

MTAS Provisioning over CAI3G

Ericsson Dynamic Activation 1

SYSTEM INTERFACE

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1 Introduction

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

1.1 Purpose and Scope

The purpose of this document is to describe the MultiMedia Telephony (MMTel) related provisioning on Multimedia Telephony Application Server (MTAS), provided by Ericsson™ Dynamic Activation (EDA).

This document describes the supported methods for MTAS provisioning. This document also declares the types and occurrences of the attributes used in the operations.

Note: This document is not a tutorial of CAI3G, it must be used together with document *Generic CAI3G Interface 1.2*, Reference [3], and *CAI3G Implementation*, Reference [4].

For more information about provisioning on MTAS, refer to *Function Specification MTAS*, Reference [2].

1.2 Target Groups

The target group for this document is as follows:

- System Integrator

For more information about the different target groups, see *Library Overview*, Reference [1].

1.3 Typographic Conventions

Typographic conventions are described in the document *Library Overview*, Reference [1].

1.4 Prerequisites

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

- Basic knowledge about the Dynamic Activation product
- Basic knowledge about the IMS solution



- Knowledge about *Generic CAI3G Interface 1.2*, Reference [3]

1.5 Namespaces

The following namespaces are referred to in this document:

- CAI3G 1.2 namespace:

`http://schemas.ericsson.com/cai3g1.2/`

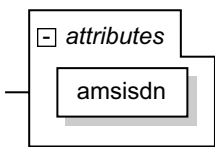
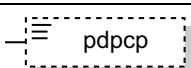
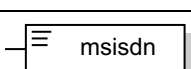
- Provisioning namespaces:

- `http://schemas.ericsson.com/ema/UserProvisioning/MTAS/`
- `http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/`
- `http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelServiceNumberService/`
- `http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService/`
- `http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingService/`
- `http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingReferralService/`

1.6 Legends

The following table shows the legends used in Extensible Markup Language (XML) schema figures in this specification.

Table 1 Legends Used in XML Schema Figures in This Specification

Legend	Description
	XML attribute
	Optional XML element
	Mandatory XML element



Legend	Description
	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 Managed Object (MO) schema structure more clearly. In practice, this type is to be replaced by the corresponding elements.

1.7 Web Service Interface

The Web Services Definition Language (WSDL) and XML Schema Definition Language (XSD) files that describe the provisioning interface can be retrieved by following below instruction:

1. Save the zip file, [Dynamic Activation WSDL and XSD files.zip](#), to a local folder.
2. Extract the zip file.
3. Check the `InterfacesPGNGN` directory for Dynamic Activation-related interfaces.

1.8 MOType

MOType is a plain text string based on the type `xs:string`. An MOType 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 MOType must follow the regular expression: `[A-Za-z][A-Za-z0-9]*`

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

1.9 MOId

MOId is an 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 MMTel Subscription

This section covers the command `Create Subscription` for MMTel Subscription.

MOType

`Subscription@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/`

2.1 Request Data

The operator administrator through CAS sends a CAI3G request to Dynamic Activation to create an MTAS user.

2.1.1 Parameters

MOId

Table 2 Create MMTelSubscription MOId

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	User identity in MTAS. This identity must already be configured on the HSS.

MOAttributes

The parameters that are used in the operation are shown in Figure 1, Figure 2, and Figure 3.

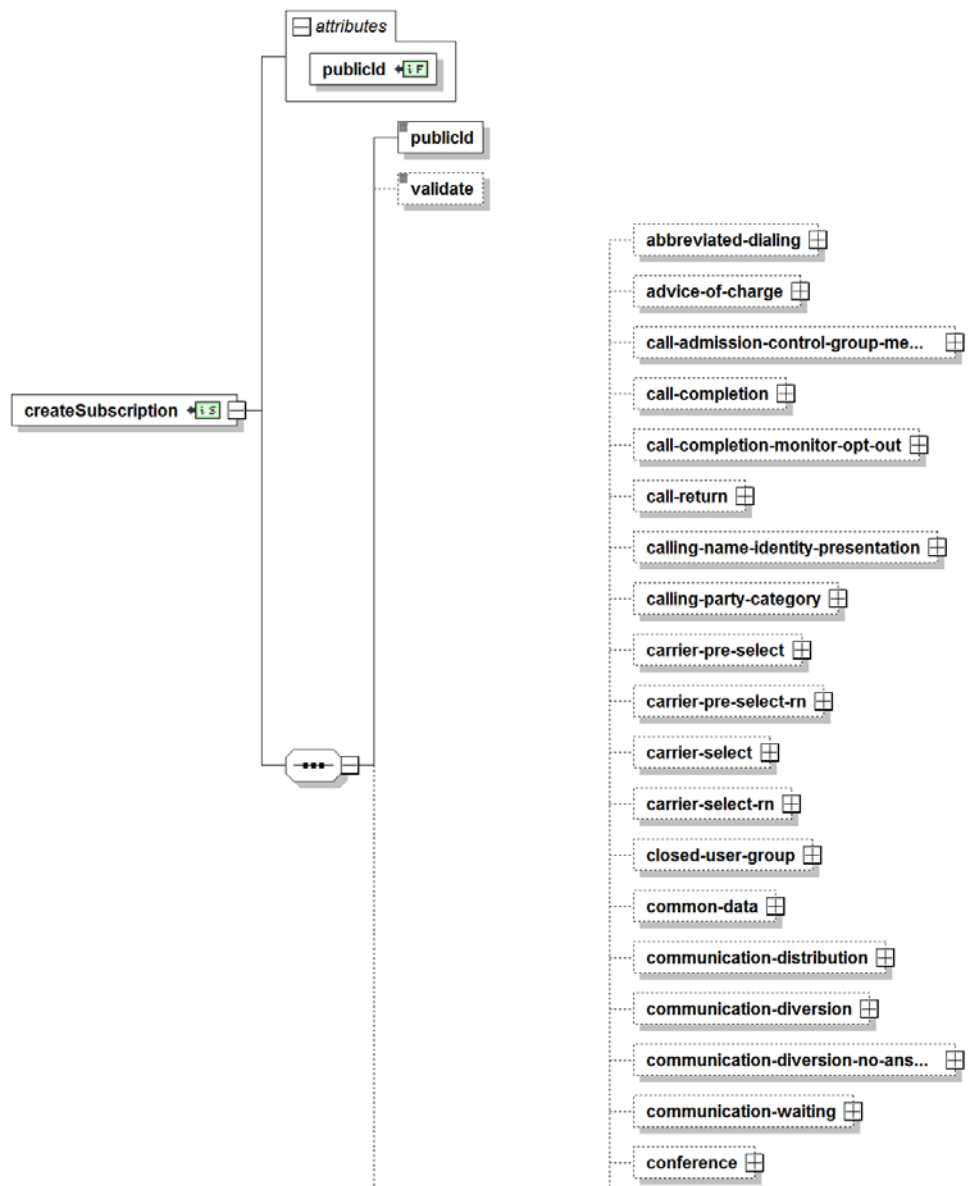


Figure 1 Parameters in Create MMTelSubscription, part 1



Figure 2 Parameters in Create MMTelSubscription, part 2

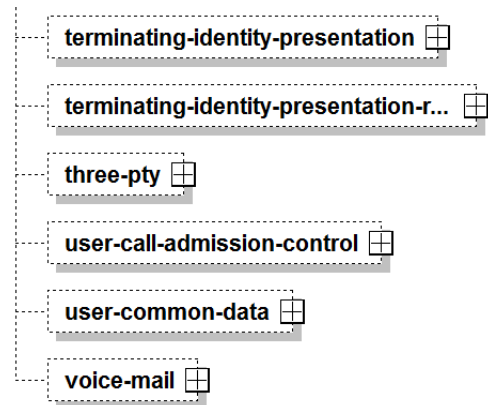


Figure 3 Parameters in Create MMTelSubscription, part 3

Table 3 covers the parameters that can be used in a Create MMTelSubscription request.

Table 3 Attributes Definition for MMTel Subscription Service

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	User identity in MTAS. This identity must already be configured on the HSS.
validate	Sub-MO	Optional	The validate feature is used when the request must be validated but not stored in the HSS.
services	Sub-MO	Optional	MMTel services, the relative order of the existing services must be maintained all new services is to be optional and inserted in alphabetical order within the existing list where possible.
abbreviated-dialing	Sub-MO	Optional	The abbreviated-dialing service SeeSection 26.1.1 on page 109 for detailed attributes definition information.
advice-of-charge	Sub-MO	Optional	The Advice of Charge service See Section 26.1.2 on page 109 for detailed attributes definition information.
call-admission-control-group-membership	Sub-MO	Optional	The user membership of call admission control group service. See Section 26.1.3 on page 111 for detailed Attributes definition information.
call-completion	Sub-MO	Optional	The communication completion service. SeeSection 26.1.4 on page 111 for detailed Attributes definition information.
call-completion-monitor-opt-out	Sub-MO	Optional	The call completion monitor opt-out service. This allows a subscriber to be opted out of being monitored to support call completion services to that subscriber. This is specified as an opt-out because the call completion is more valuable the more targets for which call completion is possible. See Section 26.1.5 on page 112 for detailed Attributes definition information.
call-return	Sub-MO	Optional	The call return service. SeeSection 26.1.6 on page 113 for detailed Attributes definition information.



Table 3 *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
calling-name-identity-presentation	Sub-MO	Optional	The calling name identity presentation service. See Section 26.1.7 on page 113 for detailed Attributes definition information.
calling-party-category	Sub-MO	Optional	The calling party category service. See Section 26.1.8 on page 114 for detailed Attributes definition information.
carrier-pre-select	Sub-MO	Optional	The carrier pre-select service. See Section 26.1.9 on page 114 for detailed Attributes definition information.
carrier-pre-select-rn	Sub-MO	Optional	The carrier pre-select rn service. See Section 26.1.10 on page 115 for detailed Attributes definition information.
carrier-select	Sub-MO	Optional	The carrier select service. See Section 26.1.11 on page 116 for detailed Attributes definition information.
carrier-select-rn	Sub-MO	Optional	The carrier select rn service. See Section 26.1.12 on page 116 for detailed Attributes definition information.
closed-user-group	Sub-MO	Optional	The closed user group service. See Section 26.1.13 on page 116 for detailed Attributes definition information.
common-data	Sub-MO	Optional	Common data available across services. This data is available to the operator rather than the user. See Section 26.1.14 on page 117 for detailed Attributes definition information.
communication-distribution	Sub-MO	Optional	The communication distribution service. See Section 26.1.15 on page 118 for detailed Attributes definition information.
communication-diversion	Sub-MO	Optional	The communication diversion service. See Section 26.1.16 on page 124 for detailed Attributes definition information.
communication-diversion-no-answer-timer	Sub-MO	Optional	The communication diversion no answer timer service. See Section 26.1.17 on page 127 for detailed Attributes definition information.
communication-waiting	Sub-MO	Optional	The communication waiting service. The communication waiting service depends on the user call admission control service. The communication waiting service can only be activated if the user call admission control service is also activated and the waiting-limit is set to greater than zero. Because of the mutual dependency with user call admission control, both services must be updated in the same request in which communication waiting is activated or deactivated. See Section 26.1.18 on page 128 for detailed Attributes definition information.
conference	Sub-MO	Optional	The conference service. See Section 26.1.19 on page 129 for detailed Attributes definition information.

**Table 3** *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
customized-alerting-tone	Sub-MO	Optional	The customized alerting tones service. See Section 26.1.20 on page 129 for detailed Attributes definition information.
dial-tone-management	Sub-MO	Optional	The dial tone management service. See Section 26.1.21 on page 130 for detailed Attributes definition information.
dialog-event-notifier	Sub-MO	Optional	The dialog event notifier service. See Section 26.1.22 on page 130 for detailed Attributes definition information.
distinctive-ring	Sub-MO	Optional	The distinctive ring service. See Section 26.1.23 on page 131 for detailed Attributes definition information.
dynamic-black-list	Sub-MO	Optional	The dynamic blacklist service. See Section 26.1.24 on page 132 for detailed Attributes definition information.
explicit-communication-transfer	Sub-MO	Optional	The explicit communication transfer service. See Section 26.1.25 on page 133 for detailed Attributes definition information.
flexible-identity-presentation	Sub-MO	Optional	The flexible identity presentation service. See Section 26.1.26 on page 133 for detailed Attributes definition information.
hotline	Sub-MO	Optional	The hotline service. See Section 26.1.27 on page 134 for detailed Attributes definition information.
incoming-communication-barring	Sub-MO	Optional	The incoming-communication-barring service. See Section 26.1.28 on page 135 for detailed Attributes definition information.
malicious-communication-identification	Sub-MO	Optional	The malicious communication identification service. See Section 26.1.29 on page 137 for detailed Attributes definition information.
malicious-communication-rejection	Sub-MO	Optional	The malicious communication rejection service. See Section 26.1.30 on page 138 for detailed Attributes definition information.
media-policy	Sub-MO	Optional	The media policy service. See Section 26.1.31 on page 138 for detailed Attributes definition information.
multi-device-conference-policy	Sub-MO	Optional	The multi device conference policy service. See Section 26.1.32 on page 139 for detailed Attributes definition information.
multi-device-user-call-admission-control	Sub-MO	Optional	The multi device user call admission control service. See Section 26.1.33 on page 140 for detailed Attributes definition information.



Table 3 *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
northbound-call-control	Sub-MO	Optional	The Northbound Call Control service. See Section 26.1.34 on page 141 for detailed Attributes definition information.
number-portability-announcement	Sub-MO	Optional	The number portability announcement. See Section 26.1.35 on page 142 for detailed Attributes definition information.
operator-controlled-outgoing-barring-programs	Sub-MO	Optional	The operator controlled outgoing barring programs service. See Section 26.1.36 on page 142 for detailed Attributes definition information.
outgoing-barring-programs	Sub-MO	Optional	The outgoing barring programs service. See Section 26.1.37 on page 143 for detailed Attributes definition information.
outgoing-communication-barring	Sub-MO	Optional	The outgoing communication barring service. See Section 26.1.38 on page 144 for detailed Attributes definition information.
originating-calling-name-identity-presentation	Sub-MO	Optional	The originating calling name identity presentation service. See Section 26.1.39 on page 146 for detailed Attributes definition information.
originating-identity-presentation	Sub-MO	Optional	The originating identity presentation service. See Section 26.1.40 on page 147 for detailed Attributes definition information.
originating-identity-presentation-restriction	Sub-MO	Optional	The originating identity presentation restriction service. See Section 26.1.41 on page 147 for detailed Attributes definition information.
priority-call	Sub-MO	Optional	The priority call service. See Section 26.1.42 on page 148 for detailed Attributes definition information.
session-transfer-to-own-device	Sub-MO	Optional	The session transfer to own device service. See Section 26.1.44 on page 149 for detailed Attributes definition information.
supplementary-service-codes	Sub-MO	Optional	The supplementary service codes service. See Section 26.1.57 on page 165 for detailed Attributes definition information.
terminating-identity-presentation	Sub-MO	Optional	The terminating identity presentation service. See Section 26.1.58 on page 166 for detailed Attributes definition information.
terminating-identity-presentation-restriction	Sub-MO	Optional	The terminating identity presentation restriction service. See Section 26.1.59 on page 167 for detailed Attributes definition information.
three-pty	Sub-MO	Optional	The three party service. See Section 26.1.60 on page 168 for detailed Attributes definition information.

**Table 3** *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
user-call-admission-control	Sub-MO	Optional	The user call admission control service. See Section 26.1.61 on page 168 for detailed Attributes definition information.
user-common-data	Sub-MO	Optional	The Common data available to the user across multiple services. See Section 26.1.62 on page 169 for detailed Attributes definition information.
voice-mail	Sub-MO	Optional	The voicemail service. See Section 26.1.63 on page 172 for detailed Attributes definition information.

