	The end date and time when the group applies for the subscriber.	
pcNotificationData					
	pcNotificationSMS				
		pcNotificationSMS	String  maxLength value="255"	Optional (0-n)	A type of mechanism used when sending notifications to the subscriber.
	pcNotificationEmail <sup>(1)</sup>				
		pcNotificationEmail	String  maxLength value="255"	Optional (0-n)	The receipt email where the notification is sent to



Parameter	Type	Occurrence	Description
pcLimitUsage	String maxLength value="2680"	Optional (0-1)	Limit use of group.  For example, {"reportingGroups": [{"name": "88888", "absoluteLimits": {"bidirVolume": 600, "time": 100}}]}
pcAccumulatedData <sup>(2)</sup>	String maxLength value="65536"	Optional (0-1)	The accumulated consumed usage per reporting group or independent of reporting group. <sup>(2)</sup>
pcSubscriberQualificationData			



Parameter		Type	Occurrence	Description
	pcQoSProfileId <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	A type of a subject profile that returns an identity statically known by the PCRF.
	pcContentFilteringProfileId	String maxLength value="255"	Optional (0-1)	A content filtering profile identity.
	pcCustomerId	String maxLength value="255"	Optional (0-1)	The customers identity.
	pcRoutingProfileId <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	A routing profile identity.
	pcSubscriberChargingProfile			
		pcSubscriberChargingProfileId	String maxLength value="255"	Optional (0-1) The subscribers charging profile identity.
		pcSubscriberChargingProfileName <sup>(1)</sup>	String maxLength value="255"	Optional (0-1) The subscribers charging profile name.
	pcBearerQoSProfileName			
		pcMaxBearerQoSProfileName	String maxLength value="255"	Optional (0-1) The maximum bearer qos profile name.
		pcMinBearerQoSProfileName	String maxLength value="255"	Optional (0-1) The minimum bearer qos profile name.
	pcServicesToRedirect <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	The services used to redirect to the server.
	pcGeneralProfileName <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	A general profile name.
	pcSubscriberChargingSystemName	String maxLength value="255"	Optional (0-1)	Subscriber Charging System Name
	pcMpsProfileName <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	The Multimedia Priority Services Profile to use. For example: PublicHealth
	pcSpId <sup>(1)</sup>	Integer minInclusive value="1" maxInclusive value="256"	Optional (0-1)	Subscriber Profile ID for RAT/Frequency Selection Priority. For example: 100
	pcPresenceAreaName	Integer minInclusive value="0" maxInclusive value="16777215"	Optional (0-1)	The name of a SRA (Sx-presence Reporting Area). SRA contains the configuration of each SRA assigned to subscribers or subscribers for reporting when the user enters or leaves the area. For example: 10000



Parameter		Type	Occurrence	Description
	pcPdnGwName <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	The name of a PDN-GW.  For example: ggsnNodeHostName.ggsnNodeHostRealm.com
pcEnableMasc		Boolean {true, false}	Optional (0-1)	If pcEnableMasc is true, the Ericsson Modem Assisted Service Classification (MASC) service is enabled.
pcEventTriggers		Integer minInclusive value="0"  maxInclusive value="23"	Optional (0-n)	Events subscribed by SAPC to receive a notification from the PCEF, BBERF, and SGSN-MME, when the subscribed events occur.
pcOperatorSpecificInfo				
	pcOperatorSpecificInfo	String maxLength value="255"	Optional (0-n)	List of specific subscriber information according to operator needs. This field can be used to extend the subscriber information with new information fields to be used in policy conditions. Each field consists of a field name and a corresponding value according to the syntax <name>:<value>  For example: age:34

(1) The parameter is not supported from monolithic SAPC 17A and above.

(2) The pcAccumulatedData is normally set by SAPC instead of provisioning. Updating this parameter value requires SAPC support and the correct JSON structure.

## 3.3 Examples

### Request Example

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

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>SAPCSubscription@http://schemas.ericsson.com/ma/SAPC/
      </cai3:MOType>
      <cai3:MOId>
        <sapc:pcSubscriberId>123456</sapc:pcSubscriberId>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

**Example 4** Get SAPC Subscription Request Message



## Response Example

This section gives an example of a GetSAPCSubscription 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>d78e0fd9ff6c436984bd4d998633487a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:GetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOAttributes>
        <ns:GetResponsesAPCSubscription pcSubscriberId="123456"
          xmlns:ns="http://schemas.ericsson.com/ma/SAPC/">
          <ns:pcSubscriberId>123456</ns:pcSubscriberId>
          <ns:pcTrafficId pcTrafficId="123456">
            <ns:pcTrafficId>123456</ns:pcTrafficId>
          </ns:pcTrafficId>
          <ns:pcSubscribedService pcSubscribedService="SubsService1">
            <ns:pcSubscribedService>SubsService1</ns:pcSubscribedService>
          </ns:pcSubscribedService>
          <ns:pcSubscribedService pcSubscribedService="SubsService2">
            <ns:pcSubscribedService>SubsService2</ns:pcSubscribedService>
          </ns:pcSubscribedService>
          <ns:pcBlacklistService pcBlacklistService="BlkService1">
            <ns:pcBlacklistService>BlkService1</ns:pcBlacklistService>
          </ns:pcBlacklistService>
          <ns:pcFamilyId>Family1</ns:pcFamilyId>
          <ns:pcGroup pcGroupId="Group1">
            <ns:pcGroupId>Group1</ns:pcGroupId>
            <ns:pcGroupPriority>1</ns:pcGroupPriority>
            <ns:pcGroupStartDate>01-01-2012T22:00:00</ns:pcGroupStartDate>
            <ns:pcGroupEndDate>01-01-2015</ns:pcGroupEndDate>
          </ns:pcGroup>
          <ns:pcGroup pcGroupId="Group2">
            <ns:pcGroupId>Group2</ns:pcGroupId>
            <ns:pcGroupPriority>2</ns:pcGroupPriority>
            <ns:pcGroupStartDate>01-01-2012T22:00:00</ns:pcGroupStartDate>
            <ns:pcGroupEndDate>01-01-2015</ns:pcGroupEndDate>
          </ns:pcGroup>
          <ns:pcNotificationData>
            <ns:pcNotificationSMS pcNotificationSMS="+34600123456">
              <ns:pcNotificationSMS>+34600123456</ns:pcNotificationSMS>
            </ns:pcNotificationSMS>
            <ns:pcNotificationEmail pcNotificationEmail=
              "subscriber1@operator.network.com">
              <ns:pcNotificationEmail>subscriber1@operator.network.com
            </ns:pcNotificationEmail>
            </ns:pcNotificationData>
          <ns:pcLimitUsage>{"reportingGroups":[{"name":
            "88888","absoluteLimits":{"bidirVolume":
            600,"time":100}}]}</ns:pcLimitUsage>
          <ns:pcAccumulatedData>{"reportingGroups":[{"name":
            "88888","absoluteLimits":{"bidirVolume":
            600,"time":100}}]}</ns:pcAccumulatedData>
          <ns:pcSubscriberQualificationData>
            <ns:pcQoSProfileId>111</ns:pcQoSProfileId>
            <ns:pcContentFilteringProfileId>222</ns:pcContentFilteringProfileId>
            <ns:pcCustomerId>KKJ876JHL98</ns:pcCustomerId>
            <ns:pcRoutingProfileId>333</ns:pcRoutingProfileId>
            <ns:pcSubscriberChargingProfile>
              <ns:pcSubscriberChargingProfileId>444
            </ns:pcSubscriberChargingProfileId>
            <ns:pcSubscriberChargingProfileName>SubsChargingProfile1
            </ns:pcSubscriberChargingProfileName>
            </ns:pcSubscriberChargingProfile>
            <ns:pcBearerQoSProfileName>
              <ns:pcMaxBearerQoSProfileName>QosProfileHigh
            </ns:pcMaxBearerQoSProfileName>
              <ns:pcMinBearerQoSProfileName>QosProfileLow
            </ns:pcMinBearerQoSProfileName>
            </ns:pcBearerQoSProfileName>
            <ns:pcServiceToRedirect pcServiceToRedirect="Service1">
```



### Example 5 Get SAPC Subscription Response Message

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## 4 Set SAPC Subscription

This section covers the `SetSubscription` command.

`SetSAPCSubscription` modifies a SAPC subscription.

### MOType

`SAPCSubscription@http://schemas.ericsson.com/ma/SAPC/`

### 4.1 Request Data

#### 4.1.1 Parameters

##### MOId

*Table 7 Set SAPC Subscription MOId*

Parameter	Type	Occurrence	Description
pcSubscriberId	String minLength value="1" maxLength value="32"	Mandatory	The administrative identifier of the subscriber.

##### MOAttributes

The parameters that are used in the operation are shown in Figure 5 and Figure 6.



Figure 5 Set SAPC Subscription, Part 1

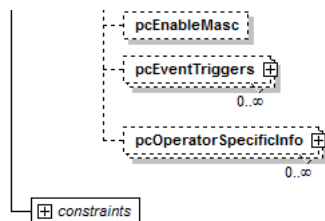


Figure 6 Set SAPC Subscription, Part 2

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

Table 8 Set SAPC Subscription Parameters

Parameter	Type	Occurrence	Description
pcTrafficId			
pcTrafficId	String maxLength value="255"	Optional (0-n)	The Traffic identifiers.
pcSubscribedService			
pcSubscribedService	String maxLength value="255"	Optional (0-n)	The available services associated to the subscriber group.
pcBlacklistService			
pcBlacklistService	String maxLength value="255"	Optional (0-n)	The denied services associated to the subscriber group.



Parameter		Type	Occurrence	Description
pcFamilyId		String minLength value="1"  maxLength value="32"	Optional (0-1)	A family to which the subscriber belongs.
pcGroup				
	pcGroupId	String maxLength value="255"	Optional (0-1)	The identifier of the subscriber group.
	pcGroupPriority	nonNegativeInteger	Optional (0-1)	A priority level assigned to the group.
	pcGroupStartDate	String maxLength	Optional (0-1)	The start date and time when the group applies for the subscriber.
	pcGroupEndDate	String maxLength value="255"	Optional (0-1)	The end date and time when the group applies for the subscriber.
pcNotificationData				
	pcNotificationSMS			
		pcNotificationSMS	String maxLength value="255"	Optional (0-n)  A type of mechanism used when sending notifications to the subscriber.
	pcNotificationEmail <sup>(1)</sup>			
		pcNotificationEmail	String maxLength value="255"	Optional (0-n)  The receipt email where the notification is sent to.
pcLimitUsage		String maxLength value="2680"	Optional (0-1)	Limit use of group.  For example, {"reportingGroups":[{"name":"88888","absoluteLimits":{"bidirVolume":600,"time":100}}]}  The Multimedia Priority Services Profile to use.  For example: PublicHealth
pcAccumulatedData <sup>(2)</sup>		String maxLength value="65536"	Optional (0-1)	The accumulated consumed usage per reporting group or independent of reporting group. <sup>(2)</sup>  The following fields cannot be included in the JSON structure when provisioning this parameter: <ul style="list-style-type: none"><li>isFromFamily</li><li>sessionAccumulated</li></ul>
pcSubscriberQualificationData				



Parameter		Type	Occurrence	Description	
	pcQoSProfileId <sup>(1)</sup>		String maxLength value="255"	Optional (0-1)	A type of a subject profile that returns an identity statically known by the PCRF.
	pcContentFilteringProfileId		String maxLength value="255"	Optional (0-1)	A content filtering profile identity.
	pcCustomerId		String maxLength value="255"	Optional (0-1)	The customers identity.
	pcRoutingProfileId <sup>(1)</sup>		String maxLength value="255"	Optional (0-1)	A routing profile identity.
	pcSubscriberChargingProfile				
		pcSubscriberChargingProfileId	String maxLength value="255"	Optional (0-1)	The subscribers charging profile identity.
		pcSubscriberChargingProfileName	String maxLength value="255"	Optional (0-1)	The subscribers charging profile name.
	pcBearerQoSProfileName				
		pcMaxBearerQoSProfileName	String maxLength value="255"	Optional (0-1)	The maximum bearer qos profile name.
		pcMinBearerQoSProfileName	String maxLength value="255"	Optional (0-1)	The minimum bearer qos profile name.
	pcServicesToRedirect <sup>(1)</sup>		String maxLength value="255"	Optional (0-1)	The services used to redirect to the server.
	pcGeneralProfileName <sup>(1)</sup>		String maxLength value="255"	Optional (0-1)	A general profile name.
	pcSubscriberChargingSystemName		String maxLength value="255"	Optional (0-1)	Subscriber Charging System Name
	pcMpsProfileName <sup>(1)</sup>		String maxLength value="255"	Optional (0-1)	The Multimedia Priority Services Profile to use.  For example: PublicHealth
	pcSpld <sup>(1)</sup>		Integer minInclusive value="1"  maxInclusive value="256"	Optional (0-1)	Subscriber Profile ID for RAT/Frequency Selection Priority.  For example: 100
	pcPresenceAreaName		Integer minInclusive value="0"  maxInclusive value="16777215"	Optional (0-1)	The name of a SRA (Sx-presence Reporting Area). SRA contains the configuration of each SRA assigned to subscribers or subscribers for reporting when the user enters or leaves the area.  For example: 10000



Parameter		Type	Occurrence	Description
	pcPdnGwName <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	The name of a PDN-GW.  For example: ggsnNodeHost name.ggsnNodeHostRealm. com
pcEnableMasc		Boolean {true, false}	Optional (0-1)	If pcEnableMasc is true, the Ericsson Modem Assisted Service Classification (MASC) service is enabled.
pcEventTriggers		Integer minInclusive value="0"  maxInclusive value="23"	Optional (0-n)	Events subscribed by SAPC to receive a notification from the PCEF, BBERF, and SGSN-MME, when the subscribed events occur.
pcOperatorSpecificInfo				
	pcOperatorSpecifi cInfo	String maxLength value="255"	Optional (0-n)	List of specific subscriber information according to operator needs. This field can be used to extend the subscriber information with new information fields to be used in policy conditions. Each field consists of a field name and a corresponding value according to the syntax <name>:<value>  For example: age:34

(1) The parameter is not supported from monolithic SAPC 17A and above.

(2) The pcAccumulatedData is normally set by SAPC instead of provisioning. Updating this parameter value requires SAPC support and the correct JSON structure.

## 4.2 Examples

### Request Example

This section gives an example of a SetSAPCSubscription request message, as shown in Example 6.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>SAPCSubscription@http://schemas.ericsson.com/ma/SAPC/</cai3:MOType>
      <cai3:MOId>
        <sapc:pcSubscriberId>123456</sapc:pcSubscriberId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <sapc:SetSAPCSubscription pcSubscriberId="123456">
          <sapc:pcTrafficId pcTrafficId="123456">
            <sapc:pcTrafficId>123456</sapc:pcTrafficId>
          </sapc:pcTrafficId>
          <sapc:pcSubscribedService pcSubscribedService="SubsService1"
            xsi:nil="true"/>
          <sapc:pcBlacklistService pcBlacklistService="BlkService1">
            <sapc:pcBlacklistService>BlkService1</sapc:pcBlacklistService>
          </sapc:pcBlacklistService>
        </sapc:SetSAPCSubscription>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```



```

<sapc:pcFamilyId>Family1</sapc:pcFamilyId>
<sapc:pcGroup pcGroupId="Group1">
  <sapc:pcGroupId>Group1</sapc:pcGroupId>
  <sapc:pcGroupPriority>1</sapc:pcGroupPriority>
  <sapc:pcGroupStartDate>01-01-2012T22:00:00</sapc:pcGroupStartDate>
  <sapc:pcGroupEndDate>01-01-2015</sapc:pcGroupEndDate>
</sapc:pcGroup>
<sapc:pcNotificationData>
  <sapc:pcNotificationSMS pcNotificationSMS="+34600123456" xsi:nil="true"/>
  <sapc:pcNotificationEmail pcNotificationEmail="subscriber1@operator.
    network.com">
    <sapc:pcNotificationEmail>subscriber1@operator.network.com
  </sapc:pcNotificationEmail>
  </sapc:pcNotificationEmail>
</sapc:pcNotificationData>
<sapc:pcLimitUsage>{"reportingGroups":[{"name":
  "88888",
  "absoluteLimits":{"bidirVolume":600,"
    time":100}}]}
</sapc:pcLimitUsage>
<sapc:pcSubscriberQualificationData>
  <sapc:pcQoSProfileId>111</sapc:pcQoSProfileId>
  <sapc:pcContentFilteringProfileId>222</sapc:pcContentFilteringProfileId>
  <sapc:pcCustomerId>KKJ876JHL98</sapc:pcCustomerId>
  <sapc:pcRoutingProfileId>333</sapc:pcRoutingProfileId>
  <sapc:pcSubscriberChargingProfile>
    <sapc:pcSubscriberChargingProfileId>444
  </sapc:pcSubscriberChargingProfileId>
    <sapc:pcSubscriberChargingProfileName>SubsChargingProfile1
  </sapc:pcSubscriberChargingProfileName>
  </sapc:pcSubscriberChargingProfile>
  <sapc:pcBearerQoSProfileName>
    <sapc:pcMaxBearerQoSProfileName>QoSProfileHigh
  </sapc:pcMaxBearerQoSProfileName>
    <sapc:pcMinBearerQoSProfileName>QoSProfileLow
  </sapc:pcMinBearerQoSProfileName>
  </sapc:pcBearerQoSProfileName>
  <sapc:pcServiceToRedirect pcServiceToRedirect="Service1">
    <sapc:pcServiceToRedirect>Service1</sapc:pcServiceToRedirect>
  </sapc:pcServiceToRedirect>
  <sapc:pcGeneralProfileName>SCEFixedAccessProfile1
  </sapc:pcGeneralProfileName>
  <sapc:pcSpId>1</sapc:pcSpId>
  <sapc:pcPresenceAreaName>0</sapc:pcPresenceAreaName>
  <sapc:pcPdnGwName>KarlskronaGw1</sapc:pcPdnGwName>
</sapc:pcSubscriberQualificationData>
<sapc:pcEnableMasc>false</sapc:pcEnableMasc>
<sapc:pcEventTriggers pcEventTriggers="0">
  <sapc:pcEventTriggers>1</sapc:pcEventTriggers>
</sapc:pcEventTriggers>
<sapc:pcOperatorSpecificInfo pcOperatorSpecificInfo="age:34">
  <sapc:pcOperatorSpecificInfo>age:35</sapc:pcOperatorSpecificInfo>
</sapc:SetSAPCSubscription>
</cai3:MOAttributes>
</cai3:Set>
</soapenv:Body>
</soapenv:Envelope>

```

### Example 6 Set SAPC Subscription Request Message

The SAPC subscription with `subscriberId` identifier 123456 has been updated with a new `trafficId` identifier 123456. Other SAPC service data is set to it.

### Response Example

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