2.2 Example

Request Example

This section gives an example of a Create MMTelSubscription request message, as shown in Example 2. The example shows how to create a user `sip:user1@tas117.imsas.al.sw.ericsson.se` with an abbreviated-dialing service. All services specified in the previous table can be added to the create request.



```
<soapenv:Envelope xsi:schemaLocation="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/
ema_UserProvisioning_MTAS_wsdl_fixed.xsd" xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/
" xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns="http://schemas.ericsson.com/ema/
UserProvisioning/MTAS/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>1</cai3:TransactionId>
    <cai3:SessionId>85b0db2685b0db26000000001359337991433</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Subscription@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/</cai3:MOType>
      <cai3:MOId>
        <publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <createSubscription publicId="sip:user1@tas117.imsas.al.sw.ericsson.se">
          <publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</publicId>
          <services>
            <abbreviated-dialing>
              <abbreviated-dialing-operator-configuration>
                <activated>true</activated>
              </abbreviated-dialing-operator-configuration>
              <abbreviated-dialing-user-configuration>
                <active>true</active>
                <number-mapping abbreviated-number="0">
                  <abbreviated-number>0</abbreviated-number>
                  <stored-number>sip:user0@test.test</stored-number>
                </number-mapping>
                <number-mapping abbreviated-number="1">
                  <abbreviated-number>1</abbreviated-number>
                  <stored-number>sip:user1@test.test</stored-number>
                </number-mapping>
              </abbreviated-dialing-user-configuration>
            </abbreviated-dialing>
          </services>
        </createSubscription>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 2 Create MMTelSubscription Request Message





3 Get MMTel Subscription

This section covers the command `Get Subscription` for MMTel Subscription.

MOType

`Subscription@http://schemas.ericsson.com/ema/UserProvis
ioning/MTAS/`

3.1 Request Data

3.1.1 Parameters

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

MOId

Table 4 Get MMTelSubscription Parameters

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	Attribute to identify the user in MTAS.

3.2 Response Data

3.2.1 Parameters

MOId

N/A

MOAttributes

The parameters that are used in the operation are shown in Figure 4, Figure 5, and Figure 6.

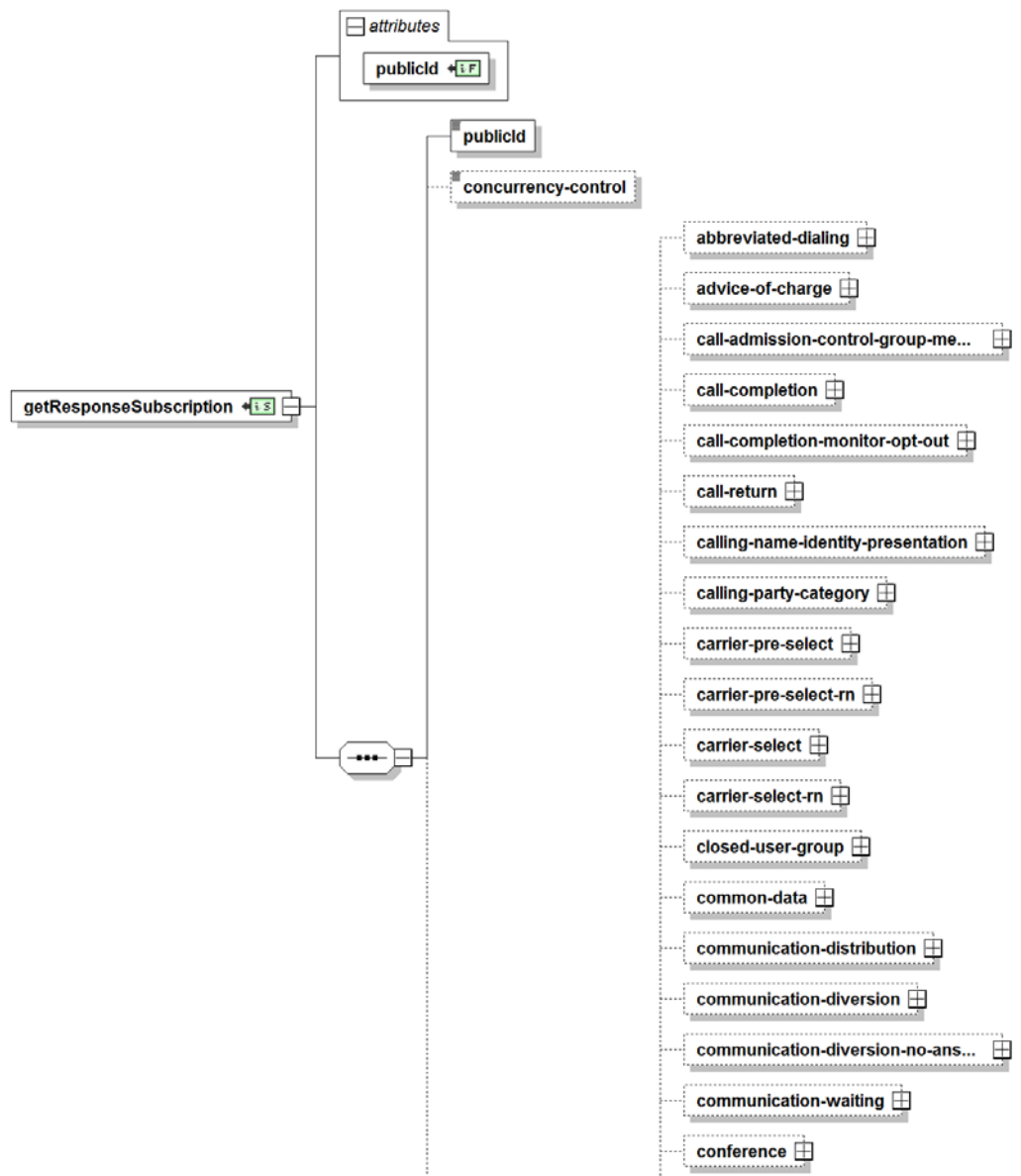


Figure 4 Parameters in Get MMTelSubscription, part 1



Figure 5 Parameters in Get MMTelSubscription, part 2

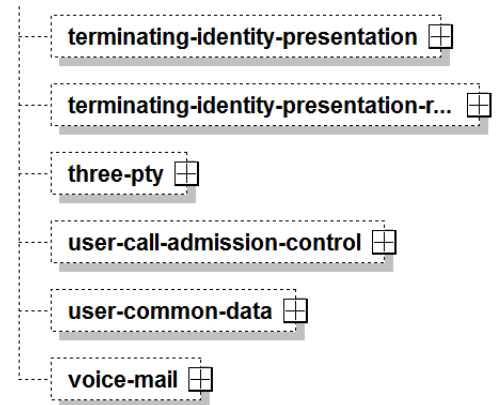


Figure 6 Parameters in Get MMTelSubscription, part 3

Table 5 covers the parameters that can be used in a Get MMTelSubscription response.

Table 5 Attributes Definition for MMTel Subscription Service

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	User identity in MTAS. This identity must already be configured on the HSS.
concurrency-control	Integer, length: 0–1	Optional	The <code>concurrency-control</code> element is an optional element to control concurrent updates. If it is present, then the <code>set</code> request is accepted only if the service data version is still at the value given in this element, for example, no other updates have been performed.
validate	Sub-MO	Optional	The validate feature is used when the request must be validated but not stored in the HSS.
services	Sub-MO	Optional	MMTel services, the relative order of the existing services must be maintained all new services is to be optional and inserted in alphabetical order within the existing list where possible.
abbreviated-dialing	Sub-MO	Optional	The abbreviated-dialing service SeeSection 26.1.1 on page 109 for detailed attributes definition information.
advice-of-charge	Sub-MO	Optional	The Advice of Charge service See Section 26.1.2 on page 109 for detailed attributes definition information.
call-admission-control-group-membership	Sub-MO	Optional	The user membership of call admission control group service. See Section 26.1.3 on page 111 for detailed Attributes definition information.
call-completion	Sub-MO	Optional	The communication completion service. SeeSection 26.1.4 on page 111 for detailed Attributes definition information.
call-completion-monitor-opt-out	Sub-MO	Optional	The call completion monitor opt-out service. This allows a subscriber to be opted out of being monitored to support call completion services to that subscriber. This is specified as an opt-out because the call completion is more valuable the more targets for which call completion is possible. See Section 26.1.5 on page 112 for detailed Attributes definition information.



Table 5 *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
call-return	Sub-MO	Optional	The call return service. See Section 26.1.6 on page 113 for detailed Attributes definition information.
calling-name-identity-presentation	Sub-MO	Optional	The calling name identity presentation service. See Section 26.1.7 on page 113 for detailed Attributes definition information.
calling-party-category	Sub-MO	Optional	The calling party category service. See Section 26.1.8 on page 114 for detailed Attributes definition information.
carrier-pre-select	Sub-MO	Optional	The carrier pre-select service. See Section 26.1.9 on page 114 for detailed Attributes definition information.
carrier-pre-select-rn	Sub-MO	Optional	The carrier pre-select rn service. See Section 26.1.10 on page 115 for detailed Attributes definition information.
carrier-select	Sub-MO	Optional	The carrier select service. See Section 26.1.11 on page 116 for detailed Attributes definition information.
carrier-select-rn	Sub-MO	Optional	The carrier select rn service. See Section 26.1.12 on page 116 for detailed Attributes definition information.
closed-user-group	Sub-MO	Optional	The closed user group service. See Section 26.1.13 on page 116 for detailed Attributes definition information.
common-data	Sub-MO	Optional	Common data available across services. This data is available to the operator rather than the user. See Section 26.1.14 on page 117 for detailed Attributes definition information.
communication-distribution	Sub-MO	Optional	The communication distribution service. See Section 26.1.15 on page 118 for detailed Attributes definition information.
communication-diversion	Sub-MO	Optional	The communication diversion service. See Section 26.1.16 on page 124 for detailed Attributes definition information.
communication-diversion-no-answer-timer	Sub-MO	Optional	The communication diversion no answer timer service. See Section 26.1.17 on page 127 for detailed Attributes definition information.
communication-waiting	Sub-MO	Optional	The communication waiting service. The communication waiting service depends on the user call admission control service. The communication waiting service can only be activated if the user call admission control service is also activated and the waiting-limit is set to greater than zero. Because of the mutual dependency with user call admission control, both services must be updated in the same request in which communication waiting is activated or deactivated. See Section 26.1.18 on page 128 for detailed Attributes definition information.

**Table 5** *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
conference	Sub-MO	Optional	The conference service. See Section 26.1.19 on page 129 for detailed Attributes definition information.
customized-alerting-tone	Sub-MO	Optional	The customized alerting tones service. See Section 26.1.20 on page 129 for detailed Attributes definition information.
dial-tone-management	Sub-MO	Optional	The dial tone management service. See Section 26.1.21 on page 130 for detailed Attributes definition information.
dialog-event-notifier	Sub-MO	Optional	The dialog event notifier service. See Section 26.1.22 on page 130 for detailed Attributes definition information.
distinctive-ring	Sub-MO	Optional	The distinctive ring service. See Section 26.1.23 on page 131 for detailed Attributes definition information.
dynamic-black-list	Sub-MO	Optional	The dynamic blacklist service. See Section 26.1.24 on page 132 for detailed Attributes definition information.
explicit-communication-transfer	Sub-MO	Optional	The explicit communication transfer service. See Section 26.1.25 on page 133 for detailed Attributes definition information.
flexible-identity-presentation	Sub-MO	Optional	The flexible identity presentation service. See Section 26.1.26 on page 133 for detailed Attributes definition information.
hotline	Sub-MO	Optional	The hotline service. See Section 26.1.27 on page 134 for detailed Attributes definition information.
incoming-communication-barring	Sub-MO	Optional	The incoming-communication-barring service See Section 26.1.28 on page 135 for detailed Attributes definition information.
malicious-communication-identification	Sub-MO	Optional	The malicious communication identification service. See Section 26.1.29 on page 137 for detailed Attributes definition information.
malicious-communication-rejection	Sub-MO	Optional	The malicious communication rejection service. See Section 26.1.30 on page 138 for detailed Attributes definition information.
media-policy	Sub-MO	Optional	The media policy service. See Section 26.1.31 on page 138 for detailed Attributes definition information.
multi-device-conference-policy	Sub-MO	Optional	The multi device user conference policy service. See Section 26.1.32 on page 139 for detailed Attributes definition information.



Table 5 *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
multi-device-user-call-admission-control	Sub-MO	Optional	The multi device user call admission control service. See Section 26.1.33 on page 140 for detailed Attributes definition information.
northbound-call-control	Sub-MO	Optional	The Northbound Call Control service. See Section 26.1.34 on page 141 for detailed Attributes definition information.
number-portability-announcement	Sub-MO	Optional	The number portability announcement. See Section 26.1.35 on page 142 for detailed Attributes definition information.
operator-controlled-outgoing-barring-programs	Sub-MO	Optional	The operator controlled outgoing barring programs service. See Section 26.1.36 on page 142 for detailed Attributes definition information.
outgoing-barring-programs	Sub-MO	Optional	The outgoing barring programs service. See Section 26.1.37 on page 143 for detailed Attributes definition information.
outgoing-communication-barring	Sub-MO	Optional	The outgoing communication barring service. See Section 26.1.38 on page 144 for detailed Attributes definition information.
originating-calling-name-identity-presentation	Sub-MO	Optional	The originating calling name identity presentation service. See Section 26.1.39 on page 146 for detailed Attributes definition information.
originating-identity-presentation	Sub-MO	Optional	The originating identity presentation service. See Section 26.1.40 on page 147 for detailed Attributes definition information.
originating-identity-presentation-restriction	Sub-MO	Optional	The originating identity presentation restriction service. See Section 26.1.41 on page 147 for detailed Attributes definition information.
priority-call	Sub-MO	Optional	The priority call service. See Section 26.1.42 on page 148 for detailed Attributes definition information.
session-transfer-to-own-device	Sub-MO	Optional	The session transfer to own device service. See Section 26.1.44 on page 149 for detailed Attributes definition information.
supplementary-service-codes	Sub-MO	Optional	The supplementary service codes service. See Section 26.1.57 on page 165 for detailed Attributes definition information.
terminating-identity-presentation	Sub-MO	Optional	The terminating identity presentation service. See Section 26.1.58 on page 166 for detailed Attributes definition information.
terminating-identity-presentation-restriction	Sub-MO	Optional	The terminating identity presentation restriction service. See Section 26.1.59 on page 167 for detailed Attributes definition information.

**Table 5** *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
three-pty	Sub-MO	Optional	The three party service. See Section 26.1.60 on page 168 for detailed Attributes definition information.
user-call-admission-control	Sub-MO	Optional	The user call admission control service. See Section 26.1.61 on page 168 for detailed Attributes definition information.
user-common-data	Sub-MO	Optional	The Common data available to the user across multiple services. See Section 26.1.62 on page 169 for detailed Attributes definition information.
voice-mail	Sub-MO	Optional	The voicemail service. See Section 26.1.63 on page 172 for detailed Attributes definition information.

3.3 Example

This section gives an example of a `Get MMTelSubscription` response message. The example shows how to get abbreviated-dialing and Advice of Charge services for the user `sip:user1@tas117.imsas.al.sw.ericsson.se`. All services specified in the previous table can be added to the get response.



```

<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://
schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>9c6d16ba53644933bf080230bd993deb</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:GetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOAttributes>
        <getResponseSubscription:getResponseSubscription publicId="sip:user1@tas117.imsas.al.
sw.ericsson.se" xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/"
xmlns:getResponseSubscription="http://schemas.ericsson.com/ema/UserProvisioning/
MTAS/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
          <publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</publicId>
          <concurrency-control>0</concurrency-control>
          <services>
            <abbreviated-dialing>
              <abbreviated-dialing-operator-configuration>
                <activated>true</activated>
              </abbreviated-dialing-operator-configuration>
              <abbreviated-dialing-user-configuration>
                <active>true</active>
                <number-mapping abbreviated-number="0">
                  <abbreviated-number>0</abbreviated-number>
                  <stored-number>sip:user0@test.test</stored-number>
                </number-mapping>
                <number-mapping abbreviated-number="1">
                  <abbreviated-number>1</abbreviated-number>
                  <stored-number>sip:user1@test.test</stored-number>
                </number-mapping>
              </abbreviated-dialing-user-configuration>
            </abbreviated-dialing>
            <advice-of-charge>
              <aoc-operator-configuration>
                <activated>true</activated>
                <service-type>
                  <operator-aoc-s>
                    <activated>true</activated>
                    <aoc-service-obligatory>AoCI</aoc-service-obligatory>
                  </operator-aoc-s>
                  <operator-aoc-d>
                    <activated>true</activated>
                    <aoc-service-obligatory>AoCI</aoc-service-obligatory>
                  </operator-aoc-d>
                  <operator-aoc-e>
                    <activated>true</activated>
                    <aoc-service-obligatory>AoCI</aoc-service-obligatory>
                  </operator-aoc-e>
                </service-type>
                <currency-or-units>
                  <currency-as-ISO-4217-numeric>111</currency-as-ISO-4217-numeric>
                </currency-or-units>
              </aoc-operator-configuration>
            </advice-of-charge>
          </services>
        </getResponseSubscription:getResponseSubscription>
      </ns2:MOAttributes>
    </ns2:GetResponse>
  </S:Body>
</S:Envelope>

```

Example 3 Get MMTelSubscription





4 Set MMTel Subscription

This section covers the command `Set Subscription` for MMTel Subscription.

MOType

`Subscription@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/`

4.1 Request Data

4.1.1 Parameters

MOId

Table 6 Set MMTelSubscription MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute to identify the user in MTAS.

MOAttributes

The parameters that are used in the operation are shown in Figure 7, Figure 8, and Figure 9.

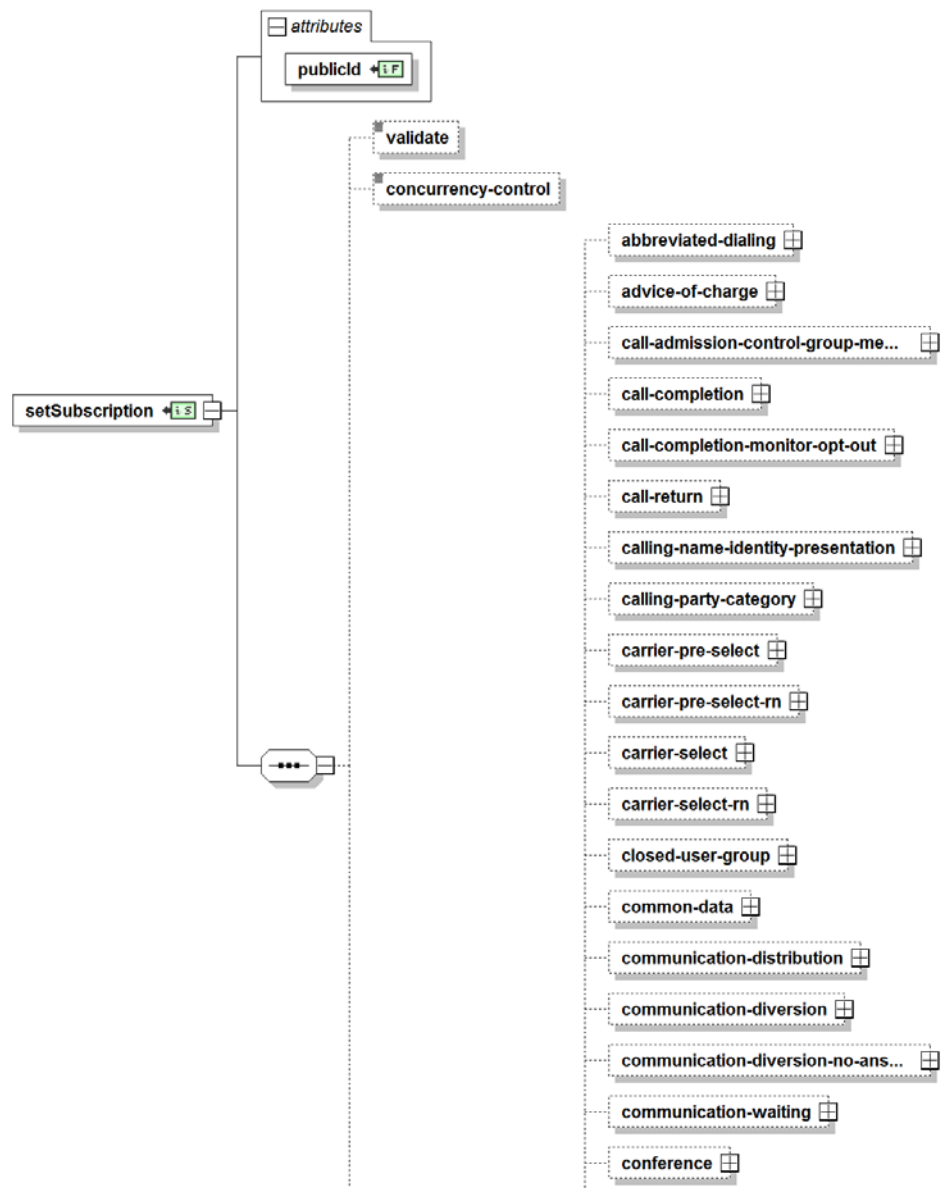


Figure 7 Parameters in Set MMTelSubscription, part 1



Figure 8 Parameters in Set MMTelSubscription, part 2

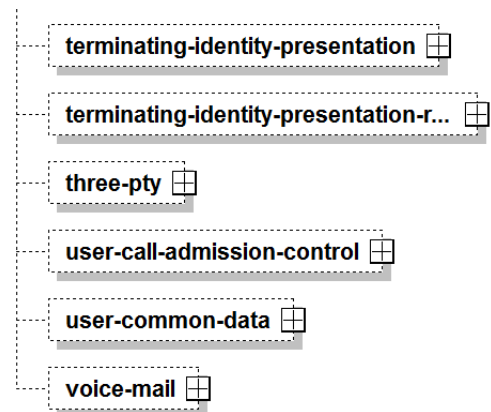


Figure 9 Parameters in Set MMTelSubscription, part 3

Table 7 covers the parameters that can be used in a Set MMTelSubscription request.

Table 7 Attributes Definition for MMTel Subscription Service

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute in the setSubscription element, to identify the user in MTAS. This identity must already be configured on the HSS.
concurrency-control	Integer, length: 0–1	Optional	The concurrency-control element is an optional element to control concurrent updates. If it is present, then the set request is accepted only if the service data version is still at the value given in this element, for example, no other updates have been performed.
validate	Sub-MO	Optional	The validate is used when the request must be validated but not stored in the HSS.
services	Sub-MO	Optional	MMTel services, the relative order of the existing services must be maintained all new services is to be optional and inserted in alphabetical order within the existing list where possible.
abbreviated-dialing	Sub-MO	Optional	The abbreviated-dialing service. Use <code>xsi:nil="true"</code> to withdraw the entire service. SeeSection 26.1.1 on page 109 for detailed attributes definition information.
advice-of-charge	Sub-MO	Optional	The Advice of Charge service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.2 on page 109 for detailed attributes definition information.
call-admission-control-group-membership	Sub-MO	Optional	The user membership of call admission control group service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.3 on page 111 for detailed Attributes definition information.
call-completion	Sub-MO	Optional	The communication completion service. Use <code>xsi:nil="true"</code> to withdraw the entire service. SeeSection 26.1.4 on page 111 for detailed Attributes definition information.



Table 7 Attributes Definition for MMTel Subscription Service

Parameter	Type	Occurrence	Description
call-completion-monitor-opt-out	Sub-MO	Optional	<p>The call completion monitor opt-out service. This allows a subscriber to be opted out of being monitored to support call completion services to that subscriber. This is specified as an opt-out because the call completion is more valuable the more targets for which call completion is possible. Use <code>xsi:nil="true"</code> to withdraw the entire service.</p> <p>See Section 26.1.5 on page 112 for detailed Attributes definition information.</p>
call-return	Sub-MO	Optional	<p>The call return service. Use <code>xsi:nil=true</code> to withdraw the entire service.</p> <p>SeeSection 26.1.6 on page 113 for detailed Attributes definition information.</p>
calling-name-identity-presentation	Sub-MO	Optional	<p>The calling name identity presentation service. Use <code>xsi:nil="true"</code> to withdraw the entire service.</p> <p>See Section 26.1.7 on page 113 for detailed Attributes definition information.</p>
calling-party-category	Sub-MO	Optional	<p>The calling party category service. Use <code>xsi:nil="true"</code> to withdraw the entire service.</p> <p>See Section 26.1.8 on page 114 for detailed Attributes definition information.</p>
carrier-pre-select	Sub-MO	Optional	<p>The carrier pre-select service. Use <code>xsi:nil="true"</code> to withdraw the entire service.</p> <p>See Section 26.1.9 on page 114 for detailed Attributes definition information.</p>
carrier-pre-select-rn	Sub-MO	Optional	<p>The carrier pre-select rn service. Use <code>xsi:nil="true"</code> to withdraw the entire service.</p> <p>See Section 26.1.10 on page 115 for detailed Attributes definition information.</p>
carrier-select	Sub-MO	Optional	<p>The carrier select service. Use <code>xsi:nil="true"</code> to withdraw the entire service.</p> <p>See Section 26.1.11 on page 116 for detailed Attributes definition information.</p>
carrier-select-rn	Sub-MO	Optional	<p>The carrier select rn service. Use <code>xsi:nil="true"</code> to withdraw the entire service.</p> <p>See Section 26.1.12 on page 116 for detailed Attributes definition information.</p>
closed-user-group	Sub-MO	Optional	<p>The closed user group service. Use <code>xsi:nil="true"</code> to withdraw the entire service.</p> <p>See Section 26.1.13 on page 116 for detailed Attributes definition information.</p>
common-data	Sub-MO	Optional	<p>Common data available across services. This data is available to the operator rather than the user. Unlike services this is never to be withdrawn so this is not nillable.</p> <p>See Section 26.1.14 on page 117 for detailed Attributes definition information.</p>
communication-distribution	Sub-MO	Optional	<p>The communication distribution service. Use <code>xsi:nil="true"</code> to withdraw the entire service.</p> <p>See Section 26.1.15 on page 118 for detailed Attributes definition information.</p>

Table 7 *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
communication-diversion	Sub-MO	Optional	The communication diversion service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.16 on page 124 for detailed Attributes definition information.
communication-diversion-no-answer-timer	Sub-MO	Optional	The communication diversion no answer timer service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.17 on page 127 for detailed Attributes definition information.
communication-waiting	Sub-MO	Optional	The communication waiting service. Use <code>xsi:nil="true"</code> to withdraw the entire service. The communication waiting service depends on the user call admission control service. The communication waiting service can only be activated if the user call admission control service is also activated and the waiting-limit is set to greater than zero. Because of the mutual dependency with user call admission control, both services must be updated in the same request in which communication waiting is activated or deactivated. See Section 26.1.18 on page 128 for detailed Attributes definition information.
conference	Sub-MO	Optional	The conference service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.19 on page 129 for detailed Attributes definition information.
customized-alerting-tone	Sub-MO	Optional	The customized alerting tones service. See Section 26.1.20 on page 129 for detailed Attributes definition information.
dial-tone-management	Sub-MO	Optional	The dial tone management service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.21 on page 130 for detailed Attributes definition information.
dialog-event-notifier	Sub-MO	Optional	The dialog event notifier service. See Section 26.1.22 on page 130 for detailed Attributes definition information.
distinctive-ring	Sub-MO	Optional	The distinctive ring service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.23 on page 131 for detailed Attributes definition information.
dynamic-blacklist	Sub-MO	Optional	The dynamic blacklist service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.24 on page 132 for detailed Attributes definition information.
explicit-communication-transfer	Sub-MO	Optional	The explicit communication transfer service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.25 on page 133 for detailed Attributes definition information.
flexible-identity-presentation	Sub-MO	Optional	The flexible identity presentation service. See Section 26.1.26 on page 133 for detailed Attributes definition information.



Table 7 *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
hotline	Sub-MO	Optional	The hotline service. Use <code>xsi:nil=true</code> to withdraw the entire service. See Section 26.1.27 on page 134 for detailed Attributes definition information.
incoming-communication-barring	Sub-MO	Optional	The incoming-communication-barring service See Section 26.1.28 on page 135 for detailed Attributes definition information.
malicious-communication-identification	Sub-MO	Optional	The malicious communication identification service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.29 on page 137 for detailed Attributes definition information.
malicious-communication-rejection	Sub-MO	Optional	The malicious communication rejection service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.30 on page 138 for detailed Attributes definition information.
media-policy	Sub-MO	Optional	The media policy service. See Section 26.1.31 on page 138 for detailed Attributes definition information.
multi-device-conference-policy	Sub-MO	Optional	The multi device conference policy. See Section 26.1.32 on page 139 for detailed Attributes definition information.
multi-device-user-call-admission-control	Sub-MO	Optional	The multi device user call admission control service. See Section 26.1.33 on page 140 for detailed Attributes definition information.
northbound-call-control	Sub-MO	Optional	The Northbound Call Control service. See Section 26.1.34 on page 141 for detailed Attributes definition information.
number-portability-announcement	Sub-MO	Optional	The number portability announcement. See Section 26.1.35 on page 142 for detailed Attributes definition information.
operator-controlled-outgoing-barring-programs	Sub-MO	Optional	The operator controlled outgoing barring programs service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.36 on page 142 for detailed Attributes definition information.
outgoing-barring-programs	Sub-MO	Optional	The outgoing barring programs service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.37 on page 143 for detailed Attributes definition information.
outgoing-communication-barring	Sub-MO	Optional	The outgoing communication barring service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.38 on page 144 for detailed Attributes definition information.
originating-calling-name-identity-presentation	Sub-MO	Optional	The originating calling name identity presentation service. Use <code>xsi:nil=true</code> to withdraw the entire service. See Section 26.1.39 on page 146 for detailed Attributes definition information.

**Table 7** *Attributes Definition for MMTel Subscription Service*

Parameter	Type	Occurrence	Description
originating-identity-presentation	Sub-MO	Optional	The originating identity presentation service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.40 on page 147 for detailed Attributes definition information.
originating-identity-presentation-restriction	Sub-MO	Optional	The originating identity presentation restriction service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.41 on page 147 for detailed Attributes definition information.
priority-call	Sub-MO	Optional	The priority call service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.42 on page 148 for detailed Attributes definition information.
session-transfer-to-own-device	Sub-MO	Optional	The session transfer to own device service. See Section 26.1.44 on page 149 for detailed Attributes definition information.
supplementary-service-codes	Sub-MO	Optional	The supplementary service codes service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.57 on page 165 for detailed Attributes definition information.
terminating-identity-presentation	Sub-MO	Optional	The terminating identity presentation service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.58 on page 166 for detailed Attributes definition information.
terminating-identity-presentation-restriction	Sub-MO	Optional	The terminating identity presentation restriction service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.59 on page 167 for detailed Attributes definition information.
three-pty	Sub-MO	Optional	The three party service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.60 on page 168 for detailed Attributes definition information.
user-call-admission-control	Sub-MO	Optional	The user call admission control service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.61 on page 168 for detailed Attributes definition information.
user-common-data	Sub-MO	Optional	The Common data available to the user across multiple services. Use <code>xsi:nil="true"</code> to delete the user-common-data. See Section 26.1.62 on page 169 for detailed Attributes definition information.
voice-mail	Sub-MO	Optional	The voicemail service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.63 on page 172 for detailed Attributes definition information.

4.2 Example

This section gives an example of a `Set MMTelSubscription` request and response message. The example shows how to set Advice of Charge services



for the user sip:user1@tas117.imsas.al.sw.ericsson.se. All services specified in the previous table can be added to the set request.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>1</cai3:TransactionId>
    <cai3:SessionId>85b0db2685b0db26000000001359337991433</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Subscription@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/
    </cai3:MOType>
    <cai3:MOId>
      <publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</publicId>
    </cai3:MOId>
    <cai3:MOAttributes>
      <setSubscription publicId="sip:user1@tas117.imsas.al.sw.ericsson.se">
        <concurrency-control>0</concurrency-control>
        <services>
          <advice-of-charge>
            <aoc-operator-configuration>
              <activated>true</activated>
              <service-type>
                <operator-aoc-s>
                  <activated>true</activated>
                  <aoc-service-obligatory>AoCI</aoc-service-obligatory>
                </operator-aoc-s>
                <operator-aoc-d>
                  <activated>true</activated>
                  <aoc-service-obligatory>AoCI</aoc-service-obligatory>
                </operator-aoc-d>
                <operator-aoc-e>
                  <activated>true</activated>
                  <aoc-service-obligatory>AoCI</aoc-service-obligatory>
                </operator-aoc-e>
              </service-type>
            </aoc-operator-configuration>
            <currency-or-units>
              <currency-as-ISO-4217-numeric>111</currency-as-ISO-4217-numeric>
            </currency-or-units>
          </aoc-operator-configuration>
        </advice-of-charge>
      </services>
    </setSubscription>
  </cai3:MOAttributes>
</cai3:Set>
</soapenv:Body>
</soapenv:Envelope>
```

Example 4 Set MMTelSubscription





5 Delete MMTel Subscription

This section covers the command `Delete Subscription` for MMTel Subscription.

MOType

`Subscription@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/`

5.1 Request Data

5.1.1 Parameters

MOId

Table 8 Delete MMTelSubscription MOId

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	Attribute to identify the user in MTAS.

MOAttributes

Not available.