```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:SetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOId>
        <sapc:pcSubscriberId xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">123456
        </sapc:pcSubscriberId>
      </ns2:MOId>
    </ns2:SetResponse>
  </S:Body>
</S:Envelope>
```

**Example 7**    *Set SAPC Subscription Response Message*







## 5 Delete SAPC Subscription

This section covers the command `DeleteSAPCSubscription`.

`DeleteSAPCSubscription` deletes a SAPC subscription.

This command is always capable of removing a SAPC subscription, even if a previous `CreateSAPCSubscription` or `DeleteSAPCSubscription` has failed.

### MOType

`SAPCSubscription@http://schemas.ericsson.com/ma/SAPC/`

## 5.1 Request Data

### 5.1.1 Parameters

#### MOId

*Table 9 Delete SAPC Subscription MOId*

Parameter	Type	Occurrence	Description
pcSubscriberId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the subscriber

#### MOAttributes

N/A

## 5.2 Examples

### Request Example

This section gives an example of a `DeleteSAPCSubscription` request message, as shown in Example 8.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>SAPCSubscription@http://schemas.ericsson.com/ma/SAPC/
    </cai3:MOType>
    <cai3:MOId>
      <sapc:pcSubscriberId>123456</sapc:pcSubscriberId>
    </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

### *Example 8 Delete SAPC Subscription Request Message*

The SAPC subscription with subscriberId identifier 123456 is deleted.

### **Response Example**

This section gives an example of a DeleteSAPCSubscription 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>d78e0fd9ff6c436984bd4d998633487a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:DeleteResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOId>
        <sapc:pcSubscriberId xmlns:sapc=
          "http://schemas.ericsson.com/ma/SAPC/">123456
        </sapc:pcSubscriberId>
      </ns2:MOId>
    </ns2:DeleteResponse>
  </S:Body>
</S:Envelope>
```

### *Example 9 Delete SAPC Subscription Response Message*



## 6 Create SAPC Family

This section covers the command `CreateSAPCFamily`.

`CreateSAPCFamily` creates a SAPC family.

### MOType

`SAPCFamily@http://schemas.ericsson.com/ma/SAPC/`

## 6.1 Request Data

### 6.1.1 Parameters

#### MOId

*Table 10 Create SAPC Family MOId*

Parameter	Type	Occurrence	Description
pcFamilyId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the family

#### MOAttributes

The parameters that are used in the operation are shown in Figure 7.

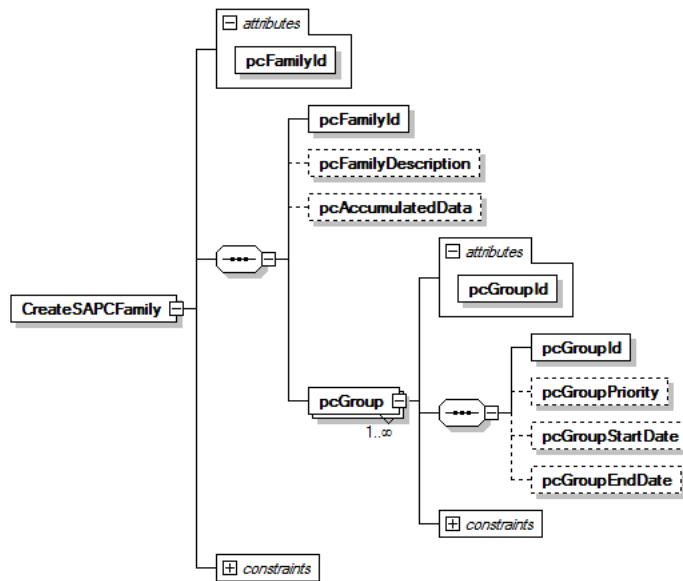


Figure 7 Create SAPC Family

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

Table 11 Create SAPC Family Parameters

Parameter	Type	Occurrence	Description
pcFamilyId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the family.
pcFamilyDescription	String maxLength value="255"	Optional (0-1)	The description of the family.
pcAccumulatedData <sup>(2)</sup>	String maxLength value="65536"	Optional (0-1)	The accumulated consumed usage per reporting group or independent of reporting group. <sup>(2)</sup>  Field <code>sessionAccumulated</code> cannot be included in the JSON structure when provisioning <code>pcAccumulatedData</code> :
pcGroup			



Parameter	Type	Occurrence	Description
pcGroupId	String maxLength value="255"	Mandatory	The identifier of the subscriber group.
pcGroupPriority	nonNegativeInteger	Optional (0-1)	The priority level assigned to the group.
pcGroupStartDate	String maxLength value="255"	Optional (0-1)	Start date and time when the group applies for the subscriber.
pcGroupEndDate	String maxLength value="255"	Optional (0-1)	End date and time when the group applies for the subscriber.

(1) The parameter is not supported from monolithic SAPC 17A and above.

(2) The pcAccumulatedData is normally set by SAPC instead of provisioning. Updating this parameter value requires SAPC support and the correct JSON structure.

## 6.2

## Examples

### Request Example

This section gives an example of a CreateSAPCFamily request message, as shown in Example 10.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
  xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>c7943219b711454ca81667704f463ac1</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>SAPCFamily@http://schemas.ericsson.com/ma/SAPC/</cai3:MOType>
      <cai3:MOId>
        <sapc:pcFamilyId>family1234</sapc:pcFamilyId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <sapc:CreateSAPCFamily pcFamilyId="family1234">
          <sapc:pcFamilyId>family1234</sapc:pcFamilyId>
          <sapc:pcFamilyDescription>ExampleFamily</sapc:pcFamilyDescription>
          <sapc:pcAccumulatedData>
            {"reportingGroups":[{"name":"ExampleFamily","isFromFamily":"yes",
              "selected":"yes","subscriberGroupName":"","subscriptionDate":
                "07-09-2012T10:08:53","validityTime":2591882}],"version":"2.0"}
          </sapc:pcAccumulatedData>
          <sapc:pcGroup pcGroupId="group_1">
            <sapc:pcGroupId>group_1</sapc:pcGroupId>
            <sapc:pcGroupPriority>1</sapc:pcGroupPriority>
            <sapc:pcGroupStartDate>01-01-2015</sapc:pcGroupStartDate>
            <sapc:pcGroupEndDate>02-01-2015</sapc:pcGroupEndDate>
          </sapc:pcGroup>
        </sapc:CreateSAPCFamily>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

**Example 10** Create SAPC Family Request Message



A SAPC family with `familyId` identifier `family1234`. Other SAPC service data is assigned to it.

### Response Example

This section gives an example of a `CreateSAPCFamily` response message, as shown in Example 11.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>c7943219b711454ca81667704f463ac1</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:CreateResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOId>
        <sapc:pcFamilyId xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
          family1234</sapc:pcFamilyId>
        </ns2:MOId>
      </ns2:CreateResponse>
    </S:Body>
  </S:Envelope>
```

#### *Example 11 Create SAPC Family Response Message*

## 7 Get SAPC Family

This section covers the command `GetSAPCFamily`.

`GetSAPCFamily` retrieves a SAPC family.

### MOType

`SAPCFamily@http://schemas.ericsson.com/ma/SAPC/`

### 7.1 Request Data

#### 7.1.1 Parameters

The following table covers the parameters that can be received in a `GetSAPCFamily` request.

*Table 12 Get SAPC Family Parameters*

Parameter	Type	Occurrence	Description
pcFamilyId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the family

### 7.2 Response Data

#### MOId

N/A

#### MOAttributes

The parameters that are used in the operation are shown in Figure 8.

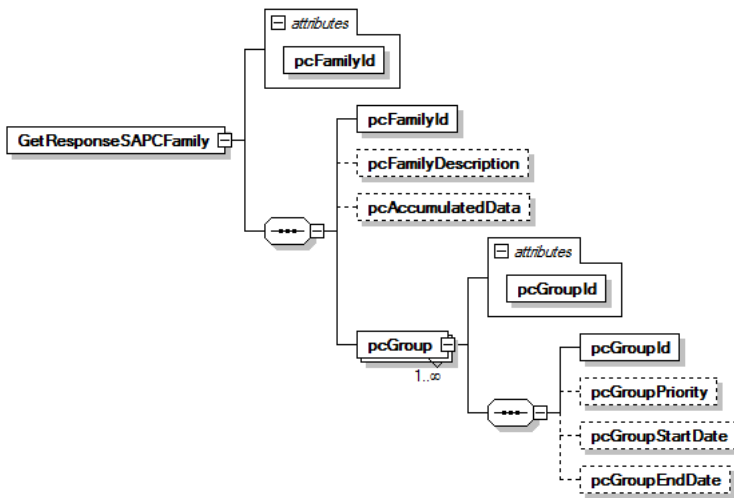


Figure 8 Get SAPC Family

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

Table 13 Get SAPC Family Parameters

Parameter	Type	Occurrence	Description
pcFamilyId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the family.
pcFamilyDescription <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	The description of a family.
pcAccumulatedData <sup>(2)</sup>	String maxLength value="65536"	Optional (0-1)	The accumulated consumed usage per reporting group or independent of reporting group.  Field sessionAccumulated cannot be included in the JSON structure when provisioning pcAccumulatedData:
pcGroup			
pcGroupId	String maxLength value="255"	Mandatory	The identifier of the subscriber group.
pcGroupPriority	nonNegativeInteger	Optional (0-1)	The priority level assigned to the group.
pcGroupStartDate	String maxLength value="255"	Optional (0-1)	Start date and time when the group applies for the subscriber.
pcGroupEndDate	String maxLength value="255"	Optional (0-1)	End date and time when the group applies for the subscriber.

(1) The parameter is not supported from monolithic SAPC 17A and above.

(2) The pcAccumulatedData is normally set by SAPC instead of provisioning. Updating this parameter value requires SAPC support and the correct JSON structure.





## 7.3

## Examples

### Request Example

This section gives an example of a `GetSAPCFamily` request message, as shown in Example 12.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>SAPCSubscription@http://schemas.ericsson.com/ma/SAPC/
    </cai3:MOType>
    <cai3:MOId>
      <sapc:pcSubscriberId>123456</sapc:pcSubscriberId>
    </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

#### Example 12 *Get SAPC Subscription Request Message*

### Response Example

This section gives an example of a `GetSAPCFamily` response message, as shown in Example 13.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>7523c47d49ec4c43a5e598bc3e2302e2</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:GetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOAttributes>
        <ns:GetResponseSAPCFamily pcFamilyId="family1234"
          xmlns:ns="http://schemas.ericsson.com/ma/SAPC/">
          <ns:pcFamilyId>family1234</ns:pcFamilyId>
          <ns:pcFamilyDescription>ExampleFamily</ns:pcFamilyDescription>
          <ns:pcAccumulatedData>
            {"reportingGroups":[{"name":"ExampleFamily","isFromFamily":"yes","selected":
              "yes","subscriberGroupName":"","subscriptionDate":"07-09-2012T10:08:53",
              "validityTime":2591882}],"version":"2.0"}</ns:pcAccumulatedData>
          <ns:pcGroup pcGroupId="group_1">
            <ns:pcGroupId>group_1</ns:pcGroupId>
            <ns:pcGroupPriority>1</ns:pcGroupPriority>
            <ns:pcGroupStartDate>01-01-2015</ns:pcGroupStartDate>
            <ns:pcGroupEndDate>02-01-2015</ns:pcGroupEndDate>
          </ns:pcGroup>
        </ns:GetResponseSAPCFamily>
      </ns2:MOAttributes>
    </ns2:GetResponse>
  </S:Body>
</S:Envelope>
```