5.2 Example

This section gives an example of a `Delete MMTelSubscription` request message. The example shows how to delete the subscription with user `sip:EMA_test00008_pubid@ile002.sh.cn`.



```
Request:
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
xmlns:mmt="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/">
  <soapenv:Header>
    <cai3:SequenceId>8520980653000269692</cai3:SequenceId>
    <cai3:SessionId>85b0db2685b0db26000000001359338307442</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>
        Subscription@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/
      </cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:EMA_test00008_pubid@ile002.sh.cn</mmt:publicId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 5 *Delete MMTelSubscription Request Message*



6 Create MMTel SharedProfileService

This section covers the command `Create Service` for MMTel SharedProfile.

MOType

Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/

6.1 Request Data

6.1.1 Parameters

MOId

Table 9 Create MMTelSharedProfileService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute to identify the MMTel Shared Profile service in MTAS.

MOAttributes

The parameters that are used in the operation are shown in Figure 10, Figure 11, and Figure 12.

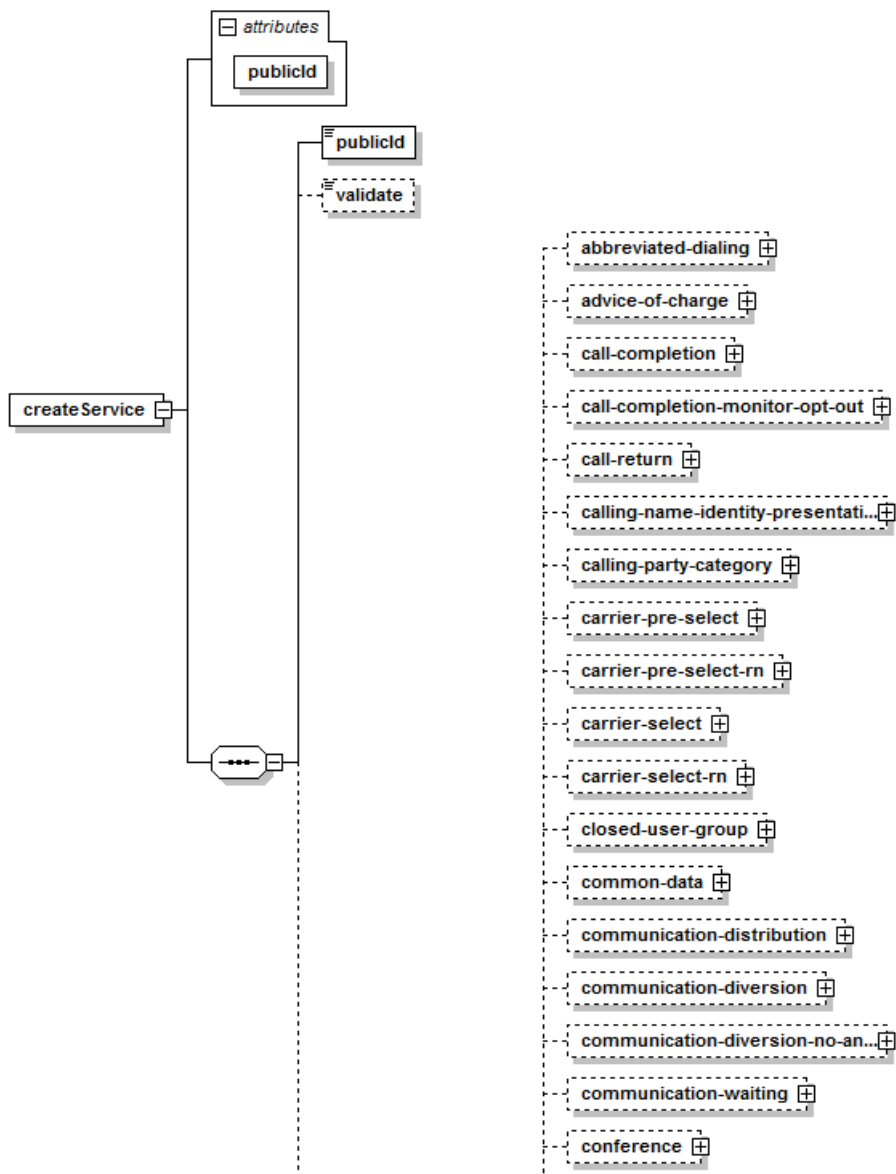


Figure 10 Parameters in Create MMTelSharedProfileService, part 1

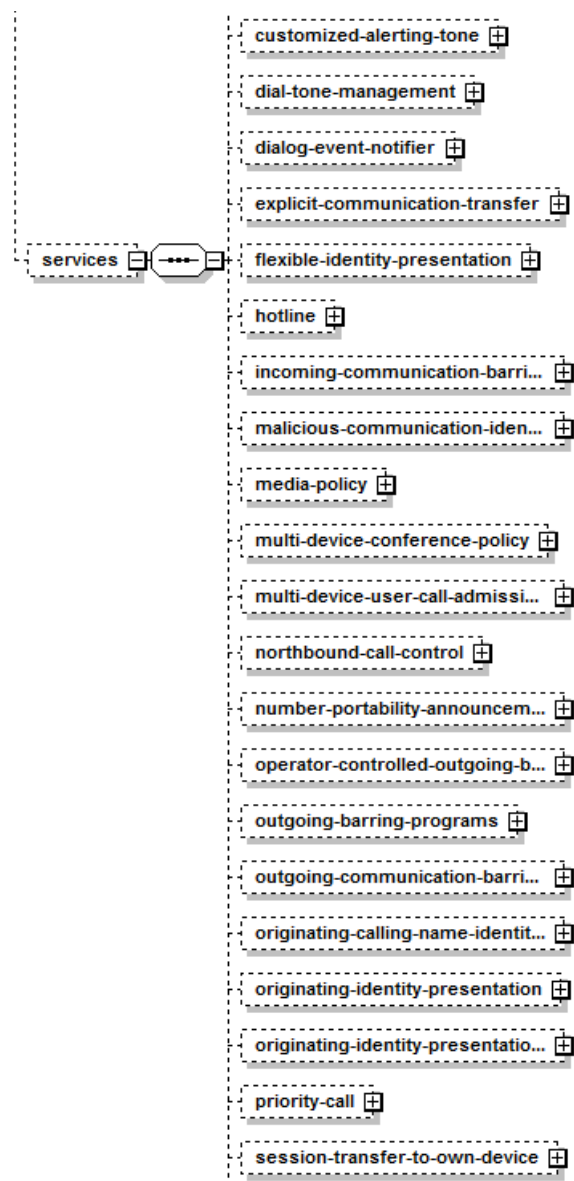


Figure 11 Parameters in Create MMTelSharedProfileService, part 2

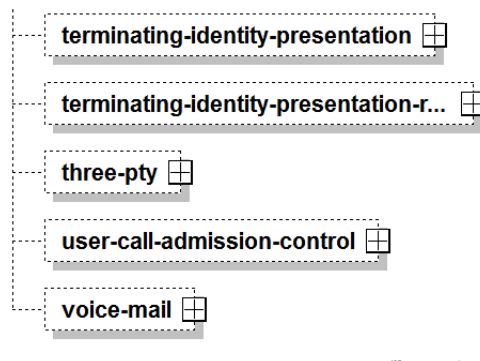


Figure 12 Parameters in Create MMTelSharedProfileService, part 3

Table 10 covers the parameters that can be used in a Create MMTelSharedProfileService request.

Table 10 Attributes Definition for MMTel Shared Profiled Services

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute to identify the shared profile in MTAS.
validate	Sub-MO	Optional	The validate is used when the request must be validated but not stored in the HSS.
services	Sub-MO	Optional	MMTel services, the relative order of the existing services must be maintained all new services is to be optional and inserted in alphabetical order within the existing list where possible
abbreviated-dialing	Sub-MO	Optional	The abbreviated-dialing service. See Section 26.1.1 on page 109 for detailed Attributes definition.
advice-of-charge	Sub-MO	Optional	The advice-of-charge service. See Section 26.1.2 on page 109 for detailed Attributes definition.
call-completion	Sub-MO	Optional	The communication completion service. See Section 26.1.4 on page 111 for detailed Attributes definition.
call-completion-monitor-opt-out	Sub-MO	Optional	The call-completion-monitor-opt-out service allows a subscriber to be opted out of being monitored to support communication-completion services to that subscriber. This is specified as an opt-out because the call-completion is more valuable the more targets for which call-completion is possible. See Section 26.1.5 on page 112 for detailed Attributes definition.
call-return	Sub-MO	Optional	The call return service. See Section 26.1.6 on page 113 for detailed Attributes definition.
calling-name-identity-presentation	Sub-MO	Optional	The calling-name-identity-presentation service. See Section 26.1.7 on page 113 for detailed Attributes definition.
calling-party-category	Sub-MO	Optional	The calling party category service. See Section 26.1.8 on page 114 for detailed Attributes definition.



Table 10 Attributes Definition for MMTel Shared Profiled Services

Parameter	Type	Occurrence	Description
carrier-pre-select	Sub-MO	Optional	The carrier-pre-select service. See Section 26.1.9 on page 114 for detailed Attributes definition.
carrier-pre-select-rn	Sub-MO	Optional	The carrier-pre-select-rn service. See Section 26.1.10 on page 115 for detailed Attributes definition.
carrier-select	Sub-MO	Optional	The carrier-select service. See Section 26.1.11 on page 116 for detailed Attributes definition.
carrier-select-rn	Sub-MO	Optional	The carrier select rn service. See Section 26.1.12 on page 116 for detailed Attributes definition information.
closed-user-group	Sub-MO	Optional	The closed user group service. See Section 26.1.13 on page 116 for detailed Attributes definition.
common-data	Sub-MO	Optional	The common data service. Only the vtp-domain element is supported. See Section 26.1.14 on page 117 for detailed Attributes definition.
communication-distribution	Sub-MO	Optional	The communication distribution service. See Section 26.1.15 on page 118 for detailed Attributes definition.
communication-diversion	Sub-MO	Optional	The communication diversion service. See Section 26.1.16 on page 124 for detailed Attributes definition.
communication-diversion-no-answer-timer	Sub-MO	Optional	The communication-diversion no answer timer service. See Section 26.1.17 on page 127 for detailed Attributes definition.
communication-waiting	Sub-MO	Optional	The communication-waiting service. The communication-waiting service depends on the user-call-admission-control service. The communication-waiting service can only be activated if the user-call-admission-control service is also activated and the value of waiting-limit is set to greater than zero. Because of the mutual dependency with user-call-admission-control, both services must be updated in the same request in which communication-waiting is activated or deactivated. See Section 26.1.18 on page 128 for detailed Attributes definition.
conference	Sub-MO	Optional	The conference service. See Section 26.1.19 on page 129 for detailed Attributes definition.
customized-alerting-tone	Sub-MO	Optional	The customized alerting tones service. See Section 26.1.20 on page 129 for detailed Attributes definition.
dial-tone-management	Sub-MO	Optional	The dial-tone-management service. See Section 26.1.21 on page 130 for detailed Attributes definition.
dialog-event-notifier	Sub-MO	Optional	The dialog event notifier service. See Section 26.1.22 on page 130 for detailed Attributes definition information.
explicit-communication-transfer	Sub-MO	Optional	The explicit-communication-transfer service. See Section 26.1.25 on page 133 for detailed Attributes definition.

Table 10 *Attributes Definition for MMTel Shared Profiled Services*

Parameter	Type	Occurrence	Description
flexible-identity-presentation	Sub-MO	Optional	The flexible identity presentation service. See Section 26.1.26 on page 133 for detailed Attributes definition.
hotline	Sub-MO	Optional	The hotline service. See Section 26.1.27 on page 134 for detailed Attributes definition.
incoming-communication-barring	Sub-MO	Optional	The incoming-communication-barring service. See Section 26.1.28 on page 135 for detailed Attributes definition.
malicious-communication-identification	Sub-MO	Optional	The malicious-communication-identification service. See Section 26.1.29 on page 137 for detailed Attributes definition.
media-policy	Sub-MO	Optional	The media policy service. See Section 26.1.31 on page 138 for detailed Attributes definition information
multi-device-conference-policy	Sub-MO	Optional	The multi device conference policy service. See Section 26.1.32 on page 139 for detailed Attributes definition information
multi-device-user-call-admission-control	Sub-MO	Optional	The multi device user call admission control service. See Section 26.1.33 on page 140 for detailed Attributes definition information
number-portability-announcement	Sub-MO	Optional	The number portability announcement. See Section 26.1.35 on page 142 for detailed Attributes definition information.
operator-controlled-outgoing-barring-programs	Sub-MO	Optional	The operator-controlled-outgoing barring-programs service. See Section 26.1.36 on page 142 for detailed Attributes definition.
outgoing-barring-programs	Sub-MO	Optional	The outgoing-barring-programs service. See Section 26.1.37 on page 143 for detailed Attributes definition.
outgoing-communication-barring	Sub-MO	Optional	The outgoing-communication-barring service. See Section 26.1.38 on page 144 for detailed Attributes definition.
originating-calling-name-identity-presentation	Sub-MO	Optional	The originating calling name identity presentation service. See Section 26.1.39 on page 146 for detailed Attributes definition.
originating-identity-presentation	Sub-MO	Optional	The originating identity presentation service. See Section 26.1.40 on page 147 for detailed Attributes definition.
originating-identity-presentation-restriction	Sub-MO	Optional	The originating-identity presentation restriction service. See Section 26.1.41 on page 147 for detailed Attributes definition.
priority-call	Sub-MO	Optional	The priority-call service. See Section 26.1.42 on page 148 for detailed Attributes definition.
session-transfer-to-own-device	Sub-MO	Optional	The session transfer to own device service. See Section 26.1.44 on page 149 for detailed Attributes definition.



Table 10 *Attributes Definition for MMTel Shared Profiled Services*

Parameter	Type	Occurrence	Description
terminating-identity-presentation	Sub-MO	Optional	The terminating-identity-presentation service. See Section 26.1.58 on page 166 for detailed Attributes definition.
terminating-identity-presentation-restriction	Sub-MO	Optional	The terminating-identity-presentation-restriction service. See Section 26.1.59 on page 167 for detailed Attributes definition.
three-pty	Sub-MO	Optional	The three party service. See Section 26.1.60 on page 168 for detailed Attributes definition.
user-call-admission-control	Sub-MO	Optional	The user-call-admission-control service. See Section 26.1.61 on page 168 for detailed Attributes definition.
voice-mail	Sub-MO	Optional	The voice-mail service. See Section 26.1.63 on page 172 for detailed Attributes definition.

6.2 Example

This section gives an example of a `Create MMTelSharedProfileService` request message. The example shows how to create an abbreviated-dialing service shared profile with identity `sip:bronze@tas117.imsas.al.sw.ericsson.se`.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>1</cai3:TransactionId>
    <cai3:SessionId>85b0db2685b0db26000000001359337991433</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/</cai3:MOType>
      <cai3:MOId>
        <publicId>sip:bronze@tas117.imsas.al.sw.ericsson.se</publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <createService publicId="sip:bronze@tas117.imsas.al.sw.ericsson.se">
          <publicId>sip:bronze@tas117.imsas.al.sw.ericsson.se</publicId>
          <services>
            <abbreviated-dialing>
              <abbreviated-dialing-operator-configuration>
                <activated>true</activated>
              </abbreviated-dialing-operator-configuration>
              <abbreviated-dialing-user-configuration>
                <active>true</active>
                <number-mapping abbreviated-number="0">
                  <abbreviated-number>0</abbreviated-number>
                  <stored-number>sip:user0@test.test</stored-number>
                </number-mapping>
              </abbreviated-dialing-user-configuration>
            </abbreviated-dialing>
          </services>
        </createService>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 6 *Create MMTelSharedProfileService*



7 Get MMTel SharedProfileService

This section covers the command `Get Service` for MMTel SharedProfile.

MOType

Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/

7.1 Request Data

7.1.1 Parameters

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

MOId

Table 11 *Get MMTelSharedProfileService Parameters*

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute to identify the MMTel Shared Profile service in MTAS.

7.2 Response Data

7.2.1 Parameters

MOId

N/A

MOAttributes

The parameters that are used in the operation are shown in Figure 13, Figure 14, and Figure 15.

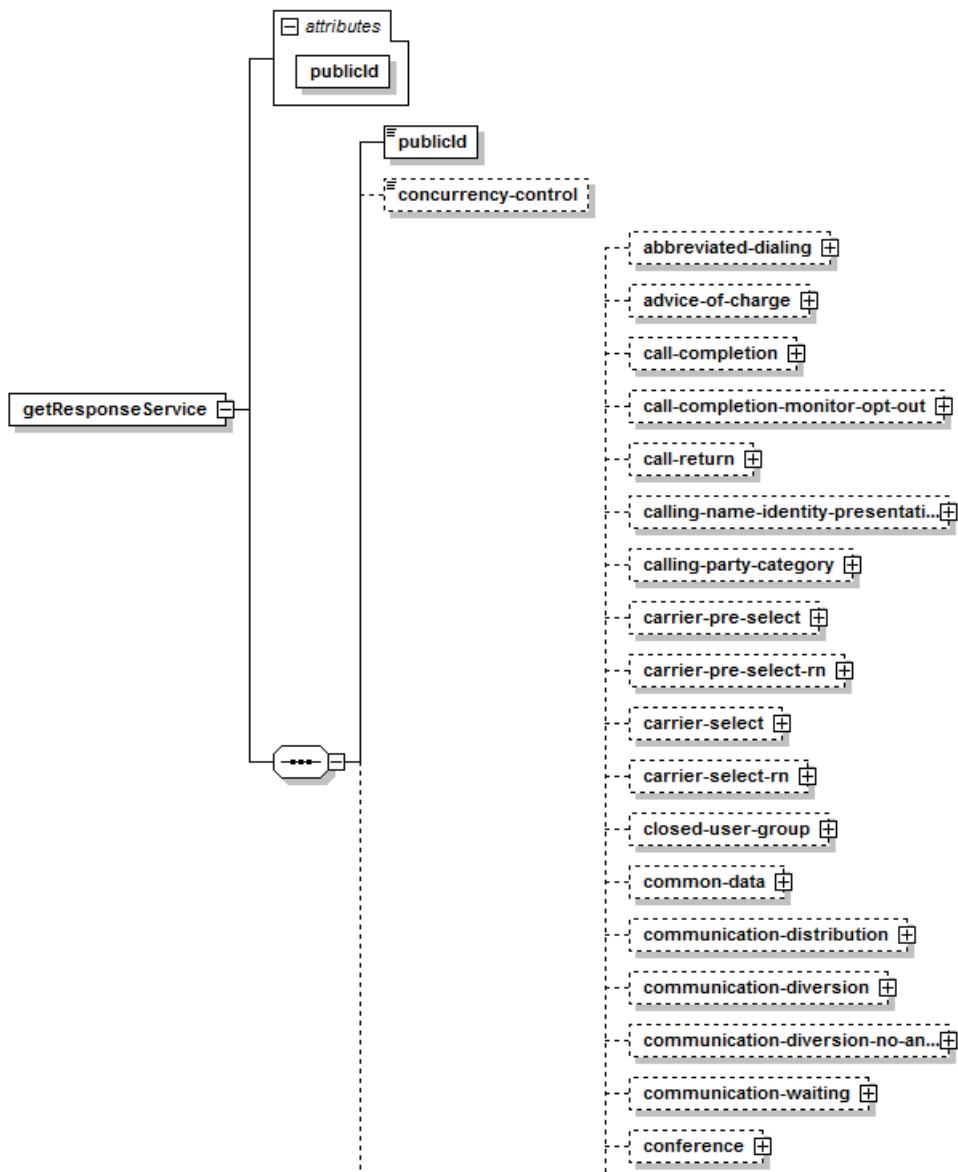


Figure 13 Parameters in Get MMTelSharedProfileService, part 1



Figure 14 Parameters in Get MMTelSharedProfileService, part 2

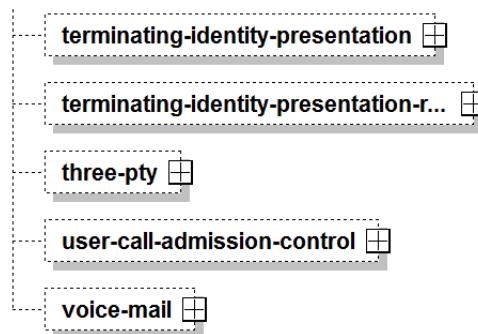


Figure 15 Parameters in Get MMTelSharedProfileService, part 3

Table 12 covers the parameters that can be used in a Get MMTelSharedProfileService response.

Table 12 Attributes Definition for MMTel Shared Profiled Services

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute to identify the shared profile in MTAS.
concurrency-control	Integer, length: 0-1	Optional	The concurrency-control element is an optional element to control concurrent updates. If it is present, then the set request is accepted only if the service data version is still at the value given in this element, for example, no other updates have been performed.
validate	Sub-MO	Optional	The validate is used when the request must be validated but not stored in the HSS.
services	Sub-MO	Optional	MMTel services, the relative order of the existing services must be maintained all new services is to be optional and inserted in alphabetical order within the existing list where possible
abbreviated-dialing	Sub-MO	Optional	The abbreviated-dialing service. See Section 26.1.1 on page 109 for detailed Attributes definition.
advice-of-charge	Sub-MO	Optional	The advice-of-charge service. See Section 26.1.2 on page 109 for detailed Attributes definition.
call-completion	Sub-MO	Optional	The communication completion service. See Section 26.1.4 on page 111 for detailed Attributes definition.
call-completion-monitor-opt-out	Sub-MO	Optional	The call-completion-monitor-opt-out service allows a subscriber to be opted out of being monitored to support communication-completion services to that subscriber. This is specified as an opt-out because the call-completion is more valuable the more targets for which call-completion is possible. See Section 26.1.5 on page 112 for detailed Attributes definition.
call-return	Sub-MO	Optional	The call return service. See Section 26.1.6 on page 113 for detailed Attributes definition.
calling-name-identity-presentation	Sub-MO	Optional	The calling-name-identity-presentation service. See Section 26.1.7 on page 113 for detailed Attributes definition.



Table 12 *Attributes Definition for MMTel Shared Profiled Services*

Parameter	Type	Occurrence	Description
calling-party-category	Sub-MO	Optional	The calling party category service. See Section 26.1.8 on page 114 for detailed Attributes definition.
carrier-pre-select	Sub-MO	Optional	The carrier-pre-select service. See Section 26.1.9 on page 114 for detailed Attributes definition.
carrier-pre-select-rn	Sub-MO	Optional	The carrier-pre-select-rn service. See Section 26.1.10 on page 115 for detailed Attributes definition.
carrier-select	Sub-MO	Optional	The carrier-select service. See Section 26.1.11 on page 116 for detailed Attributes definition.
carrier-select-rn	Sub-MO	Optional	The carrier select rn service. See Section 26.1.12 on page 116 for detailed Attributes definition information.
closed-user-group	Sub-MO	Optional	The closed user group service. See Section 26.1.13 on page 116 for detailed Attributes definition.
common-data	Sub-MO	Optional	The common data service. Only the vtp-domain element is supported. See Section 26.1.14 on page 117 for detailed Attributes definition.
communication-distribution	Sub-MO	Optional	The communication distribution service. See Section 26.1.15 on page 118 for detailed Attributes definition.
communication-diversion	Sub-MO	Optional	The communication diversion service. See Section 26.1.16 on page 124 for detailed Attributes definition.
communication-diversion-no-answer-timer	Sub-MO	Optional	The communication-diversion no answer timer service. See Section 26.1.17 on page 127 for detailed Attributes definition.
communication-waiting	Sub-MO	Optional	The communication-waiting service. The communication-waiting service depends on the user-call-admission-control service. The communication-waiting service can only be activated if the user-call-admission-control service is also activated and the value of waiting-limit is set to greater than zero. Because of the mutual dependency with user-call-admission-control, both services must be updated in the same request in which communication-waiting is activated or deactivated. See Section 26.1.18 on page 128 for detailed Attributes definition.
conference	Sub-MO	Optional	The conference service. See Section 26.1.19 on page 129 for detailed Attributes definition.
customized-alerting-tone	Sub-MO	Optional	The customized alerting tones service. See Section 26.1.20 on page 129 for detailed Attributes definition.
dial-tone-management	Sub-MO	Optional	The dial-tone-management service. See Section 26.1.21 on page 130 for detailed Attributes definition.
dialog-event-notifier	Sub-MO	Optional	The dialog event notifier service. See Section 26.1.22 on page 130 for detailed Attributes definition information.

Table 12 *Attributes Definition for MMTel Shared Profiled Services*

Parameter	Type	Occurrence	Description
explicit-com munication-t ransfer	Sub-MO	Optional	The explicit-communication-transfer service. See Section 26.1.25 on page 133 for detailed Attributes definition.
flexible-ide ntity-presen tation	Sub-MO	Optional	The flexible identity presentation service. See Section 26.1.26 on page 133 for detailed Attributes definition.
hotline	Sub-MO	Optional	The hotline service. See Section 26.1.27 on page 134 for detailed Attributes definition.
incoming-com munication-b arring	Sub-MO	Optional	The incoming-communication-barring service. See Section 26.1.28 on page 135 for detailed Attributes definition.
malicious-co mmunication- identificati on	Sub-MO	Optional	The malicious-communication-identification service. See Section 26.1.29 on page 137 for detailed Attributes definition.
media-policy	Sub-MO	Optional	The media policy service. See Section 26.1.31 on page 138 for detailed Attributes definition information
multi-device -conference- policy	Sub-MO	Optional	The multi device conference policy service. See Section 26.1.32 on page 139 for detailed Attributes definition information
multi-device -user-call-a dmission-con trol	Sub-MO	Optional	The multi device user call admission control service. See Section 26.1.33 on page 140 for detailed Attributes definition information
northbound-c all-control	Sub-MO	Optional	The Northbound Call Control service. See Section 26.1.34 on page 141 for detailed Attributes definition.
number-porta bility-annou ncement	Sub-MO	Optional	The number portability announcement. See Section 26.1.35 on page 142 for detailed Attributes definition information.
operator-con trolled-outg oing-barring -programs	Sub-MO	Optional	The operator-controlled-outgoing barring-programs service. See Section 26.1.36 on page 142 for detailed Attributes definition.
outgoing-bar ring-program s	Sub-MO	Optional	The outgoing-barring-programs service. See Section 26.1.37 on page 143 for detailed Attributes definition.
outgoing-com munication-b arring	Sub-MO	Optional	The outgoing-communication-barring service. See Section 26.1.38 on page 144 for detailed Attributes definition.
originating- calling-name -identity-pr esentation	Sub-MO	Optional	The originating calling name identity presentation service. See Section 26.1.39 on page 146 for detailed Attributes definition.
originating- identity-pre sentation	Sub-MO	Optional	The originating identity presentation service. See Section 26.1.40 on page 147 for detailed Attributes definition.
originating- identity-pre sentation-re striction	Sub-MO	Optional	The originating-identity presentation restriction service. See Section 26.1.41 on page 147 for detailed Attributes definition.



Table 12 *Attributes Definition for MMTel Shared Profiled Services*

Parameter	Type	Occurrence	Description
priority-call	Sub-MO	Optional	The priority-call service. See Section 26.1.42 on page 148 for detailed Attributes definition.
session-transfer-to-own-device	Sub-MO	Optional	The session transfer to own device service. See Section 26.1.44 on page 149 for detailed Attributes definition.
terminating-identity-presentation	Sub-MO	Optional	The terminating-identity-presentation service. See Section 26.1.58 on page 166 for detailed Attributes definition.
terminating-identity-presentation-restriction	Sub-MO	Optional	The terminating-identity-presentation-restriction service. See Section 26.1.59 on page 167 for detailed Attributes definition.
three-pty	Sub-MO	Optional	The three party service. See Section 26.1.60 on page 168 for detailed Attributes definition.
user-call-admission-control	Sub-MO	Optional	The user-call-admission-control service. See Section 26.1.61 on page 168 for detailed Attributes definition.
voice-mail	Sub-MO	Optional	The voice-mail service. See Section 26.1.63 on page 172 for detailed Attributes definition.

7.3 Example

This section gives an example of a Get MMTelSharedProfileService response message. The example shows how to get the abbreviated-dialing and call-completion services shared profile with identity sip:bronze@tas117.imsas.al.sw.ericsson.se.



```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>377d77074e324a63882e701704062457</cai3g:SessionId>
  </S:Header>
  <S:Body>
    <ns2:GetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOAttributes>
        <getResponseService:getResponseService publicId="sip:bronze@tas117.imsas.al.sw.ericsson.se" xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/" xmlns:getResponseService="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
          <publicId>sip:bronze@tas117.imsas.al.sw.ericsson.se</publicId>
          <concurrency-control>1</concurrency-control>
          <services>
            <abbreviated-dialing>
              <abbreviated-dialing-operator-configuration>
                <activated>true</activated>
              </abbreviated-dialing-operator-configuration>
              <abbreviated-dialing-user-configuration>
                <active>true</active>
                <number-mapping abbreviated-number="0">
                  <abbreviated-number>0</abbreviated-number>
                  <stored-number>sip:bronze@tas117.imsas.al.sw.ericsson.se>
                </number-mapping>
              </abbreviated-dialing-user-configuration>
            </abbreviated-dialing>
            <call-completion>
              <cc-operator-configuration>
                <activated>true</activated>
                <ccbs>activated</ccbs>
                <ccnr>activated</ccnr>
                <ccnl>activated</ccnl>
                <ccivr>activated</ccivr>
                <cc-monitor-queue-size>0</cc-monitor-queue-size>
                <max-number-of-ccbs-requests-in-monitor-queue>0</max-number-of-ccbs-requests-in-monitor-queue>
                <max-number-of-ccnr-requests-in-monitor-queue>0</max-number-of-ccnr-requests-in-monitor-queue>
                <max-number-of-ccnl-requests-in-monitor-queue>0</max-number-of-ccnl-requests-in-monitor-queue>
              </cc-operator-configuration>
            </call-completion>
          </services>
        </getResponseService:getResponseService>
      </ns2:MOAttributes>
    </ns2:GetResponse>
  </S:Body>
</S:Envelope>
```

Example 7 Get MMTelSharedProfileService



8 Set MMTel SharedProfileService

This section covers the command `Set Service` for MMTel SharedProfile.

MOType

Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/

8.1 Request Data

8.1.1 Parameters

MOId

Table 13 Set MMTelSharedProfileService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute to identify the MMTel Shared Profile service in MTAS.

MOAttributes

The parameters that are used in the operation are shown in Figure 16, Figure 17, and Figure 18.

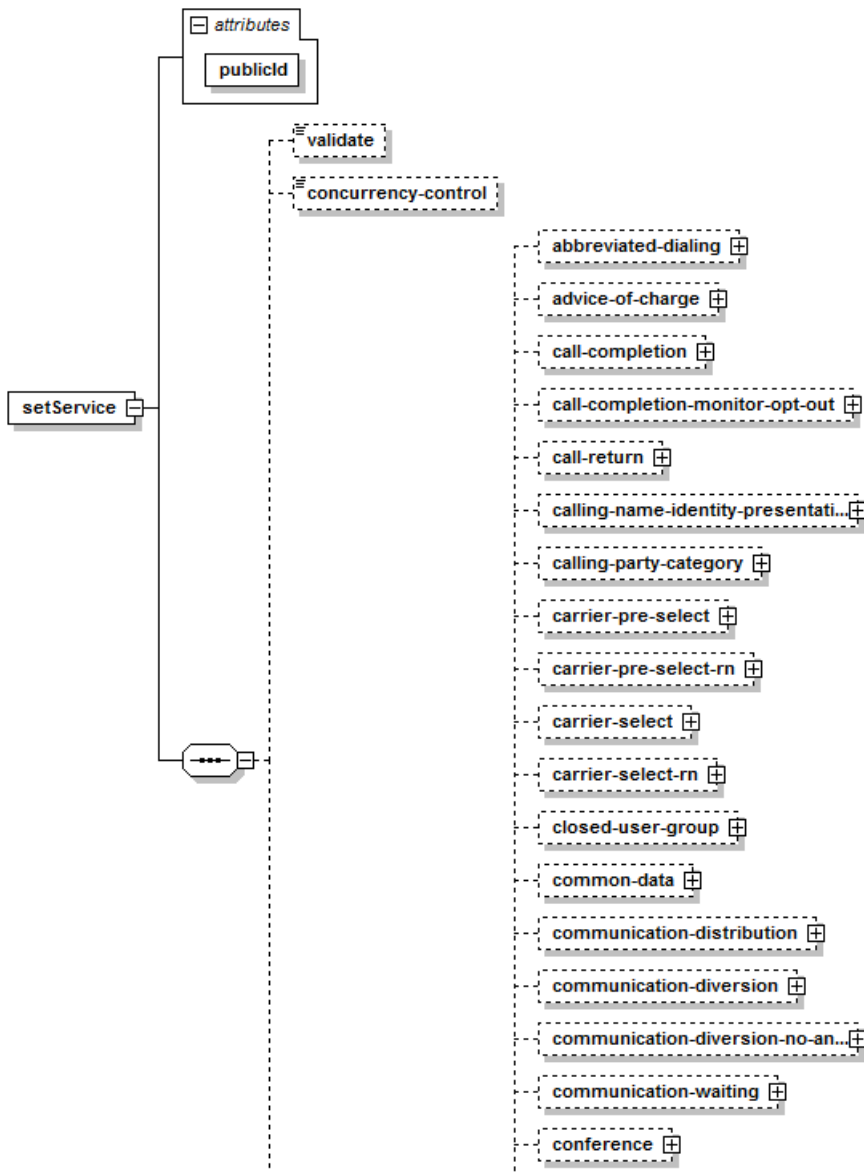


Figure 16 Parameters in Set MMTelSharedProfileService, Part 1

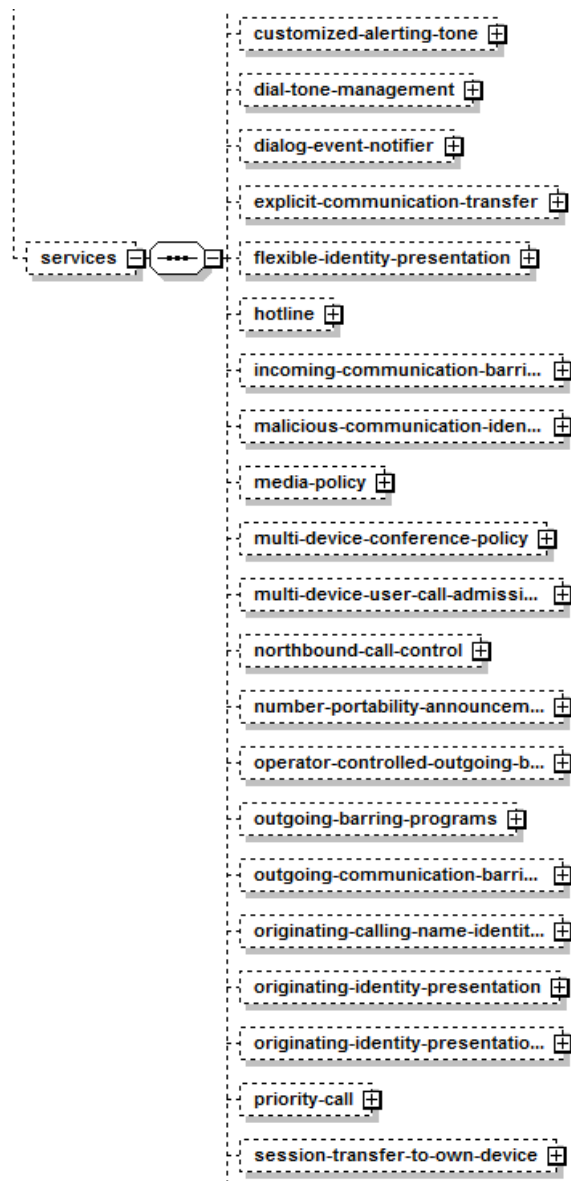


Figure 17 Parameters in Set MMTelSharedProfileService, part 2

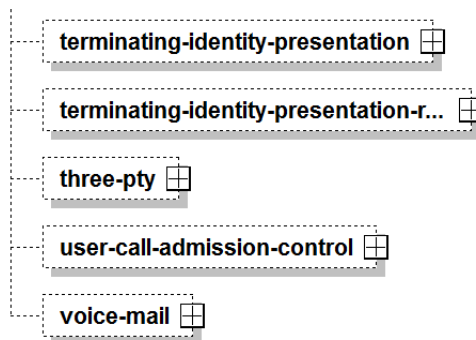


Figure 18 Parameters in Set MMTelSharedProfileService, part 3

Table 14 covers the parameters that can be used in a Set MMTelSharedProfileService request.

Table 14 Attributes Definition for MMTel Shared Profiled Services

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute in setService element to identify the shared profile in MTAS.
concurrency-control	Integer, length: 0-1	Optional	The concurrency-control element is an optional element to control concurrent updates. If it is present, then the set request is accepted only if the service data version is still at the value given in this element, for example, no other updates have been performed.
validate	Sub-MO	Optional	The validate is used when the request must be validated but not stored in the HSS.
services	Sub-MO	Optional	MMTel services, the relative order of the existing services must be maintained all new services is to be optional and inserted in alphabetical order within the existing list where possible
abbreviated-dialing	Sub-MO	Optional	The abbreviated-dialing service. Use xsi:nil="true" to withdraw the entire service. See Section 26.1.1 on page 109 for detailed Attributes definition.
advice-of-charge	Sub-MO	Optional	The advice-of-charge service. Use xsi:nil="true" to withdraw the entire service. See Section 26.1.2 on page 109 for detailed Attributes definition.
call-completion	Sub-MO	Optional	The communication completion service. Use xsi:nil="true" to withdraw the entire service. See Section 26.1.4 on page 111 for detailed Attributes definition.
call-completion-monitor-opt-out	Sub-MO	Optional	The call-completion-monitor-opt-out service allows a subscriber to be opted out of being monitored to support communication-completion services to that subscriber. This is specified as an opt-out because the call-completion is more valuable the more targets for which call-completion is possible. Use xsi:nil="true" to withdraw the entire service. See Section 26.1.5 on page 112 for detailed Attributes definition.
call-return	Sub-MO	Optional	The call return service. Use xsi:nil=true to withdraw the entire service. See Section 26.1.6 on page 113 for detailed Attributes definition.



Table 14 Attributes Definition for MMTel Shared Profiled Services

Parameter	Type	Occurrence	Description
calling-name-identity-presentation	Sub-MO	Optional	The calling-name-identity-presentation service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.7 on page 113 for detailed Attributes definition.
calling-party-category	Sub-MO	Optional	The calling party category service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.8 on page 114 for detailed Attributes definition.
carrier-pre-select	Sub-MO	Optional	The carrier-pre-select service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.9 on page 114 for detailed Attributes definition.
carrier-pre-select-rn	Sub-MO	Optional	The carrier-pre-select-rn service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.10 on page 115 for detailed Attributes definition.
carrier-select	Sub-MO	Optional	The carrier-select service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.11 on page 116 for detailed Attributes definition.
carrier-select-rn	Sub-MO	Optional	The carrier select rn service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.12 on page 116 for detailed Attributes definition information.
closed-user-group	Sub-MO	Optional	The closed user group service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.13 on page 116 for detailed Attributes definition.
common-data	Sub-MO	Optional	The common data service. Only the <code>vtp-domain</code> element is supported. See Section 26.1.14 on page 117 for detailed Attributes definition.
communication-distribution	Sub-MO	Optional	The communication distribution service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.15 on page 118 for detailed Attributes definition.
communication-diversion	Sub-MO	Optional	The communication diversion service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.16 on page 124 for detailed Attributes definition.
communication-diversion-no-answer-timer	Sub-MO	Optional	The communication-diversion no answer timer service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.17 on page 127 for detailed Attributes definition.
communication-waiting	Sub-MO	Optional	The communication-waiting service. Use <code>xsi:nil="true"</code> to withdraw the entire service. The communication-waiting service depends on the user-call-admission-control service. The communication-waiting service can only be activated if the user-call-admission-control service is also activated and the value of waiting-limit is set to greater than zero. Because of the mutual dependency with user-call-admission-control, both services must be updated in the same request in which communication-waiting is activated or deactivated. See Section 26.1.18 on page 128 for detailed Attributes definition.
conference	Sub-MO	Optional	The conference service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.19 on page 129 for detailed Attributes definition.

**Table 14** *Attributes Definition for MMTel Shared Profiled Services*

Parameter	Type	Occurrence	Description
customized-alerting-tone	Sub-MO	Optional	The customized alerting tones service. See Section 26.1.20 on page 129 for detailed Attributes definition.
dial-tone-management	Sub-MO	Optional	The dial-tone-management service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.21 on page 130 for detailed Attributes definition.
dialog-event-notifier	Sub-MO	Optional	The dialog event notifier service. See Section 26.1.22 on page 130 for detailed Attributes definition information.
explicit-communication-transfer	Sub-MO	Optional	The explicit-communication-transfer service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.25 on page 133 for detailed Attributes definition.
flexible-identity-presentation	Sub-MO	Optional	The flexible identity presentation service. See Section 26.1.26 on page 133 for detailed Attributes definition.
hotline	Sub-MO	Optional	The hotline service. Use <code>xsi:nil=true</code> to withdraw the entire service. See Section 26.1.27 on page 134 for detailed Attributes definition.
incoming-communication-barring	Sub-MO	Optional	The incoming-communication-barring service. See Section 26.1.28 on page 135 for detailed Attributes definition.
malicious-communication-identification	Sub-MO	Optional	The malicious-communication-identification service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.29 on page 137 for detailed Attributes definition.
media-policy	Sub-MO	Optional	The media policy service. See Section 26.1.31 on page 138 for detailed Attributes definition information
multi-device-conference-policy	Sub-MO	Optional	The multi device conference policy service. See Section 26.1.32 on page 139 for detailed Attributes definition information
multi-device-user-call-admission-control	Sub-MO	Optional	The multi device user call admission control service. See Section 26.1.33 on page 140 for detailed Attributes definition information
northbound-call-control	Sub-MO	Optional	The Northbound Call Control service. See Section 26.1.34 on page 141 for detailed Attributes definition.
number-portability-announcement	Sub-MO	Optional	The number portability announcement. See Section 26.1.35 on page 142 for detailed Attributes definition information.
operator-controlled-outgoing-barring-programs	Sub-MO	Optional	The operator-controlled-outgoing barring-programs service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.36 on page 142 for detailed Attributes definition.
outgoing-barring-programs	Sub-MO	Optional	The outgoing-barring-programs service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.37 on page 143 for detailed Attributes definition.



Table 14 Attributes Definition for MMTel Shared Profiled Services

Parameter	Type	Occurrence	Description
outgoing-com munication-b arring	Sub-MO	Optional	The outgoing-communication-barring service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.38 on page 144 for detailed Attributes definition.
originating- calling-name -identity-pr esentation	Sub-MO	Optional	The originating calling name identity presentation service. Use <code>xsi:nil=true</code> to withdraw the entire service. See Section 26.1.39 on page 146 for detailed Attributes definition.
originating- identity-pre sentation	Sub-MO	Optional	The originating identity presentation service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.40 on page 147 for detailed Attributes definition.
originating- identity-pre sentation-re striction	Sub-MO	Optional	The originating-identity presentation restriction service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.41 on page 147 for detailed Attributes definition.
priority-cal l	Sub-MO	Optional	The priority-call service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.42 on page 148 for detailed Attributes definition.
session-tran sfer-to-own- device	Sub-MO	Optional	The session transfer to own device service. See Section 26.1.44 on page 149 for detailed Attributes definition.
terminating- identity-pre sentation	Sub-MO	Optional	The terminating-identity-presentation service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.58 on page 166 for detailed Attributes definition.
terminating- identity-pre sentation-re striction	Sub-MO	Optional	The terminating-identity-presentation-restriction service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.59 on page 167 for detailed Attributes definition.
three-pty	Sub-MO	Optional	The three party service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.60 on page 168 for detailed Attributes definition.
user-call-ad mission-cont rol	Sub-MO	Optional	The user-call-admission-control service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.61 on page 168 for detailed Attributes definition.
voice-mail	Sub-MO	Optional	The voice-mail service. Use <code>xsi:nil="true"</code> to withdraw the entire service. See Section 26.1.63 on page 172 for detailed Attributes definition.

8.2 Example

This section gives an example of a Set MMTelSharedProfileService request message. The example shows how to set the abbreviated-dialing and call-completion services shared profile with identity `sip:bronze@tas117.im`
`sas.al.sw.ericsson.se`



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>1</cai3:TransactionId>
    <cai3:SessionId>85b0db2685b0db26000000001359337991433</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/</cai3:MOType>
      <cai3:MOId>
        <publicId>sip:bronze@tas117.imsas.al.sw.ericsson.se</publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <setService publicId="sip:bronze@tas117.imsas.al.sw.ericsson.se">
          <validate>true</validate>
          <concurrency-control>0</concurrency-control>
          <services>
            <abbreviated-dialing>
              <abbreviated-dialing-operator-configuration>
                <activated>true</activated>
              </abbreviated-dialing-operator-configuration>
              <abbreviated-dialing-user-configuration>
                <active>true</active>
                <number-mapping abbreviated-number="0">
                  <abbreviated-number>0</abbreviated-number>
                  <stored-number>sip:user0@test.test</stored-number>
                </number-mapping>
              </abbreviated-dialing-user-configuration>
            </abbreviated-dialing>
            <call-completion>
              <cc-operator-configuration>
                <activated>true</activated>
                <ccbs>activated</ccbs>
                <ccnr>activated</ccnr>
                <ccnl>activated</ccnl>
                <ccivr>activated</ccivr>
                <cc-monitor-queue-size>0</cc-monitor-queue-size>
                <max-number-of-ccbs-requests-in-monitor-queue>0</max-number-of-ccbs-requests-in-monitor-queue>
                <max-number-of-ccnr-requests-in-monitor-queue>0</max-number-of-ccnr-requests-in-monitor-queue>
                <max-number-of-ccnl-requests-in-monitor-queue>0</max-number-of-ccnl-requests-in-monitor-queue>
              </cc-operator-configuration>
            </call-completion>
          </services>
        </setService>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 8 Set MMTelSharedProfileService



9 Delete MMTel SharedProfileService

This section covers the command `Delete Service` for MMTel SharedProfile.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSharedProfile/`

9.1 Request Data

9.1.1 Parameters

MOId

Table 15 Delete MMTelSharedProfileService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute to identify the MMTel Shared Profile service in MTAS.

MOAttributes

Not available.

9.2 Example

This section gives an example of a `Delete MMTelSharedProfileService` request message. The example shows how to delete the shared profile with identity `sip:bronze@tas117.imsas.al.sw.ericsson.se`.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
  xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/"
  xmlns:mmt="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/
    MMTelSharedProfile/">
  <soapenv:Header>
    <cai3:SequenceId>14902919326025555836</cai3:SequenceId>
    <cai3:TransactionId>1234567890</cai3:TransactionId>
    <cai3:SessionId>850f63b2850f63b2000000001341545755440</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Delete>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/
        MTAS/Service/MMTelSharedProfile/</cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:bronze@tas117.imsas.al.sw.ericsson.se</mmt:publicId>
      </cai3:MOId>
    </cai3:Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 9 Delete MMTelSharedProfileService



10 Create MMTel ServiceNumberService

This section covers the command `Create Service` for `MMTelServiceNumberService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/MMTelServiceNumberService/`

10.1 Request Data

10.1.1 Parameters

MOId

Table 16 Create MMTelServiceNumberService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	The default Public User Identity for the service number. This identity must already be configured on the HSS.

MOAttributes

The parameters that are used in the operation are shown in Figure 19.

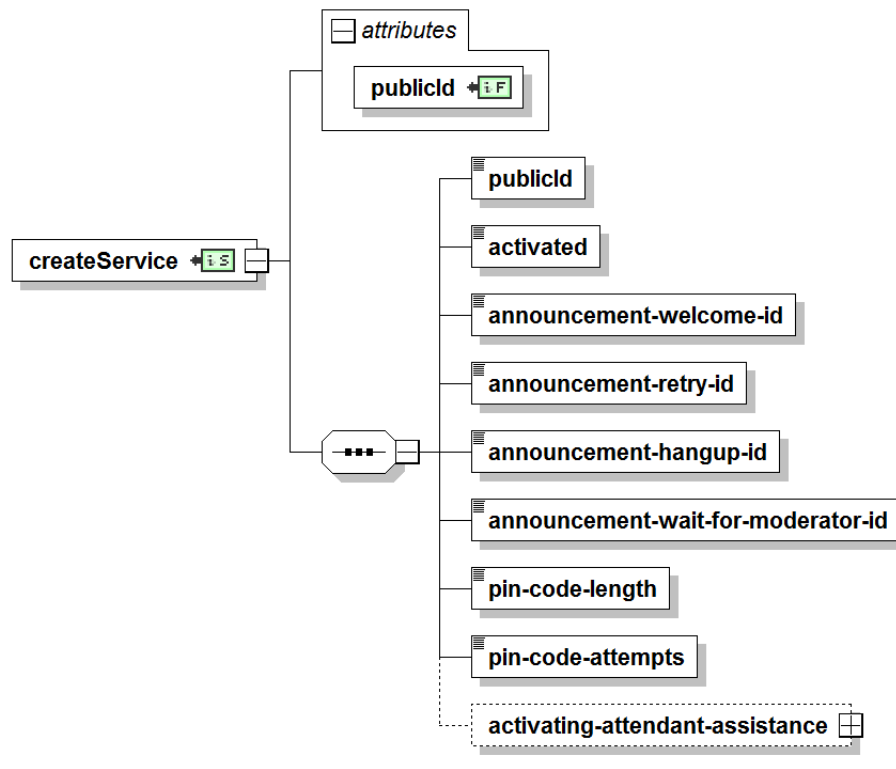


Figure 19 Parameters in Create MMTelServiceNumberService

Table 17 covers the parameters that can be used in a Create MMTelServiceNumberService request.

Table 17 Attributes Definition for MMTel Service Number Service

Parameter	Type	Occurrence	Description
publicId	Case sensitive string	Mandatory	The default Public User Identity for the service number. This identity must already be configured on the HSS.
activated	Boolean {true, false}	Mandatory	This element has values of true and false. When it is set to true, the service number is ready for traffic operation.
activating-attendant-assistance		Optional	This element defines whether Attendant Assistance is invoked when the limit of number of PIN attempts has been exceeded.
announcement-attendant-assistance-id	Integer	Optional	Defines the Attendant Assistance announcement when the limit of number of attempts has been exceeded. This value must be aligned with the number configured for the announcement in the MRF/P. immThe Attendant Assistance announcement is played continuously. This must be present on the creation when activating-attendant-assistance is present.
attendant-uri	Case sensitive string	Optional	The tel URI of the Attendant. This must be present on the creation when activating-attendant-assistance is present.
announcement-welcome-id	Integer Range: 0-65535	Mandatory	This element defines the welcome announcement requesting a pin code when entering the conference system. The element value must be aligned with the number configured for the announcement in MRF/P.



Table 17 *Attributes Definition for MMTel Service Number Service*

Parameter	Type	Occurrence	Description
announcement-retry-id	Integer Range: 0–65535	Mandatory	This element defines the retry announcement when incorrect pin is entered. The element value must be aligned with the number configured for the announcement in MRF/P.
announcement-hangup-id	Integer Range: 0–65535	Mandatory	This element defines the hang-up announcement when the limit of number of attempts is exceeded. The element value must be aligned with the number configured for the announcement in MRF/P.
announcement-wait-for-moderator-id	Integer Range: 0–65535	Mandatory	This element defines the waiting-for-moderator announcement when the moderator has to join the conference before the conference starts. The element value must be aligned with the number configured for the announcement in MRF/P.
pin-code-length	Integer Range: 4–10	Mandatory	This element defines the number of digits in the PIN code.
pin-code-attempts	Integer Range: 1–6	Mandatory	This element defines the number of PIN-code attempts allowed until the conference service hangs up.

10.2 Example

This section gives an example of a `Create MMTelServiceNumberService` request message. The example shows how to create an activating-attendant-assistance service number with identity `sip:user1@tas117.imsas.al.sw.ericsson.se`.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:mmt="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelServiceNumberService/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>1</cai3:TransactionId>
    <cai3:SessionId>85b0db2685b0db26000000001359337991433</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelServiceNumberService/</cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</mmt:publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <mmt:createService publicId="sip:user1@tas117.imsas.al.sw.ericsson.se">
          <mmt:publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</mmt:publicId>
          <mmt:activated>true</mmt:activated>
          <mmt:announcement-welcome-id>0</mmt:announcement-welcome-id>
          <mmt:announcement-retry-id>0</mmt:announcement-retry-id>
          <mmt:announcement-hangup-id>0</mmt:announcement-hangup-id>
          <mmt:announcement-wait-for-moderator-id>0</mmt:announcement-wait-for-moderator-id>
          <mmt:pin-code-length>4</mmt:pin-code-length>
          <mmt:pin-code-attempts>1</mmt:pin-code-attempts>
          <mmt:activating-attendant-assistance>
            <mmt:announcement-attendant-assistance-id>0</mmt:announcement-attendant-assistance-id>
            <mmt:attendant-uri>http://www.ericsson.com/</mmt:attendant-uri>
          </mmt:activating-attendant-assistance>
        </mmt:createService>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 10 *Create MMTelServiceNumberService*



11 Get MMTel ServiceNumberService

This section covers the command `Get Service` for `MMTelServiceNumberService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/MMTelServiceNumberService/`

11.1 Request Data

11.1.1 Parameters

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

MOId

Table 18 Get MMTelGroupService Parameters

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	The default Public User Identity for the service number. This identity must already be configured on the HSS.

11.2 Response Data

11.2.1 Parameters

MOId

N/A

MOAttributes

The parameters that are used in the operation are shown in Figure 20.

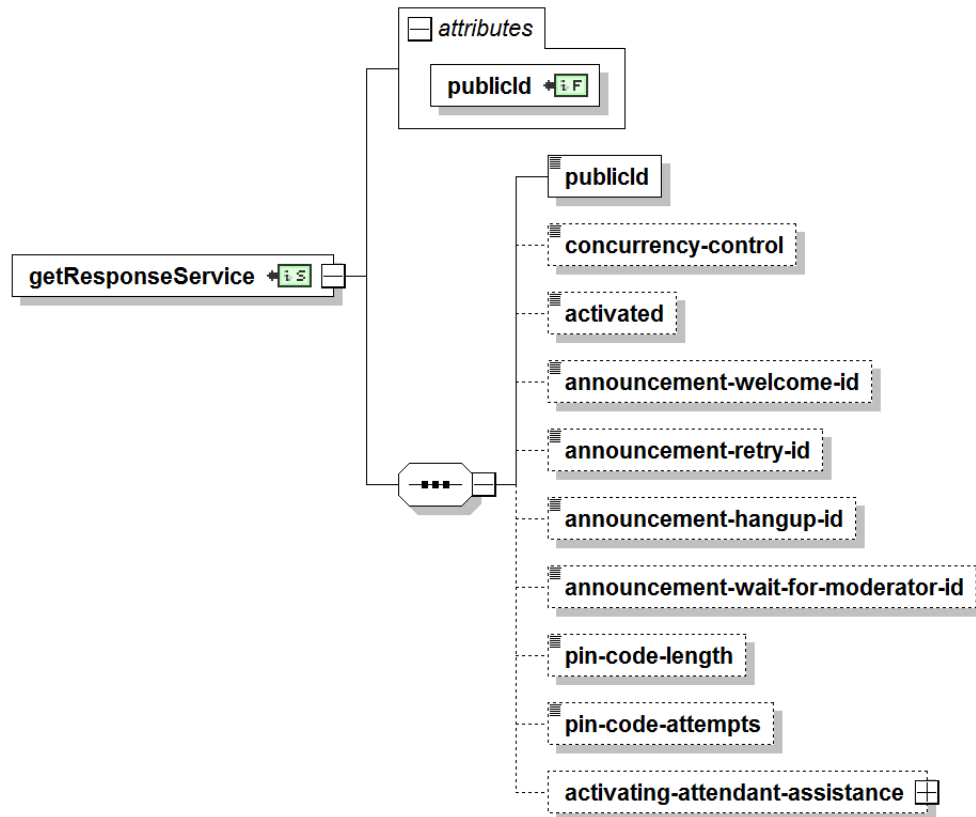


Figure 20 Parameters in Get MMTelServiceNumberService

Table 19 covers the parameters that can be used in a Get MMTelServiceNumberService request.

Table 19 Attributes Definition for MMTel Service Number Service

Parameter	Type	Occurrence	Description
publicId	Case sensitive string	Mandatory	The default Public User Identity for the service number. This identity must already be configured on the HSS.
concurrency-control	Integer	Optional	This element is an optional element to control concurrent updates. If this element is present and the service-data version is equal to the value set in this element, which means no other updates have been done, then the set request is accepted.
activated	Boolean {true, false}	Optional	This element has values of true and false. When it is set to true, the service number is ready for traffic operation.
activating-attendant-assistance		Optional	This element defines whether Attendant Assistance is invoked when the limit of number of PIN attempts has been exceeded.



Table 19 *Attributes Definition for MMTel Service Number Service*

Parameter	Type	Occurrence	Description
announcement-attendant-assistance-id	Integer	Optional	Defines the Attendant Assistance announcement when the limit of number of attempts has been exceeded. This value must be aligned with the number configured for the announcement in the MRF/P. immThe Attendant Assistance announcement is played continuously. This must be present on the creation when activating-attendant-assistance is present.
attendant-uri	Case sensitive string	Optional	The tel URI of the Attendant. This must be present on the creation when activating-attendant-assistance is present.
announcement-welcome-id	Integer Range: 0-65535	Optional	This element defines the welcome announcement requesting a pin code when entering the conference system. The element value must be aligned with the number configured for the announcement in MRF/P.
announcement-retry-id	Integer Range: 0-65535	Optional	This element defines the retry announcement when incorrect pin is entered. The element value must be aligned with the number configured for the announcement in MRF/P.
announcement-hangup-id	Integer Range: 0-65535	Optional	This element defines the hang-up announcement when the limit of number of attempts is exceeded. The element value must be aligned with the number configured for the announcement in MRF/P.
announcement-wait-for-moderator-id	Integer Range: 0-65535	Optional	This element defines the waiting-for-moderator announcement when the moderator has to join the conference before the conference starts. The element value must be aligned with the number configured for the announcement in MRF/P.
pin-code-length	Integer Range: 4-10	Optional	This element defines the number of digits in the PIN code.
pin-code-attempts	Integer Range: 1-6	Optional	This element defines the number of PIN-code attempts allowed until the conference service hangs up.

11.3 Example

This section gives an example of a Get MMTelServiceNumberService response message. The example shows how to get an activating-attendant-assistance service number with identity sip:user1@tas117.imsas.al.sw.ericsson.se.