#### Example 13 *Get SAPC Family Response Message*

The SAPC family with `familyId` identifier `family1234` is printed.





## 8 Set SAPC Family

This section covers the command `SetSAPCFamily`.

`SetSAPCFamily` modifies a SAPC family.

### MOType

`SAPCFamily@http://schemas.ericsson.com/ma/SAPC/`

## 8.1 Request Data

### 8.1.1 Parameters

#### MOId

*Table 14 Set SAPC Family MOId*

Parameter	Type	Occurrence	Description
pcFamilyId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the family

#### MOAttributes

The parameters that are used in the operation are shown in Figure 9.

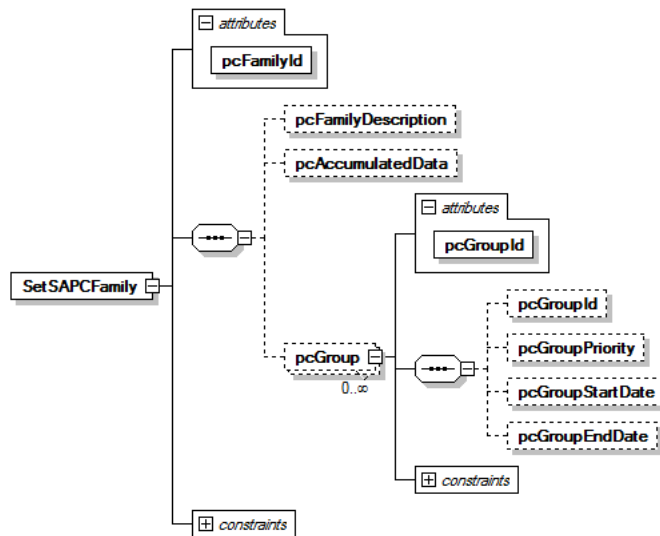


Figure 9 Set SAPC Family

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

Table 15 Set SAPC Family Parameters

Parameter	Type	Occurrence	Description
pcFamilyId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the family.
pcFamilyDescription <sup>(1)</sup>	String maxLength value="255"	Optional (0-1)	The description of the family.
pcAccumulatedData <sup>(2)</sup>	String maxLength value="65536"	Optional (0-1)	The accumulated consumed usage per reporting group or independent of reporting group.  Field sessionAccumulated cannot be included in the JSON structure when provisioning pcAccumulatedData:
pcGroup			



Parameter	Type	Occurrence	Description
pcGroupId	String maxLength value="255"	Optional (0-1)	The identifier of the subscriber group.
pcGroupPriority	nonNegativeInteger	Optional (0-1)	The priority level assigned to the group.
pcGroupStartDate	String maxLength value="255"	Optional (0-1)	Start date and time when the group applies for the subscriber.
pcGroupEndDate	String maxLength value="255"	Optional (0-1)	End date and time when the group applies for the subscriber.

(1) The parameter is not supported from monolithic SAPC 17A and above.

(2) The pcAccumulatedData is normally set by SAPC instead of provisioning. Updating this parameter value requires SAPC support and the correct JSON structure.

## 8.2 Examples

### Request Example

This section gives an example of a SetSAPCFamily request message, as shown in Example 14.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
  xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>25de6433cbb84c1d85ba67</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>SAPCFamily@http://schemas.ericsson.com/ma/SAPC/
      </cai3:MOType>
      <cai3:MOId>
        <sapc:pcFamilyId>family1234</sapc:pcFamilyId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <sapc:SetSAPCFamily pcFamilyId="family1234">
          <sapc:pcFamilyDescription>ExampleFamily</sapc:pcFamilyDescription>
          <sapc:pcAccumulatedData>
            {"reportingGroups":[{"name":"ExampleFamily","isFromFamily":"yes","selected":
              "yes","subscriberGroupName":"","subscriptionDate":"07-09-2012T10:08:53",
              "validityTime":2591882}], "version":"2.0"}
          </sapc:pcAccumulatedData>
          <sapc:pcGroup pcGroupId="group_2">
            <sapc:pcGroupId>group_2</sapc:pcGroupId>
            <sapc:pcGroupPriority>1</sapc:pcGroupPriority>
            <sapc:pcGroupStartDate>01-01-2015</sapc:pcGroupStartDate>
            <sapc:pcGroupEndDate>02-01-2015</sapc:pcGroupEndDate>
          </sapc:pcGroup>
        </sapc:SetSAPCFamily>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

#### Example 14 Set SAPC Family Request Message

The SAPC family with familyId identifier family1234 is updated with pcAccumulatedData and new pcGroup.



## Response Example

This section gives an example of a `SetSAPCFamily` response message, as shown in Example 15.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>9148f2ac87844d818dda4dcfc2a3a62d</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:SetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>
```

**Example 15**    *Set SAPC Family Response Message*



## 9 Delete SAPC Family

This section covers the command `DeleteSAPCFamily`.

`DeleteSAPCFamily` deletes a SAPC family.

This command is always capable of removing a SAPC family, even if a previous `CreateSAPCFamily` or `DeleteSAPCFamily` has failed.

### MOType

`SAPCFamily@http://schemas.ericsson.com/ma/SAPC/`

## 9.1 Request Data

### 9.1.1 Parameters

#### MOId

*Table 16 Delete SAPC Family MOId*

Parameter	Type	Occurrence	Description
pcFamilyId	String minLength value="1" maxLength value="32"	Mandatory	The identifier of the family

#### MOAttributes

N/A

## 9.2 Examples

### Request Example

This section gives an example of a `DeleteSAPCFamily` request message, as shown in Example 16.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>eecb7e7a1fa7408aa0c8a7e0801f43c3</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>SAPCFamily@http://schemas.ericsson.com/ma/SAPC/
    </cai3:MOType>
    <cai3:MOId>
      <sapc:pcFamilyId>family1234</sapc:pcFamilyId>
    </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

### ***Example 16 Delete SAPC Family Request Message***

The SAPC family with familyId identifier family1234 is deleted.

### **Response Example**

This section gives an example of a DeleteSAPCFamily response message, as shown in Example 17.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>eecb7e7a1fa7408aa0c8a7e0801f43c3</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:DeleteResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOId>
        <sapc:pcFamilyId xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
          family1234</sapc:pcFamilyId>
        </ns2:MOId>
      </ns2:DeleteResponse>
    </S:Body>
</S:Envelope>
```

### ***Example 17 Delete SAPC Family Response Message***





## 10 Create Data Plan

This section covers the `CreateDataplan` command.

`CreateDataplan` creates a data plan.

### MOType

`Dataplan@http://schemas.ericsson.com/ma/SAPC/`

## 10.1 Request Data

### 10.1.1 Parameters

#### MOId

*Table 17 Create SAPC Data Plan MOId*

Parameter	Type	Occurrence	Description
pcDataplanName	String minLength value="1" maxLength value="255"	Mandatory	The identifier of the subscriber data plan.

#### MOAttributes

The parameters that are used in the operation are shown in Figure 10.

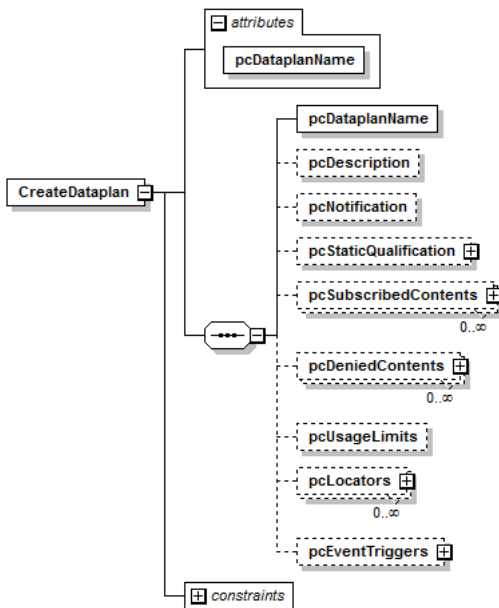


Figure 10 Create Data Plan

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

Table 18 Create Data Plan Parameters

Parameter	Type	Occurrence	Description
pcDataplanName	String minLength value="1" maxLength value="255"	Mandatory	The identifier of the subscriber data plan.
pcDescription	String maxLength value="255"	Optional (0-1)	The short description of the data plan.
pcNotification	String Enumeration value="sms"	Optional (0-1)	Defines if the SAPC can send SMS notifications to the subscribers of this data plan without the provisioning SMS destination for each subscriber. The SAPC sends the SMS to the MSISDN received in the Gx request.  The SAPC only considers this value when SMS data are not provisioned at the subscriber level.
pcStaticQualification		Optional (0-1)	The specific data that characterizes the data plan for each function the SAPC controls, such as QoS, Charging, and Content Filtering.
pcMaxBearerQoSProfileId	String maxLength value="255"	Optional (0-1)	The maximum static bearer QoS profile to be applied to the data plan.



Parameter		Type	Occurrence	Description
	pcMinBearerQoSProfileId	String maxLength value="255"	Optional (0-1)	The minimum static bearer QoS profile to be applied to the data plan.
	pcSubscriberChargingProfileId	String maxLength value="255"	Optional (0-1)	The charging profile to be applied to the data plan.
	pcContentFiltering	String maxLength value="255"	Optional (0-1)	The content filtering profile to be applied to the data plan.
	pcPresenceReportingAreaNames		Optional (0-1)	A list of the presence reporting area names.
	pcPresenceReportingAreaName	String maxLength value="255"	Mandatory	The presence reporting area name of the data plan.
	pcPdnGwListName	String maxLength value="255"	Optional (0-1)	The name of the PDN-GW list associated to the data plan.
	pcSpId	Integer minInclusive value="1" maxInclusive value="256"	Optional (0-1)	The SPID of the data plan.
	pcSubscribedContents		Optional (0-n)	The available contents associated to the data plan.
	pcContentName	String maxLength value="255"	Mandatory	The subscribed content name of the data plan.
	pcRedirect	Boolean {true, false}	Optional (0-1)	Indicates whether the service can be redirected to a controlled address or not.  Default value is: false
	pcDeniedContents		Optional (0-n)	The denied contents associated to the data plan.
	pcDeniedContent	String maxLength value="255"	Mandatory	The denied content of the data plan.
	pcUsageLimits	String maxLength value="2680"	Optional (0-1)	The usage limits of the data plan. Usage limits are per reporting group or independent of reporting group (that is, total traffic of the IP-CAN session) for a specified time period or the IP session lifetime.  The parameter must start with "reportingGroups":.  For example, {"reportingGroups":[{"name":"88888","absoluteLimits":{"bidirectionalVolume":600,"time":100}}]}



Parameter			Type	Occurrence	Description	
pcLocators				Optional (0-n)	A list of locators associated to the locator resource collection.	
	pcResourceName		String maxLength value="255"	Mandatory	The resource name of the locator.	
	pcContext			Optional (1-n)	The context of the Locator.	
		pcContextName	String maxLength value="255"	Mandatory	The context name of the locator.	
		pcPolicies		Optional (1-n)	A list of the policies associated with the policy locator.	
			pcPolicy	String maxLength value="255"	Mandatory	The identifier of the policy.
pcEventTriggers				Optional (0-n)	The event triggers associated with a data plan.	
	pcEventTrigger		Integer minInclusive value="0" maxInclusive value="255"	Mandatory	The event trigger of the data plan. For the detailed list of values, see Event-Trigger AVP in the Gx or Sx Interface Description document. Do not set NO_EVENT_TRIGGER (14) value.	

## 10.2 Examples

### Request Example

This section gives an example of a CreateDataplan request message, as shown in Example 18.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Dataplan@http://schemas.ericsson.com/ma/SAPC/</cai3:MOType>
      <cai3:MOId>
        <sapc:pcDataplanName>group_1</sapc:pcDataplanName>
      </cai3:MOId>
      <cai3:MOAttributes>
        <sapc:CreateDataplan pcDataplanName="group_1">
          <sapc:pcDataplanName>group_1</sapc:pcDataplanName>
          <sapc:pcDescription>description</sapc:pcDescription>
          <sapc:pcNotification>sms</sapc:pcNotification>
          <sapc:pcStaticQualification>
            <sapc:pcMaxBearerQosProfileId>QosProfileHigh</sapc:pcMaxBearerQosProfileId>
            <sapc:pcMinBearerQosProfileId>QosProfileLow</sapc:pcMinBearerQosProfileId>
            <sapc:pcSubscriberChargingProfileId>111</sapc:pcSubscriberChargingProfileId>
            <sapc:pcContentFiltering>111</sapc:pcContentFiltering>
            <sapc:pcPresenceReportingAreaNames pcPresenceReportingAreaName="10000">
              <sapc:pcPresenceReportingAreaName>10000</sapc:pcPresenceReportingAreaName>
            </sapc:pcPresenceReportingAreaNames>
            <sapc:pcPdnGwListName>ggsnNodeHostname.ggsnNodeHostRealm.com</sapc:pcPdnGwListName>
            <sapc:pcSpId>123</sapc:pcSpId>
          </sapc:pcStaticQualification>
        </sapc:CreateDataplan>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```



```

<sapc:pcSubscribedContents pcContentName="contentName1">
  <sapc:pcContentName>contentName1</sapc:pcContentName>
  <sapc:pcRedirect>true</sapc:pcRedirect>
</sapc:pcSubscribedContents>
<sapc:pcSubscribedContents pcContentName="contentName2">
  <sapc:pcContentName>contentName2</sapc:pcContentName>
  <sapc:pcRedirect>true</sapc:pcRedirect>
</sapc:pcSubscribedContents>
<sapc:pcDeniedContents pcDeniedContent="ID1">
  <sapc:pcDeniedContent>ID1</sapc:pcDeniedContent>
</sapc:pcDeniedContents>
<sapc:pcDeniedContents pcDeniedContent="ID2">
  <sapc:pcDeniedContent>ID2</sapc:pcDeniedContent>
</sapc:pcDeniedContents>
<sapc:pcUsageLimits>
  { "reportingGroups": [{ "name": "88888", "description": "A reporting group used for testing",
    "reportingLevel": "totalTraffic", "subscriptionType": "postpaid", "subscriptionDate": "01-07-
    -2099T22:22:22", "minQuotaTime" : 600, "minQuotaVolume" : 47, "reportingIntervalTime" : 25,
    "sliceTime": 12, "sliceVolume": 7575, "absoluteLimits": { "resetPeriod": { "volume":
    "monthly", "time": "monthly" }, "ulVolume": ["50%", 2097152], "dlVolume": ["50%", 2097152],
    "bidirVolume": ["50%", 2097152], "time": [100, 200, 300], "conditionalLimits": [{ "name":
    "Tjorven", "ulVolume": ["50%", 2097152], "dlVolume": ["50%", 2097152], "bidirVolume": ["50%
    ", 2097152], "time": [100, 200, 300] }] }, "sessionLimits": { "ulVolume": ["50%", 2097152],
    "dlVolume": ["50%", 2097152], "bidirVolume": ["50%", 2097152], "time": [100, 200, 300],
    "conditionalLimits": [{ "name": "Batsman", "ulVolume": ["50%", 2097152], "dlVolume":
    ["50%", 2097152], "bidirVolume": ["50%", 2097152], "time": [100, 200, 300] }] } } ] }
</sapc:pcUsageLimits>
<sapc:pcLocators pcResourceName="resourceName">
  <sapc:pcResourceName>resourceName</sapc:pcResourceName>
  <sapc:pcContext pcContextName="qos">
    <sapc:pcContextName>qos</sapc:pcContextName>
    <sapc:pcPolicies pcPolicy="Policies">
      <sapc:pcPolicy>Policies</sapc:pcPolicy>
    </sapc:pcPolicies>
  </sapc:pcContext>
</sapc:pcLocators>
<sapc:pcLocators pcResourceName="resourceName2">
  <sapc:pcResourceName>resourceName2</sapc:pcResourceName>
  <sapc:pcContext pcContextName="qos">
    <sapc:pcContextName>qos</sapc:pcContextName>
    <sapc:pcPolicies pcPolicy="Locators2">
      <sapc:pcPolicy>Locators2</sapc:pcPolicy>
    </sapc:pcPolicies>
  </sapc:pcContext>
</sapc:pcLocators>
<sapc:pcEventTriggers pcEventTrigger="1">
  <sapc:pcEventTrigger>1</sapc:pcEventTrigger>
</sapc:pcEventTriggers>
<sapc:pcEventTriggers pcEventTrigger="2">
  <sapc:pcEventTrigger>2</sapc:pcEventTrigger>
</sapc:pcEventTriggers>
</sapc:CreateDataplan>
</cai3:MOAttributes>
</cai3:Create>
</soapenv:Body>
</soapenv:Envelope>

```

### Example 18 Create Data Plan Request Message

A data plan with pcDataplanName group\_1 is initiated. Other data plan data is assigned to it.