```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>94d9fcf55a384b7f80f0e4d134392abf</cai3g:SessionId>
    <cai3g:TransactionId>123123</cai3g:TransactionId>
    <cai3g:SequenceId>94d9fcf55a384b7f80f0e4d134392abf</cai3g:SequenceId>
  </S:Header>
  <S:Body>
    <ns2:GetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOAttributes>
        <getResponseService:getResponseService publicId="tel:+4686170001" xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelServiceNumberService/" xmlns:getResponseService="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelServiceNumberService/">
          <publicId>tel:+4686170001</publicId>
          <concurrency-control>0</concurrency-control>
          <activated>true</activated>
          <announcement-welcome-id>0</announcement-welcome-id>
          <announcement-retry-id>0</announcement-retry-id>
          <announcement-hangup-id>0</announcement-hangup-id>
          <announcement-wait-for-moderator-id>0</announcement-wait-for-moderator-id>
          <pin-code-length>4</pin-code-length>
          <pin-code-attempts>1</pin-code-attempts>
          <activating-attendant-assistance>
            <announcement-attendant-assistance-id>0</announcement-attendant-assistance-id>
            <attendant-uri>http://www.ericsson.com/</attendant-uri>
          </activating-attendant-assistance>
        </getResponseService:getResponseService>
      </ns2:MOAttributes>
    </ns2:GetResponse>
  </S:Body>
</S:Envelope>
```

Example 11 *Get MMTelServiceNumberService*



12 Set MMTel ServiceNumberService

This section covers the command `Set Service` for `MMTelServiceNumberService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelServiceNumberService/`

12.1 Request Data

12.1.1 Parameters

MOId

Table 20 Set MMTelGroupService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute in <code>setService</code> element to identify the service number in MTAS. This identity must already be configured on the HSS.

MOAttributes

The parameters that are used in the operation are shown in Figure 21.

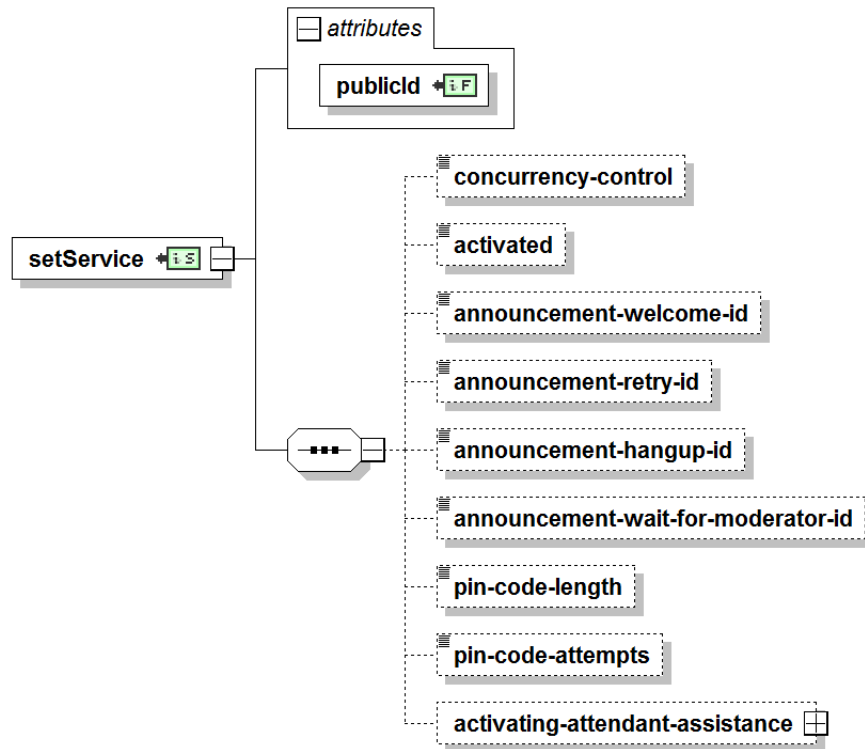


Figure 21 Parameters in Set MMTelServiceNumberService

Table 21 covers the parameters that can be used in a Set MMTelServiceNumberService request.

Table 21 Attributes Definition for MMTel Service Number Service

Parameter	Type	Occurrence	Description
publicId	Case sensitive string	Mandatory	Attribute in setService element to identify the service number in MTAS. This identity must already be configured on the HSS.
concurrency-control	Integer	Optional	This element is an optional element to control concurrent updates. If this element is present and the service-data version is equal to the value set in this element, which means no other updates have been done, then the set request is accepted.
activated	Boolean {true, false}	Optional	This element has values of true and false. When it is set to true, the service number is ready for traffic operation.
activating-attendant-assistance		Optional	This element defines whether Attendant Assistance is invoked when the limit of number of PIN attempts has been exceeded.
announcement-attendant-assistance-id	Integer	Optional	Defines the Attendant Assistance announcement when the limit of number of attempts has been exceeded. This value must be aligned with the number configured for the announcement in the MRF/P. immThe Attendant Assistance announcement is played continuously. This must be present on the creation when activating-attendant-assistance is present.
attendant-uri	Case sensitive string	Optional	The tel URI of the Attendant. This must be present on the creation when activating-attendant-assistance is present.



Table 21 *Attributes Definition for MMTel Service Number Service*

Parameter	Type	Occurrence	Description
announcement-welcome-id	Integer Range: 0–65535	Optional	This element defines the welcome announcement requesting a pin code when entering the conference system. The element value must be aligned with the number configured for the announcement in MRF/P.
announcement-retry-id	Integer Range: 0–65535	Optional	This element defines the retry announcement when incorrect pin is entered. The element value must be aligned with the number configured for the announcement in MRF/P.
announcement-hangup-id	Integer Range: 0–65535	Optional	This element defines the hang-up announcement when the limit of number of attempts is exceeded. The element value must be aligned with the number configured for the announcement in MRF/P.
announcement-wait-for-moderator-id	Integer Range: 0–65535	Optional	This element defines the waiting-for-moderator announcement when the moderator has to join the conference before the conference starts. The element value must be aligned with the number configured for the announcement in MRF/P.
pin-code-length	Integer Range: 4–10	Optional	This element defines the number of digits in the PIN code.
pin-code-attempts	Integer Range: 1–6	Optional	This element defines the number of PIN-code attempts allowed until the conference service hangs up.

12.2 Example

This section gives an example of a `Set MMTelServiceNumberService` request message. The example shows how to set an activating-attendant-assistance service number with identity `sip:user1@tas117.imsas.al.sw.ericsson.se`.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:mmt="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelServiceNumberService/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>1</cai3:TransactionId>
    <cai3:SessionId>85b0db2685b0db26000000001359337991433</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelServiceNumberService/</cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</mmt:publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <mmt:setService publicId="sip:user1@tas117.imsas.al.sw.ericsson.se">
          <mmt:concurrency-control>0</mmt:concurrency-control>
          <mmt:activated>true</mmt:activated>
          <mmt:announcement-welcome-id>1</mmt:announcement-welcome-id>
          <mmt:announcement-retry-id>1</mmt:announcement-retry-id>
          <mmt:announcement-hangup-id>1</mmt:announcement-hangup-id>
          <mmt:announcement-wait-for-moderator-id>1</mmt:announcement-wait-for-moderator-id>
          <mmt:pin-code-length>4</mmt:pin-code-length>
          <mmt:pin-code-attempts>3</mmt:pin-code-attempts>
          <mmt:activating-attendant-assistance>
            <mmt:announcement-attendant-assistance-id>0</mmt:announcement-attendant-assistance-id>
            <mmt:attendant-uri>http://www.ericsson.com/</mmt:attendant-uri>
          </mmt:activating-attendant-assistance>
        </mmt:setService>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 12 *Set MMTelServiceNumberService*



13 Delete MMTel ServiceNumberService

This section covers the command `Delete Service` for `MMTelServiceNumberService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/MMTelServiceNumberService/`

13.1 Request Data

13.1.1 Parameters

MOId

Table 22 Delete MMTelServiceNumberService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute to identify the default Public User Identity for the service number.

MOAttributes

Not available.

13.2 Example

This section gives an example of a `Delete MMTelServiceNumberService` request message. The example shows how to delete the service-number service for a user.