### Response Example

This section gives an example of a CreateDataplan response message, as shown in Example 19.



```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:CreateResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOId>
        <sapc:pcDataplanName xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">group_1
        </sapc:pcDataplanName>
      </ns2:MOId>
    </ns2:CreateResponse>
  </S:Body>
</S:Envelope>
```

**Example 19**    *Create Data Plan Response Message*



## 11 Get Data Plan

This section covers the `GetDataplan` command.

`GetDataplan` retrieves a data plan.

### **MOType**

`Dataplan@http://schemas.ericsson.com/ma/SAPC/`

### 11.1 Request Data

#### 11.1.1 Parameters

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

*Table 19 Get Data Plan Parameters*

Parameter	Type	Occurrence	Description
pcDataplanName	String minLength value="1" maxLength value="255"	Mandatory	The identifier of the subscriber data plan.

### 11.2 Response Data

#### **MOId**

N/A

#### **MOAttributes**

The parameters that are used in the operation are shown in Figure 11.

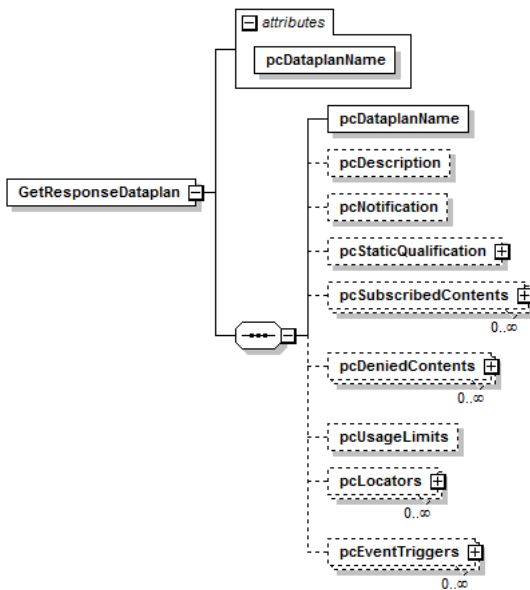


Figure 11 Get Data Plan

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

Table 20 Get Data Plan Parameters

Parameter	Type	Occurrence	Description
pcDataplanName	String minLength value="1" maxLength value="255"	Mandatory	The identifier of the subscriber data plan.
pcDescription	String maxLength value="255"	Optional (0-1)	The short description of the data plan.
pcNotification	String Enumeration value="sms"	Optional (0-1)	Defines if the SAPC can send SMS notifications to the subscribers of this data plan without the provisioning SMS destination for each subscriber. The SAPC sends the SMS to the MSISDN received in the Gx request.  The SAPC only considers this value when SMS data are not provisioned at the subscriber level.
pcStaticQualification		Optional (0-1)	The specific data that characterizes the data plan for each function the SAPC controls, such as QoS, Charging, and Content Filtering.
	pcMaxBearerQoSProfileId String maxLength value="255"	Optional (0-1)	The maximum static bearer QoS profile to be applied to the data plan.





Parameter		Type	Occurrence	Description
	pcMinBearerQoSProfileId	String maxLength value="255"	Optional (0-1)	The minimum static bearer QoS profile to be applied to the data plan.
	pcSubscriberChargingProfileId	String maxLength value="255"	Optional (0-1)	The charging profile to be applied to the data plan.
	pcContentFiltering	String maxLength value="255"	Optional (0-1)	The content filtering profile to be applied to the data plan.
	pcPresenceReportingAreaNames		Optional (0-1)	A list of the presence reporting area names.
	pcPresenceReportingAreaName	String maxLength value="255"	Mandatory	The presence reporting area name of the data plan.
	pcPdnGwListName	String maxLength value="255"	Optional (0-1)	The name of the PDN-GW list associated to the data plan.
	pcSpId	Integer minInclusive value="1" maxInclusive value="256"	Optional (0-1)	The SPID of the data plan.
	pcSubscribedContents		Optional (0-n)	The available contents associated to the data plan.
	pcContentName	String maxLength value="255"	Mandatory	The subscribed content name of the data plan.
	pcRedirect	Boolean {true, false}	Optional (0-1)	Indicates whether the service can be redirected to a controlled address or not.  Default value is: false
	pcDeniedContents		Optional (0-n)	The denied contents associated to the data plan.
	pcDeniedContent	String maxLength value="255"	Mandatory	The denied content of the data plan.
	pcUsageLimits	String maxLength value="2680"	Optional (0-1)	The usage limits of the data plan. Usage limits are per reporting group or independent of reporting group (that is, total traffic of the IP-CAN session) for a specified time period or the IP session lifetime.  The parameter must start with "reportingGroups":.  For example, {"reportingGroups":[{"name":"88888","absoluteLimits":{"bidirectionalVolume":600,"time":100}}]}



Parameter			Type	Occurrence	Description	
pcLocators				Optional (0-n)	A list of locators associated to the locator resource collection.	
	pcResourceName		String maxLength value="255"	Mandatory	The resource name of the locator.	
	pcContext			Optional (1-n)	The context of the Locator.	
		pcContextName	String maxLength value="255"	Mandatory	The context name of the locator.	
	pcPolicies			Optional (1-n)	A list of the policies associated with the policy locator.	
			pcPolicy	String maxLength value="255"	Mandatory	The identifier of the policy.
pcEventTriggers				Optional (0-n)	The event triggers associated with a data plan.	
	pcEventTrigger		Integer minInclusive value="0"  maxInclusive value="255"	Mandatory	The event trigger of the data plan. For the detailed list of values, see Event-Trigger AVP in the Gx or Sx Interface Description document. Do not set NO_EVENT_TRIGGER (14) value.	

## 11.3 Examples

### Request Example

This section gives an example of a GetDataplan request message, as shown in Example 20.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Get>
      <cai3:MOType>Dataplan@http://schemas.ericsson.com/ma/SAPC/</cai3:MOType>
      <cai3:MOId>
        <sapc:pcDataplanName>group_1</sapc:pcDataplanName>
      </cai3:MOId>
    </cai3:Get>
  </soapenv:Body>
</soapenv:Envelope>
```

*Example 20 Get Data Plan Request Message*

### Response Example

This section gives an example of a GetDataplan response message, as shown in Example 21.



```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>8bec346cf16d48cd8878847954e8e205</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <ns:GetResponseDataplan pcDataplanName="group_1"
          xmlns:ns="http://schemas.ericsson.com/ma/SAPC/">
          <ns:pcDataplanName>group_1</ns:pcDataplanName>
          <ns:pcDescription>description</ns:pcDescription>
          <ns:pcNotification>sms</ns:pcNotification>
          <ns:pcStaticQualification>
            <ns:pcMaxBearerQosProfileId>QosProfileHigh</ns:pcMaxBearerQosProfileId>
            <ns:pcMinBearerQosProfileId>QosProfileLow</ns:pcMinBearerQosProfileId>
            <ns:pcSubscriberChargingProfileId>111</ns:pcSubscriberChargingProfileId>
            <ns:pcContentFiltering>111</ns:pcContentFiltering>
            <ns:pcPresenceReportingAreaNames pcPresenceReportingAreaName="10000">
              <ns:pcPresenceReportingAreaName>10000</ns:pcPresenceReportingAreaName>
            </ns:pcPresenceReportingAreaNames>
            <ns:pcPdnGwListName>ggsnNodeHostname.ggsnNodeHostRealm.com</ns:pcPdnGwListName>
            <ns:pcSpId>123</ns:pcSpId>
          </ns:pcStaticQualification>
          <ns:pcSubscribedContents pcContentName="contentName1">
            <ns:pcContentName>contentName1</ns:pcContentName>
            <ns:pcRedirect>true</ns:pcRedirect>
          </ns:pcSubscribedContents>
          <ns:pcSubscribedContents pcContentName="contentName2">
            <ns:pcContentName>contentName2</ns:pcContentName>
            <ns:pcRedirect>true</ns:pcRedirect>
          </ns:pcSubscribedContents>
          <ns:pcDeniedContents pcDeniedContent="ID1">
            <ns:pcDeniedContent>ID1</ns:pcDeniedContent>
          </ns:pcDeniedContents>
          <ns:pcDeniedContents pcDeniedContent="ID2">
            <ns:pcDeniedContent>ID2</ns:pcDeniedContent>
          </ns:pcDeniedContents>
          <ns:pcUsageLimits>
            {
              "reportingGroups": [
                {
                  "name": "88888",
                  "description": "A reporting group used for testing",
                  "reportingLevel": "totalTraffic",
                  "subscriptionType": "postpaid",
                  "subscriptionDate": "01-07-2099T22:22:22",
                  "minQuotaTime": 600,
                  "minQuotaVolume": 47,
                  "reportingIntervalTime": 25,
                  "sliceTime": 12,
                  "sliceVolume": 7575,
                  "absoluteLimits": {
                    "resetPeriod": {
                      "volume": "monthly",
                      "time": "monthly",
                      "ulVolume": ["50%", 2097152],
                      "dlVolume": ["50%", 2097152],
                      "bidirVolume": ["50%", 2097152],
                      "time": [100, 200, 300],
                      "conditionalLimits": [
                        {
                          "name": "Tjorven",
                          "ulVolume": ["50%", 2097152],
                          "dlVolume": ["50%", 2097152],
                          "bidirVolume": ["50%", 2097152],
                          "time": [100, 200, 300],
                          "conditionalLimits": [
                            {
                              "name": "Batsman",
                              "ulVolume": ["50%", 2097152],
                              "dlVolume": ["50%", 2097152],
                              "bidirVolume": ["50%", 2097152],
                              "time": [100, 200, 300]
                            }
                          ]
                        }
                      ]
                    }
                  }
                ]
              }
            }
          </ns:pcUsageLimits>
          <ns:pcLocators pcResourceName="resourceName">
            <ns:pcResourceName>resourceName</ns:pcResourceName>
            <ns:pcContext pcContextName="qos">
              <ns:pcContextName>qos</ns:pcContextName>
              <ns:pcPolicies pcPolicy="Policies">
                <ns:pcPolicy>Policies</ns:pcPolicy>
              </ns:pcPolicies>
            </ns:pcContext>
          </ns:pcLocators>
          <ns:pcLocators pcResourceName="resourceName2">
            <ns:pcResourceName>resourceName2</ns:pcResourceName>
            <ns:pcContext pcContextName="qos">
              <ns:pcContextName>qos</ns:pcContextName>
              <ns:pcPolicies pcPolicy="Locators2">
                <ns:pcPolicy>Locators2</ns:pcPolicy>
              </ns:pcPolicies>
            </ns:pcContext>
          </ns:pcLocators>
          <ns:pcEventTriggers pcEventTrigger="1">
            <ns:pcEventTrigger>1</ns:pcEventTrigger>
          </ns:pcEventTriggers>
          <ns:pcEventTriggers pcEventTrigger="2">
            <ns:pcEventTrigger>2</ns:pcEventTrigger>
          </ns:pcEventTriggers>
        </ns:GetResponseDataplan>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>

```



```
</MOAttributes>  
</GetResponse>  
</S:Body>  
</S:Envelope>
```

**Example 21**    *Get Data Plan Response Message*

The data plan with pcDataplanName group\_1 is printed.

## 12 Set Data Plan

This section covers the `SetDataplan` command.

`SetDataplan` modifies a data plan.

### MOType

`Dataplan@http://schemas.ericsson.com/ma/SAPC/`

## 12.1 Request Data

### 12.1.1 Parameters

#### MOId

*Table 21 Set Data Plan MOId*

Parameter	Type	Occurrence	Description
<code>pcDataplanName</code>	String minLength value="1" maxLength value="255"	Mandatory	The identifier of the subscriber data plan.

#### MOAttributes

The parameters that are used in the operation are shown in Figure 12.

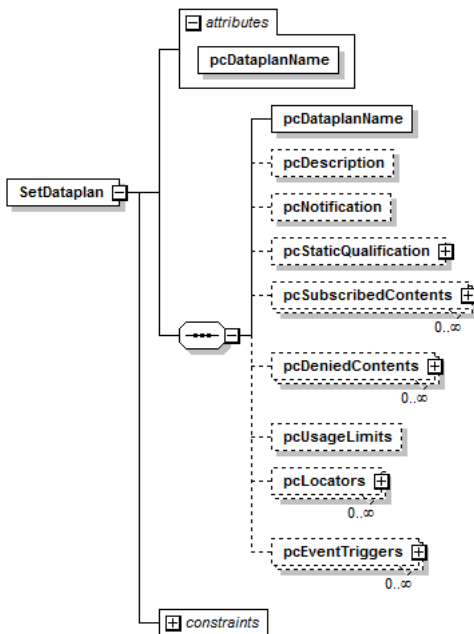


Figure 12 Set Data Plan

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

Table 22 Set Data Plan Parameters

Parameter	Type	Occurrence	Description
pcDataplanName	String minLength value="1" maxLength value="255"	Mandatory	The identifier of the subscriber data plan.
pcDescription	String maxLength value="255"	Optional (0-1)	The short description of the data plan.
pcNotification	String Enumeration value="sms"	Optional (0-1)	Defines if the SAPC can send SMS notifications to the subscribers of this data plan without the provisioning SMS destination for each subscriber. The SAPC sends the SMS to the MSISDN received in the Gx request.  The SAPC only considers this value when SMS data are not provisioned at the subscriber level.
pcStaticQualification		Optional (0-1)	The specific data that characterizes the data plan for each function the SAPC controls, such as QoS, Charging, and Content Filtering.



Parameter		Type	Occurrence	Description
	pcMaxBearerQoSProfileId	String maxLength value="255"	Optional (0-1)	The maximum static bearer QoS profile to be applied to the data plan.
	pcMinBearerQoSProfileId	String maxLength value="255"	Optional (0-1)	The minimum static bearer QoS profile to be applied to the data plan.
	pcSubscriberChargingProfileId	String maxLength value="255"	Optional (0-1)	The charging profile to be applied to the data plan.
	pcContentFiltering	String maxLength value="255"	Optional (0-1)	The content filtering profile to be applied to the data plan.
	pcPresenceReportingAreaNames		Optional (0-1)	A list of the presence reporting area names.
	pcPresenceReportingAreaName	String maxLength value="255"	Mandatory	The presence reporting area name of the data plan.
	pcPdnGwListName	String maxLength value="255"	Optional (0-1)	The name of the PDN-GW list associated to the data plan.
	pcSpId	Integer minInclusive value="1" maxInclusive value="256"	Optional (0-1)	The SPID of the data plan.
	pcSubscribedContents		Optional (0-n)	The available contents associated to the data plan.
	pcContentName	String maxLength value="255"	Mandatory	The subscribed content name of the data plan.
	pcRedirect	Boolean {true, false}	Optional (0-1)	Indicates whether the service can be redirected to a controlled address or not.  Default value is: <code>false</code>
	pcDeniedContents		Optional (0-n)	The denied contents associated to the data plan.
	pcDeniedContent	String maxLength value="255"	Mandatory	The denied content of the data plan.



Parameter		Type	Occurrence	Description
pcUsageLimits		String maxLength value="2680"	Optional (0-1)	The usage limits of the data plan. Usage limits are per reporting group or independent of reporting group (that is, total traffic of the IP-CAN session) for a specified time period or the IP session lifetime.  The parameter must start with "reportingGroups":.  For example, {"reportingGroups": [{"name": "88888", "absoluteLimits": {"bidirectionalVolume": 600, "time": 100}}]}
pcLocators			Optional (0-n)	A list of locators associated to the locator resource collection.
	pcResourceName	String maxLength value="255"	Mandatory	The resource name of the locator.
	pcContext		Optional (1-n)	The context of the Locator.
		pcContextName String maxLength value="255"	Mandatory	The context name of the locator.
		pcPolicies		Optional (1-n) A list of the policies associated with the policy locator.
		pcPolicy String maxLength value="255"	Mandatory	The identifier of the policy.
pcEventTriggers			Optional (0-n)	The event triggers associated with a data plan.
	pcEventTrigger	Integer minInclusive value="0" maxInclusive value="255"	Mandatory	The event trigger of the data plan. For the detailed list of values, see Event-Trigger AVP in the Gx or Sx Interface Description document. Do not set NO_EVENT_TRIGGER (14) value.

## 12.2 Examples

### Request Example

This section gives an example of a SetDataplan request message, as shown in Example 22.