```
Request:
<cai3:Delete>
  <cai3:MOType>
    Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/
    Service/MMTelServiceNumberService/
  </cai3:MOType>
  <cai3:MOId>
    <publicId>tel:+46871920001</publicId>
  </cai3:MOId>
</cai3:Delete>
```

Example 13 Delete MMTelServiceNumberService



14 Create MMTel SchedConfService

This section covers the command `Create Service` for `MMTelSchedConfService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService/`

14.1 Request Data

14.1.1 Parameters

MOId

Table 23 Create MMTelSchedConfService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	This element identifies the user in MTAS. This identity must already be configured on the HSS.

MOAttributes

The parameters that are used in the operation are shown in Figure 22.

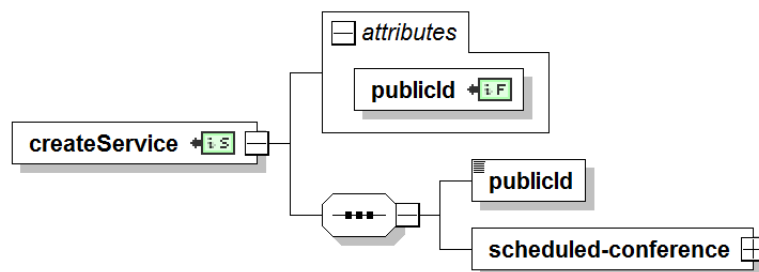


Figure 22 Parameters in Create MMTelSchedConfService

Table 24 covers the parameters that can be used in a `Create MMTelSchedConfService` request.



Table 24 Attributes Definition for MMTel Scheduled Conference Service

Parameter	Type	Occurrence	Description
publicId	Case sensitive string	Mandatory	This element identifies the user in MTAS. This identity must already be configured on the HSS.
scheduled-conference	Sub-MO	Mandatory	The scheduled-conference element is the user data for scheduled conference service group. See Section 26.1.43 on page 149 for detailed Attributes definition information.

14.2 Example

This section gives an example of a Create MMTelSchedConfService request message. The example shows how to create a scheduled-conference service with user sip:user1@tas117.imsas.al.sw.ericsson.se.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>1</cai3:TransactionId>
    <cai3:SessionId>85b0db2685b0db26000000001359337991433</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService/</cai3:MOType>
      <cai3:MOId>
        <publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <createService publicId="sip:user1@tas117.imsas.al.sw.ericsson.se">
          <publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</publicId>
          <scheduled-conference>
            <scheduled-conference-operator-configuration>
              <activated>true</activated>
              <service-number>tel:+4686170001</service-number>
            </scheduled-conference-operator-configuration>
          </scheduled-conference>
        </createService>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 14 Create MMTelSchedConfService



15 Get MMTel SchedConfService

This section covers the command `Get Service` for `MMTelSchedConfService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService/`

15.1 Request Data

15.1.1 Parameters

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

MOId

Table 25 Get MMTelSchedConfService Parameters

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	This element identifies the user in MTAS. This identity must already be configured on the HSS.

15.2 Response Data

15.2.1 Parameters

MOId

N/A

MOAttributes

The parameters that are used in the operation are shown in Figure 23.

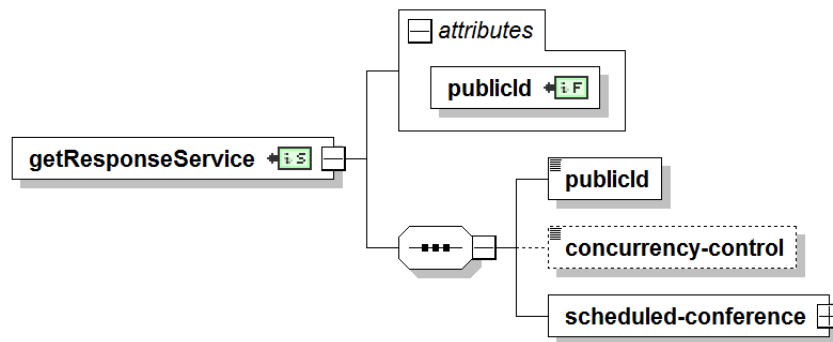


Figure 23 Parameters in Get MMTelSchedConfService

Table 26 covers the parameters that can be used in a Get MMTelSchedConfService request.

Table 26 Attributes Definition for MMTel Scheduled Conference Service

Parameter	Type	Occurrence	Description
publicId	Case sensitive string	Mandatory	This element identifies the user in MTAS. This identity must already be configured on the HSS.
concurrency-control	Integer	Optional	This element is an optional element to control concurrent updates. If this element is present and the service-data version is equal to the value set in this element, which means no other updates have been done, then the set request is accepted. This element is only applicable for get and set operations.
scheduled-conference	Sub-MO	Mandatory	The scheduled-conference element is the user date for scheduled conference service group. See Section 26.1.43 on page 149 for detailed Attributes definition information.

15.3 Example

This section gives an example of a Get MMTelSchedConfService response message. The example shows how to get a scheduled-conference service with user sip:user1@tas117.imsas.al.sw.ericsson.se.



```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://
schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>2eb9b1f4526d4926bb941534bd8a1343</cai3g:SessionId>
    <cai3g:TransactionId>123123</cai3g:TransactionId>
    <cai3g:SequenceId>2eb9b1f4526d4926bb941534bd8a1343</cai3g:SequenceId>
  </S:Header>
  <S:Body>
    <ns2:GetResponse xmlns:ns2="http://schemas.ericsson.com/cai3g1.2/">
      <ns2:MOAttributes>
        <getResponseService:getResponseService publicId="sip:user1@tas117.imsas.
al.sw.ericsson.se" xmlns="http://schemas.ericsson.com/ema/UserProvisioning/
MTAS/Service/MMTelSchedConfService/" xmlns:getResponseService="http://
schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService/
" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
          <publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</publicId>
          <concurrency-control>0</concurrency-control>
          <scheduled-conference>
            <scheduled-conference-operator-configuration>
              <activated>true</activated>
              <service-number>tel:+4686170001</service-number>
            </scheduled-conference-operator-configuration>
          </scheduled-conference>
        </getResponseService:getResponseService>
      </ns2:MOAttributes>
    </ns2:GetResponse>
  </S:Body>
</S:Envelope>
```

Example 15 *Get MMTelSchedConfService*





16 Set MMTel SchedConfService

This section covers the command `Set Service` for MMTelSchedConfService.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService/`

16.1 Request Data

16.1.1 Parameters

MOId

Table 27 Set MMTelSchedConfService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute in <code>setService</code> element to identify the scheduled conference in MTAS. This identity must already be configured on the HSS.

MOAttributes

The parameters that are used in the operation are shown in Figure 24.

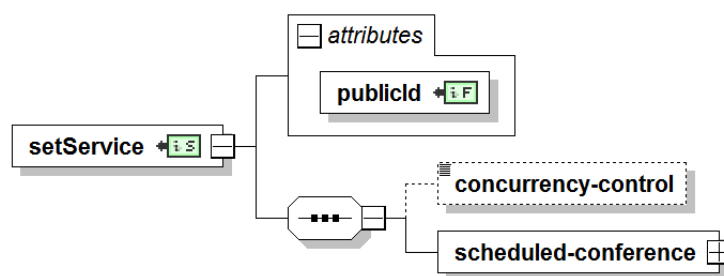


Figure 24 Parameters in Set MMTelSchedConfService



Table 28 covers the parameters that can be used in a Set MMTelSchedConfService request.

Table 28 Attributes Definition for MMTel Scheduled Conference Service

Parameter	Type	Occurrence	Description
publicId	Case sensitive string	Mandatory	Attribute in setService element to identify the scheduled conference in MTAS. This identity must already be configured on the HSS.
concurrency-control	Integer	Optional	This element is an optional element to control concurrent updates. If this element is present and the service-data version is equal to the value set in this element, which means no other updates have been done, then the set request is accepted. This element is only applicable for get and set operations.
scheduled-conference	Sub-MO	Mandatory	The scheduled-conference element is the user data for scheduled conference service group. Use xsi:nil="true" to withdraw the entire service. See Section 26.1.43 on page 149 for detailed Attributes definition information.

16.2 Example

This section gives an example of a Set MMTelSchedConfService request message. The example shows how to set a scheduled-conference service with user sip:user1@tas117.imsas.al.sw.ericsson.se.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>1</cai3:TransactionId>
    <cai3:SessionId>85b0db2685b0db26000000001359337991433</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService</cai3:MOType>
      <cai3:MOId>
        <publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <setService publicId="sip:user1@tas117.imsas.al.sw.ericsson.se">
          <concurrency-control>0</concurrency-control>
          <scheduled-conference>
            <scheduled-conference-operator-configuration>
              <activated>true</activated>
              <service-number>tel:+4686170001</service-number>
            </scheduled-conference-operator-configuration>
          </scheduled-conference>
        </setService>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 16 Set MMTelSchedConfService



17 Delete MMTel SchedConfService

This section covers the command `Delete Service` for `MMTelSchedConfService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSchedConfService/`

17.1 Request Data

17.1.1 Parameters

MOId

Table 29 Delete MMTelSchedConfService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	Attribute to identify the user in MTAS.

MOAttributes

Not available.

17.2 Example

This section gives an example of a `Delete MMTelSchedConfService` request message. The example shows how to delete scheuled-conference for a user.

Request:

```
<cai3:Delete>
  <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS
    /Service/MMTelSchedConfService/
  </cai3:MOType>
  <cai3:MOId>
    <publicId>sip:46871920001@operator.com </publicId>
  </cai3:MOId>
</cai3:Delete>
```

Example 17 Delete MMTelSchedConfService





18 Create MMTel SipTrunkingService

This section covers the command `Create Service` for MMTelSipTrunkingService.

MOType

Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/MMTelSipTrunkingService/

18.1 Request Data

18.1.1 Parameters

MOId

Table 30 Create MMTelSipTrunkingService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	The default Public User Identity for the Private Branch EXchange (PBX). This identity must already be configured in the HSS.

MOAttributes

The parameters that are used in the operation are shown in Figure 25.

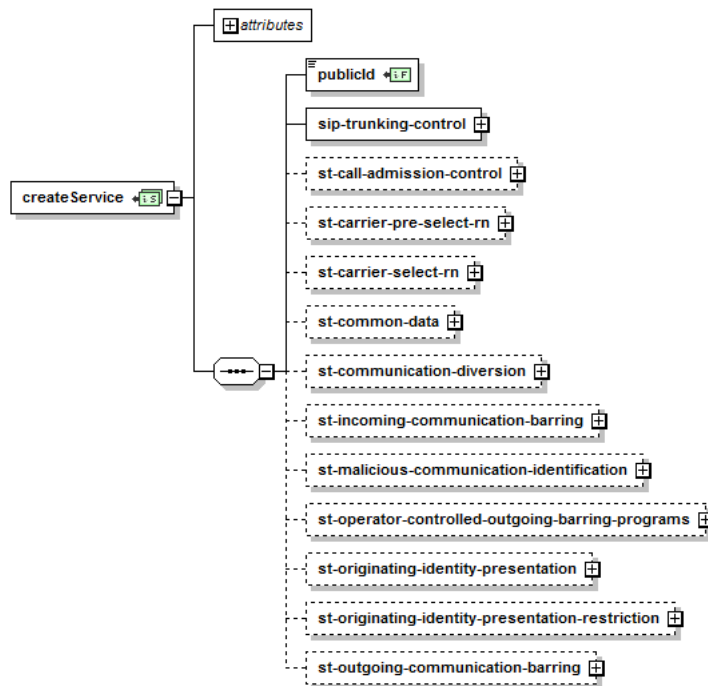


Figure 25 Parameters in Create MMTel SipTrunkingService

Table 31 covers the parameters that can be used in a Create MMTelSipTrunkingService request.

Table 31 Attributes Definition for Create MMTel SipTrunkingService

Parameter	Type	Occurrence	Description
publicId	Sub-MO	Optional	The default public user identity for the PBX. This identity must already be configured in the HSS.
sip-trunking-control	Sub-MO	Optional	The SIP Trunking Control. See Section 26.1.45 on page 154 for detailed Attributes definition information.
st-call-admission-control	Sub-MO	Optional	The SIP Trunking (ST) Call Admission Control service. See Section 26.1.46 on page 155 for detailed Attributes definition information.
st-carrier-pre-select-rn	Sub-MO	Optional	The ST Carrier Pre-select Rn service. See Section 26.1.47 on page 156 for detailed Attributes definition information.
st-carrier-select-rn	Sub-MO	Optional	The ST Carrier Select Rn service. See Section 26.1.48 on page 156 for detailed Attributes definition information.
st-common-data	Sub-MO	Optional	The ST Common Data. See Section 26.1.49 on page 156 for detailed Attributes definition information.



Table 31 Attributes Definition for Create MMTel SipTrunkingService

Parameter	Type	Occurrence	Description
st-communication-diversion	Sub-MO	Optional	The ST Communication Diversion service. See Section 26.1.50 on page 157 for detailed Attributes definition information.
st-incoming-communication-barring	Sub-MO	Optional	The ST Incoming Communication Barring service. See Section 26.1.51 on page 159 for detailed Attributes definition information.
st-malicious-communication-identification	Sub-MO	Optional	The ST Malicious Communication Identification service. See Section 26.1.52 on page 161 for detailed Attributes definition information.
st-operator-controlled-outgoing-barring-programs	Sub-MO	Optional	The ST Operator-controlled Outgoing Barring Programs service. See Section 26.1.53 on page 161 for detailed Attributes definition information.
st-originating-identity-presentation	Sub-MO	Optional	The ST Originating Identity Presentation service. See Section 26.1.54 on page 162 for detailed Attributes definition information.
st-originating-identity-presentation-restriction	Sub-MO	Optional	The ST Originating Identity Presentation Restriction service. See Section 26.1.55 on page 163 for detailed Attributes definition information.
st-outgoing-communication-barring	Sub-MO	Optional	The ST Outgoing Communication Barring service. See Section 26.1.56 on page 164 for detailed Attributes definition information.

18.2 Example

This section gives an example of a Create MMTelSipTrunkingService request message.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3g1.2/" xmlns:mmt="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingService/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>123123</cai3:TransactionId>
    <cai3:SessionId>85b0db2685b0db26000000001359337991433</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingService/</cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:user1@tas75.imsas.al.sw.ericsson.se</mmt:publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <mmt:createService publicId="sip:user1@tas75.imsas.al.sw.ericsson.se">
          <mmt:publicId>sip:user1@tas75.imsas.al.sw.ericsson.se</mmt:publicId>
          <mmt:sip-trunking-control>
            <mmt:operator-configuration>
              <mmt:activated>true</mmt:activated>
              <mmt:disable-identity-validation>false</mmt:disable-identity-validation>
              <mmt:auxiliary-identity>sip:test@ericsson.com</mmt:auxiliary-identity>
              <mmt:dynamic-route id="sip:test@ericsson.com">
                <mmt:id>sip:test@ericsson.com</mmt:id>
                <mmt:disabled>true</mmt:disabled>
                <mmt:standby-route>exampleRoute</mmt:standby-route>
              </mmt:dynamic-route>
            </mmt:operator-configuration>
          </mmt:sip-trunking-control>
        </mmt:createService>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 18 Create MMTelSipTrunkingService



19 Get MMTel SipTrunkingService

This section covers the command `Get Service` for `MMTelSipTrunkingService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/MMTelSipTrunkingService/`

19.1 Request Data

19.1.1 Parameters

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

MOId

Table 32 Get MMTelSipTrunkingService Parameters

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	The default Public User Identity for the Private PBX. This identity must already be configured in the HSS.

19.2 Response Data

19.2.1 Parameters

MOId

N/A

MOAttributes

The parameters that are used in the operation are shown in Figure 26.

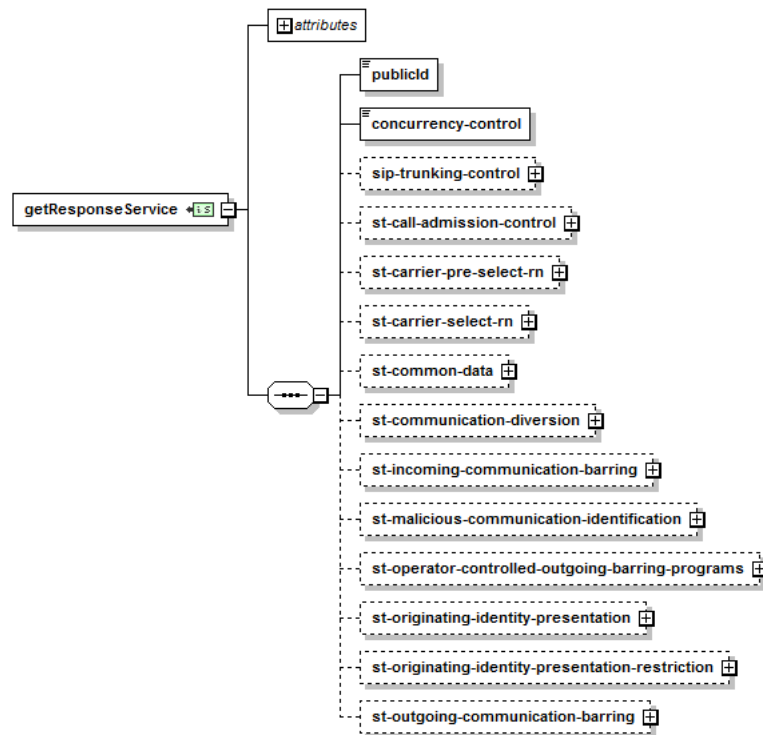


Figure 26 Parameters in Get MMTel SipTrunkingService

Table 33 covers the parameters that can be used in a Get MMTelSipTrunkingService request.

Table 33 Attributes Definition for Get MMTel SipTrunkingService

Parameter	Type	Occurrence	Description
publicId	Sub-MO	Optional	The default public user identity for the PBX. This identity must already be configured in the HSS.
concurrency-control	Sub-MO	Optional	The <code>concurrency-control</code> element is an integer value indicating the current version of the SIP trunking service data. This value can be used in a subsequent <code>setSt</code> request to make sure that no changes have been made to the service data since the version that was read.
sip-trunking-control	Sub-MO	Optional	The SIP Trunking Control. See Section 26.1.45 on page 154 for detailed Attributes definition information.
st-call-admission-control	Sub-MO	Optional	The SIP Trunking (ST) Call Admission Control service. See Section 26.1.46 on page 155 for detailed Attributes definition information.
st-carrier-pre-select-rn	Sub-MO	Optional	The ST Carrier Pre-select Rn service. See Section 26.1.47 on page 156 for detailed Attributes definition information.



Table 33 Attributes Definition for Get MMTel SipTrunkingService

Parameter	Type	Occurrence	Description
st-carrier-select-rn	Sub-MO	Optional	The ST Carrier Select Rn service. See Section 26.1.48 on page 156 for detailed Attributes definition information.
st-common-data	Sub-MO	Optional	The ST Common Data. See Section 26.1.49 on page 156 for detailed Attributes definition information.
st-communication-diversion	Sub-MO	Optional	The ST Communication Diversion service. See Section 26.1.50 on page 157 for detailed Attributes definition information.
st-incoming-communication-barring	Sub-MO	Optional	The ST Incoming Communication Barring service. See Section 26.1.51 on page 159 for detailed Attributes definition information.
st-malicious-communication-identification	Sub-MO	Optional	The ST Malicious Communication Identification service. See Section 26.1.52 on page 161 for detailed Attributes definition information.
st-operator-controlled-outgoing-barring-programs	Sub-MO	Optional	The ST Operator-controlled Outgoing Barring Programs service. See Section 26.1.53 on page 161 for detailed Attributes definition information.
st-originating-identity-presentation	Sub-MO	Optional	The ST Originating Identity Presentation service. See Section 26.1.54 on page 162 for detailed Attributes definition information.
st-originating-identity-presentation-restriction	Sub-MO	Optional	The ST Originating Identity Presentation Restriction service. See Section 26.1.55 on page 163 for detailed Attributes definition information.
st-outgoing-communication-barring	Sub-MO	Optional	The ST Outgoing Communication Barring service. See Section 26.1.56 on page 164 for detailed Attributes definition information.

19.3 Example

This section gives an example of a Get MMTelSipTrunkingService response message.