```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/"
  xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Header>
    <cai3:SessionId>0273948ecb5a4edc997123dbb691a241</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Dataplan@http://schemas.ericsson.com/ma/SAPC/</cai3:MOType>
      <cai3:MOId>
        <sapc:pcDataplanName>group_1</sapc:pcDataplanName>
      </cai3:MOId>
      <cai3:MOAttributes>
        <sapc:SetDataplan pcDataplanName="group_1">
          <sapc:pcDataplanName>group_1</sapc:pcDataplanName>
          <sapc:pcDescription>description</sapc:pcDescription>
          <sapc:pcNotification>sms</sapc:pcNotification>
          <sapc:pcStaticQualification>
            <sapc:pcMaxBearerQosProfileId>QosProfileHigh</sapc:pcMaxBearerQosProfileId>
            <sapc:pcMinBearerQosProfileId>QosProfileLow</sapc:pcMinBearerQosProfileId>
            <sapc:pcSubscriberChargingProfileId>111</sapc:pcSubscriberChargingProfileId>
            <sapc:pcContentFiltering>111</sapc:pcContentFiltering>
            <sapc:pcPresenceReportingAreaNames pcPresenceReportingAreaName="10000">
              <sapc:pcPresenceReportingAreaName>10000</sapc:pcPresenceReportingAreaName>
            </sapc:pcPresenceReportingAreaNames>
            <sapc:pcPdnGwListName>pdnGwListName</sapc:pcPdnGwListName>
            <sapc:pcSpId>12</sapc:pcSpId>
          </sapc:pcStaticQualification>
          <sapc:pcSubscribedContents pcContentName="contentName1" xsi:nil="true"/>
          <sapc:pcDeniedContents pcDeniedContent="ID1" xsi:nil="true" />
          <sapc:pcUsageLimits>
            { "reportingGroups": [{ "name": "usageLimits", "description": "A reporting group
            used for testing", "reportingLevel": "totalTraffic", "subscriptionType": "postpaid",
            "subscriptionDate": "01-07-2099T22:22:22", "minQuotaTime" : 600, "minQuotaVolume"
            : 47, "reportingIntervalTime" : 25, "sliceTime": 12, "sliceVolume": 7575, "absoluteLimits":
            { "resetPeriod": { "volume": "monthly", "time": "monthly" }, "ulVolume": ["50%", 2097152],
            "dlVolume": ["50%", 2097152], "bidirVolume": ["50%", 2097152], "time": [100, 200, 300],
            "conditionalLimits": [{ "name": "Tjorven", "ulVolume": ["50%", 2097152], "dlVolume":
            ["50%", 2097152], "bidirVolume": ["50%", 2097152], "time": [100, 200, 300] } ] },
            "sessionLimits": { "ulVolume": ["50%", 2097152], "dlVolume": ["50%", 2097152],
            "bidirVolume": ["50%", 2097152], "time": [100, 200, 300], "conditionalLimits": [{
            "name": "Batsman", "ulVolume": ["50%", 2097152], "dlVolume": ["50%", 2097152],
            "bidirVolume": ["50%", 2097152], "time": [100, 200, 300] } ] } ] } }
          </sapc:pcUsageLimits>
          <sapc:pcLocators pcResourceName="resourceName">
            <sapc:pcResourceName>resourceName</sapc:pcResourceName>
            <sapc:pcContext pcContextName="qos">
              <sapc:pcContextName>qos</sapc:pcContextName>
              <sapc:pcPolicies pcPolicy="Policies">
                <sapc:pcPolicy>Policies</sapc:pcPolicy>
              </sapc:pcPolicies>
            </sapc:pcContext>
          </sapc:pcLocators>
          <sapc:pcEventTriggers pcEventTrigger="1">
            <sapc:pcEventTrigger>1</sapc:pcEventTrigger>
          </sapc:pcEventTriggers>
        </sapc:SetDataplan>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

## Example 22 Set Data Plan Request Message

The data plan with pcDataplanName group\_1 has been updated. Other data plan data is set to it.

## Response Example

This section gives an example of a SetDataplan response message, as shown in Example 23.



```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>9148f2ac87844d818dda4dcfc2a3a62d</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:SetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/" />
  </S:Body>
</S:Envelope>
```

***Example 23 Set Data Plan Response Message***



## 13 Delete Data Plan

This section covers the command `DeleteDataplan`.

`DeleteDataplan` deletes a data plan.

This command is always capable of removing a data plan, even if a previous `CreateDataplan` or `DeleteDataplan` has failed.

### MOType

`Dataplan@http://schemas.ericsson.com/ma/SAPC/`

## 13.1 Request Data

### 13.1.1 Parameters

#### MOId

*Table 23 Delete Data Plan MOId*

Parameter	Type	Occurrence	Description
pcDataplanName	String minLength value="1" maxLength value="255"	Mandatory	The identifier of the subscriber data plan.

#### MOAttributes

N/A

## 13.2 Examples

### Request Example

This section gives an example of a `DeleteDataplan` request message, as shown in Example 24.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/"
  xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">
  <soapenv:Header>
    <cai3:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>Dataplan@http://schemas.ericsson.com/ma/SAPC/</cai3:MOType>
      <cai3:MOId>
        <sapc:pcDataplanName>group_1</sapc:pcDataplanName>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

#### **Example 24** Delete Data Plan Request Message

The data plan with pcDataplanName group\_1 is deleted.

#### **Response Example**

This section gives an example of a DeleteDataplan response message, as shown in Example 25.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>d78e0fd9ff6c436984bd4d998633487a</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:DeleteResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOId>
        <sapc:pcDataplanName xmlns:sapc="http://schemas.ericsson.com/ma/SAPC/">group_1
      </sapc:pcDataplanName>
      </ns2:MOId>
    </ns2:DeleteResponse>
  </S:Body>
</S:Envelope>
```

#### **Example 25** Delete Data Plan Response Message



## 14 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 SAPC specific error codes are described in this section. These error codes are included in the Fault type `PGFault`.

For generic error codes, and information about the different Fault types, see *CAI3G Implementation*, Reference [4].

### 14.1 Subordinate SAPC Error Codes

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

*Table 24 Subordinate SAPC Error Codes*

Error Code	Error Message	Error Details	Error Information	MO	Operation
12006	DATABASE LOCKED FOR BACKUP	-	Database locked for backup	SAPCSubscription SAPCFamily	C/S/D
12013	OPERATION FAILED, ROLL BACK HAS BEEN PERFORMED SUCCESSFULLY	-	This information varies depending on the actual error	SAPCSubscription SAPCFamily Dataplan	C
12014	OPERATION FAILED, ROLL BACK WAS UNSUCCESSFUL	-	This information varies depending on the actual error	SAPCSubscription SAPCFamily Dataplan	C
17001	SUBSCRIPTION ALREADY EXISTS	-	SAPC subscriber exists	SAPCSubscription	C
17002	SUBSCRIPTION NOT DEFINED	-	SAPC subscriber not found	SAPCSubscription	G/S/D
17004	TRAFFICID ALREADY EXISTS	-	SAPC subscriber <code>trafficId</code> already exists	SAPCSubscription	C/S



Error Code	Error Message	Error Details	Error Information	MO	Operation
17005	SAPC REQUEST VALIDATION ERROR	[Date]=[value] is invalid	Date format like pcGroupStartDate and pcGroupEndDate is to be "dd-mm-yyyy [Thh[:mm[:ss]]]"	SAPCSubscription	C/S
		pcGroupEndDate =[value] is invalid for earlier than pcGroupStartDate	pcGroupStartDate is to be after pcGroupEndDate		
		pcTrafficId=[pcTrafficId] duplicated value	pcTrafficId value is duplicated		
		EPC-Data in pcLimitUsage attribute is invalid	EPC-Data in pcLimitUsage attribute is invalid with specific error field info in response		
		EPC-Accumulated Data in pcAccumulatedData attribute is invalid	EPC-AccumulatedData in pcAccumulatedData attribute is invalid with specific error field info in response		
		Not allowed to delete last group of the family	Deletion of the last group or the last subscriber is not acceptable.		
		EPC-Family with EPC-FamilyId = [string] does not exist	The family with the specified familyId needs existing before assign this familyId to a subscriber.		
17006	FAMILY ALREADY EXISTS	-	SAPC family ID exists	SAPCFamily	C
17007	FAMILY NOT DEFINED	-	SAPC family data not found	SAPCFamily	G/S/D
17008	SUBSCRIPTIONS ARE CONNECTED TO FAMILY	-	SAPC subscription is connected to a family	SAPCFamily	D
17009	SUBSCRIPTION INCOMPLETE DATA	-	SAPC subscription data is incomplete	SAPCFamily	S
17010	DATAPLAN ALREADY EXISTS	-	SAPC dataplan exists	Dataplan	C
17011	SAPC DATAPLAN NOT DEFINED	-	SAPC dataplan data is not found	Dataplan	S/G/D
17021	SEMANTIC ERROR	-	Semantic error	SAPCSubscription SAPCFamily Dataplan	C/S
17022	SAPC INTERNAL DATABASE ERROR	-	Internal database error	SAPCSubscription SAPCFamily Dataplan	C/S/G/D



Error Code	Error Message	Error Details	Error Information	MO	Operation
17023	COMMUNICATION ERROR	-	Content type is not correct, only application/JSON is supported.	SAPCSubscriber SAPCFamily Dataplan	C/S
		-	Bad request. Wrong JSON format.	SAPCSubscriber SAPCFamily Dataplan	C/S
		-	Uri too long	SAPCSubscriber SAPCFamily Dataplan	C/S/G/D
		-	Unauthorized	SAPCSubscriber SAPCFamily Dataplan	C/S/G/D

## 14.2 CAI3G Error Message Example

The following, shown in Example 26, 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>e22cc7c843ec42deb8b5c04c4e99d63c</cai3g:SessionId>
  </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:Client</faultcode>
      <faultstring>This is a client fault</faultstring>
      <detail>
        <Cai3gFault:Cai3gFault xmlns="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:Cai3gFault="http://schemas.ericsson.com/cai3g1.2/">
          <faultcode>3013</faultcode>
          <faultreason>
            <reasonText>Invalid parameter.</reasonText>
          </faultreason>
          <faultrole>MF</faultrole>
          <details>
            <PGFault:PGFault xmlns="http://schemas.ericsson.com/pg/1.0"
              xmlns:PGFault="http://schemas.ericsson.com/pg/1.0">
              <errorcode>17004</errorcode>
              <errormessage>TRAFFICID ALREADY EXISTS</errormessage>
              <errordetails>SAPC subscriber trafficId already exists -
                [Processed by PG Node: vmx1771]</errordetails>
            </PGFault:PGFault>
          </details>
        </Cai3gFault:Cai3gFault>
      </detail>
    </ns2:Fault>
  </S:Body>
</S:Envelope>
```

**Example 26** 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 00 03 Uen
- [3] *Library Overview*, 18/1553-CSH 109 628 Uen
- [4] *CAI3G Implementation*, 26/155 19-CSH 109 628 Uen