```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g=
"http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>22e30df5c3a14d4aa3fc2bc49373c6eb</cai3g:SessionId>
    <cai3g:TransactionId>123123</cai3g:TransactionId>
    <cai3g:SequenceId>22e30df5c3a14d4aa3fc2bc49373c6eb</cai3g:SequenceId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <getResponseService:getResponseService publicId="sip:user1@tas75.imsas.al.sw.ericsson.se"
          xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingService/"
          xmlns:getResponseService="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/
          MMTelSipTrunkingService/" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
          <publicId>sip:user1@tas75.imsas.al.sw.ericsson.se</publicId>
          <concurrency-control>2</concurrency-control>
          <sip-trunking-control>
            <operator-configuration>
              <activated>true</activated>
              <disable-identity-validation/>
              <auxiliary-identity>sip:test@ericsson.com</auxiliary-identity>
              <dynamic-route id="sip:test@ericsson.com">
                <id>sip:test@ericsson.com</id>
                <disabled/>
                <standby-route/>
              </dynamic-route>
            </operator-configuration>
          </sip-trunking-control>
        </getResponseService:getResponseService>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 19 Get MMTelSipTrunkingService



20 Set MMTel SipTrunkingService

This section covers the command `Set Service` for `MMTelSipTrunkingService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/MMTelSipTrunkingService/`

20.1 Request Data

20.1.1 Parameters

MOId

Table 34 Set MMTelSipTrunkingService MOId

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	The default Public User Identity for the Private PBX. This identity must already be configured in the HSS.

MOAttributes

The parameters that are used in the operation are shown in Figure 27.

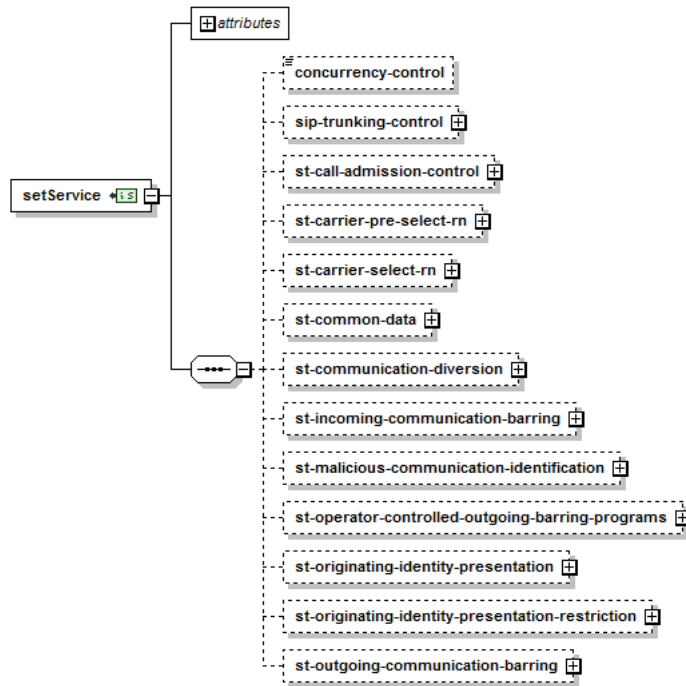


Figure 27 Parameters in Set MMTel SipTrunkingService

Table 35 covers the parameters that can be used in a Set MMTelSipTrunkingService request.

Table 35 Attributes Definition for Set MMTel SipTrunkingService

Parameter	Type	Occurrence	Description
concurrency-control	Sub-MO	Optional	The <code>concurrency-control</code> element is an optional element, of type integer, to control concurrent updates. If present, the set request will be accepted only if the service data version is still at the value given in this element. That is, no other updates have been performed.
sip-trunking-control	Sub-MO	Optional	The SIP Trunking Control. See Section 26.1.45 on page 154 for detailed Attributes definition information.
st-call-admission-control	Sub-MO	Optional	The SIP Trunking (ST) Call Admission Control service. See Section 26.1.46 on page 155 for detailed Attributes definition information.
st-carrier-pre-select-rn	Sub-MO	Optional	The ST Carrier Pre-select Rn service. See Section 26.1.47 on page 156 for detailed Attributes definition information.
st-carrier-select-rn	Sub-MO	Optional	The ST Carrier Select Rn service. See Section 26.1.48 on page 156 for detailed Attributes definition information.



Table 35 Attributes Definition for Set MMTel SipTrunkingService

Parameter	Type	Occurrence	Description
st-common-data	Sub-MO	Optional	The ST Common Data. See Section 26.1.49 on page 156 for detailed Attributes definition information.
st-communication-diversion	Sub-MO	Optional	The ST Communication Diversion service. See Section 26.1.50 on page 157 for detailed Attributes definition information.
st-incoming-communication-barring	Sub-MO	Optional	The ST Incoming Communication Barring service. See Section 26.1.51 on page 159 for detailed Attributes definition information.
st-malicious-communication-identification	Sub-MO	Optional	The ST Malicious Communication Identification service. See Section 26.1.52 on page 161 for detailed Attributes definition information.
st-operator-controlled-outgoing-barring-programs	Sub-MO	Optional	The ST Operator-controlled Outgoing Barring Programs service. See Section 26.1.53 on page 161 for detailed Attributes definition information.
st-originating-identity-presentation	Sub-MO	Optional	The ST Originating Identity Presentation service. See Section 26.1.54 on page 162 for detailed Attributes definition information.
st-originating-identity-presentation-restriction	Sub-MO	Optional	The ST Originating Identity Presentation Restriction service. See Section 26.1.55 on page 163 for detailed Attributes definition information.
st-outgoing-communication-barring	Sub-MO	Optional	The ST Outgoing Communication Barring service. See Section 26.1.56 on page 164 for detailed Attributes definition information.

20.2 Example

This section gives an example of a Set MMTelSipTrunkingService request message.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:mmt="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingService/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>123123</cai3:TransactionId>
    <cai3:SessionId>22e30df5c3a14d4aa3fc2bc49373c6eb</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingService/</cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:user1@tas75.imsas.al.sw.ericsson.se</mmt:publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <mmt:setService publicId="sip:user1@tas75.imsas.al.sw.ericsson.se">
          <mmt:concurrency-control>0</mmt:concurrency-control>
          <mmt:sip-trunking-control>
            <mmt:operator-configuration>
              <mmt:activated>true</mmt:activated>
              <mmt:disable-identity-validation>true</mmt:disable-identity-validation>
              <mmt:auxiliary-identity>sip:test@ericsson.com</mmt:auxiliary-identity>
              <mmt:static-route id="String1">
                <mmt:id>String1</mmt:id>
                <mmt:disabled>text</mmt:disabled>
                <mmt:standby-route>text</mmt:standby-route>
                <mmt:routes>
                  <mmt:route id="String1">
                    <mmt:id>String1</mmt:id>
                    <mmt:uri>sip:test@ericsson.com</mmt:uri>
                  </mmt:route>
                </mmt:routes>
              </mmt:static-route>
            </mmt:operator-configuration>
          </mmt:sip-trunking-control>
        </mmt:setService>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 20 Set MMTelSipTrunkingService



21 Delete MMTel SipTrunkingService

This section covers the command `Delete Service` for `SipTrunkingService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/SipTrunkingService/`

21.1 Request Data

21.1.1 Parameters

MOId

Table 36 *Delete SipTrunkingService MOId*

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	The default Public User Identity for the Private PBX. This identity must already be configured in the HSS.

MOAttributes

Not available.

21.2 Example

This section gives an example of a `Delete MMTelSipTrunkingService` request message.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:mmt="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingService/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>123123</cai3:TransactionId>
    <cai3:SessionId>22e30df5c3a14d4aa3fc2bc49373c6eb</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingService/</cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:user1@tas75.imsas.al.sw.ericsson.se</mmt:publicId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 21 *Delete MMTelSipTrunkingService*



22 Create MMTel SipTrunkingReferralService

This section covers the command `Create Service` for MMTelSipTrunkingReferralService.

MOType

Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/MMTelSipTrunkingReferralService/

22.1 Request Data

22.1.1 Parameters

MOId

Table 37 Create MMTelSipTrunkingReferralService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	The Public Service Identity for service document. This identity must already be configured on the HSS.

MOAttributes

The parameters that are used in the operation are shown in Figure 28.

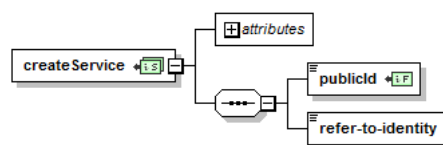


Figure 28 Parameters in Create MMTel SipTrunkingReferralService

Table 38 covers the parameters that can be used in a `Create MMTelSipTrunkingReferralService` request.

**Table 38** Attributes Definition for Create MMTelSipTrunkingReferralService

Parameter	Type	Occurrence	Description
publicId	Sub-MO	Optional	The public service identity for service document. This identity must already be configured on the HSS.
refer-to-identity	Sub-MO	Optional	The refer-to-identity element contains public identity of the associated service document. It must be present and may never be withdrawn so it is not nillable.

22.2 Example

This section gives an example of a Create MMTelSipTrunkingReferral Service request message.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:mmt="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingReferralService/">
  <soapenv:Header>
    <cai3:SequenceId>13866798920162516860</cai3:SequenceId>
    <cai3:TransactionId>123123</cai3:TransactionId>
    <cai3:SessionId>22e30df5c3a14d4aa3fc2bc49373c6eb</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Create>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingReferralService/</cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:user1@tas75.imsas.al.sw.ericsson.se</mmt:publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <mmt:createService publicId="sip:user1@tas75.imsas.al.sw.ericsson.se">
          <mmt:publicId>sip:user1@tas75.imsas.al.sw.ericsson.se</mmt:publicId>
          <mmt:refer-to-identity>sip:example@ericsson.com</mmt:refer-to-identity>
        </mmt:createService>
      </cai3:MOAttributes>
    </cai3:Create>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 22 Create MMTelSipTrunkingReferralService



23 Get MMTel SipTrunkingReferralService

This section covers the command `Get Service` for `MMTelSipTrunkingReferralService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/MMTelSipTrunkingReferralService/`

23.1 Request Data

23.1.1 Parameters

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

MOId

Table 39 Get MMTelSipTrunkingReferralService Parameters

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	The Public Service Identity for service document. This identity must already be configured on the HSS.

23.2 Response Data

23.2.1 Parameters

MOId

N/A

MOAttributes

The parameters that are used in the operation are shown in Figure 29.

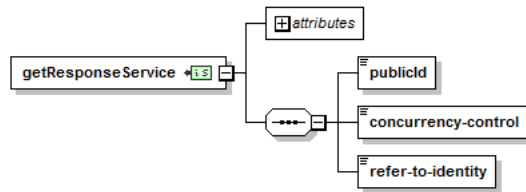


Figure 29 Parameters in Get MMTelSipTrunkingReferralService

Table 40 covers the parameters that can be used in a Get MMTelSipTrunkingReferralService request.

Table 40 Attributes Definition for Get MMTelSipTrunkingReferralService

Parameter	Type	Occurrence	Description
publicId	Sub-MO	Optional	The public service identity for service document. This identity must already be configured on the HSS.
concurrency-control	Sub-MO	Optional	The concurrency-control element is an integer value indicating the current version of the SIP Trunking Referral service data. This value can be used in a subsequent setStReferral request to make sure that no changes have been made to the service data since the version that was read.
refer-to-identity	Sub-MO	Optional	The refer-to-identity element contains public identity of the associated service document. It must be present and may never be withdrawn so it is not nillable.

23.3 Example

This section gives an example of a Get MMTelSipTrunkingReferralService response message.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3g="http://schemas.ericsson.com/cai3g1.2/">
  <S:Header>
    <cai3g:SessionId>63a5243f9ac146ecb1cd8acc824601a3</cai3g:SessionId>
    <cai3g:TransactionId>123123</cai3g:TransactionId>
    <cai3g:SequenceId>63a5243f9ac146ecb1cd8acc824601a3</cai3g:SequenceId>
  </S:Header>
  <S:Body>
    <GetResponse xmlns="http://schemas.ericsson.com/cai3g1.2/">
      <MOAttributes>
        <getResponseService:getResponseService publicId="sip:user1@tas117.imsas.al.sw.ericsson.se"
          xmlns="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingReferralService/"
          xmlns:getResponseService="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingReferralService/"
          xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
          <publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</publicId>
          <concurrency-control>1</concurrency-control>
          <refer-to-identity>sip:example@ericsson.com</refer-to-identity>
        </getResponseService:getResponseService>
      </MOAttributes>
    </GetResponse>
  </S:Body>
</S:Envelope>
```

Example 23 Get MMTelSipTrunkingReferralService



24 Set MMTel SipTrunkingReferralService

This section covers the command `Set Service` for MMTelSipTrunkingReferralService.

MOType

Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/MMTelSipTrunkingReferralService/

24.1 Request Data

24.1.1 Parameters

MOId

Table 41 Set MMTelSipTrunkingReferralService MOId

Parameter	Type	Occurrence	Description
publicId	Case Sensitive String	Mandatory	The Public Service Identity for service document. This identity must already be configured on the HSS.

MOAttributes

The parameters that are used in the operation are shown in Figure 30.

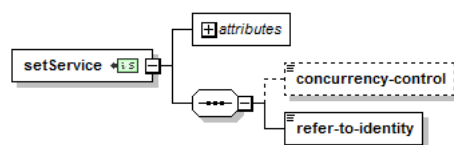


Figure 30 Parameters in Set MMTel SipTrunkingReferralService

Table 42 covers the parameters that can be used in a `Set MMTelSipTrunkingReferralService` request.



Table 42 Attributes Definition for Set MMTelSipTrunkingReferralService

Parameter	Type	Occurrence	Description
concurrency-control	Sub-MO	Optional	The concurrency-control element is an optional element, of type integer, to control concurrent updates. If present, the set request will be accepted only if the service data version is still at the value given in this element. That is, no other updates have been performed.
refer-to-identity	Sub-MO	Optional	The refer-to-identity element contains public identity of the associated service document. It must be present and may never be withdrawn so it is not nillable.

24.2 Example

This section gives an example of a Set MMTelSipTrunkingReferralService request message.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:mmt="http://schemas.ericsson.com/
ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingReferralService/">
  <soapenv:Header>
    <cai3:SequenceId>63a5243f9ac146ecb1cd8acc824601a3</cai3:SequenceId>
    <cai3:TransactionId>123123</cai3:TransactionId>
    <cai3:SessionId>63a5243f9ac146ecb1cd8acc824601a3</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3:Set>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/
MMTelSipTrunkingReferralService/</cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</mmt:publicId>
      </cai3:MOId>
      <cai3:MOAttributes>
        <mmt:setService publicId="sip:user1@tas117.imsas.al.sw.ericsson.se">
          <mmt:concurrency-control>0</mmt:concurrency-control>
          <mmt:refer-to-identity>sip:test@ericsson.com/</mmt:refer-to-identity>
        </mmt:setService>
      </cai3:MOAttributes>
    </cai3:Set>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 24 Set MMTelSipTrunkingReferralService



25 Delete MMTel SipTrunkingReferralService

This section covers the command `Delete Service` for `SipTrunkingReferralService`.

MOType

`Service@http://schemas.ericsson.com/ema/UserProvisioning/M
TAS/Service/SipTrunkingReferralService/`

25.1 Request Data

25.1.1 Parameters

MOId

Table 43 *Delete SipTrunkingReferralService MOId*

Parameter	Type	Occurrence	Description
<code>publicId</code>	Case Sensitive String	Mandatory	The Public Service Identity for service document. This identity must already be configured on the HSS.

MOAttributes

Not available.

25.2 Example

This section gives an example of a `Delete SipTrunkingReferralService` request message.



```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/" xmlns:cai3="http://schemas.ericsson.com/cai3gl.2/" xmlns:mmt="http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingReferralService/">
  <soapenv:Header>
    <cai3:SequenceId>63a5243f9ac146ecb1cd8acc824601a3</cai3:SequenceId>
    <cai3:TransactionId>123123</cai3:TransactionId>
    <cai3:SessionId>63a5243f9ac146ecb1cd8acc824601a3</cai3:SessionId>
  </soapenv:Header>
  <soapenv:Body>
    <cai3>Delete>
      <cai3:MOType>Service@http://schemas.ericsson.com/ema/UserProvisioning/MTAS/Service/MMTelSipTrunkingReferralService/</cai3:MOType>
      <cai3:MOId>
        <mmt:publicId>sip:user1@tas117.imsas.al.sw.ericsson.se</mmt:publicId>
      </cai3:MOId>
    </cai3>Delete>
  </soapenv:Body>
</soapenv:Envelope>
```

Example 25 *Delete MMTelSipTrunkingReferralService*



26 MTAS Attributes Definitions

26.1 Detailed Service Attributes Definition List

This section lists the attribute definitions for Sub-MOs.

26.1.1 Abbreviated Dialing

The following table covers the parameters used for abbreviated dialing.

Table 44 Attributes Definition for Abbreviated Dialing

Parameter	Occurrence	Description
abbreviated-dialing	Optional	The abbreviated-dialing service
abbreviated-dialing-operator-configuration	Optional	The configuration parameters for the abbreviated dialing service that are available to the operator rather than the user. This must be present on the creation of the abbreviated-dialing service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the abbreviated dialing service. If set to "false", this withdraws the user service and the <code>abbreviated-dialing-user-configuration</code> element must be deleted at the same time. This must be present on the creation of the abbreviated-dialing service.
abbreviated-dialing-user-configuration	Optional	The configuration parameters for the abbreviated dialing service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, <code>abbreviated-dialing-operator-configuration</code> is present and <code>activated</code> is "true".
active	Optional	The <code>active</code> element has values "true" or "false". It controls whether the abbreviated dialing service is active or not for this subscriber.
number-mapping	Optional	The <code>number-mapping</code> element specifies the mapping between an abbreviated number and the full stored number to be substituted when the abbreviated number is dialed. The <code>number-mapping</code> element is a sub-MO allowing multiple instances with <code>abbreviated-number</code> as the unique key.
abbreviated-number	Optional	The abbreviated form of a number from 0 through 99. This must be present on the creation of a <code>number-mapping</code> element.
stored-number	Optional	The stored number in its full form, which is substituted when the user dials the corresponding abbreviated number. The <code>stored-number</code> is a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number, or a number that can be normalized after removing a dynamic ad-hoc presentation SSC and/or a CSC. This must be present on the creation of a <code>number-mapping</code> element.

26.1.2 Advice of Charge

The following table covers the parameters used for Advice of Charge.

Table 45 Attributes Definition for Advice of Charge

Parameter	Occurrence	Description
advice-of-charge	Optional	The Advice of Charge service
aoc-operator-configuration	Optional	The configuration parameters for the advice-of-charge service that are available to the operator rather than the user. This must be present on the creation of the advice-of-charge service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the Advice of Charge service. If set to "false", this withdraws the service from the user. This must be present on the creation of the advice-of-charge service.
service-type	Optional	The service-type element contains the Advice of Charge service types. This must be present on the creation of the advice-of-charge service.
operator-aoc-s	Optional	The presence of the operator-aoc-s element indicates that the user is provisioned with the AOC-S(tart) service type.
activated	Optional	The activated element has values "true" or "false". When set to "true" the service type is activated. This must be present on the creation of the parent service type.
aoc-service-obligatory	Optional	The aoc-service-obligatory indicates that the user is provisioned with the obligatory type of AOCl(information) for this service type. This must be present on the creation of the parent service type.
operator-aoc-d	Optional	The presence of the operator-aoc-d element indicates that the user is provisioned with the AOC-D(uring) service type.
activated	Optional	The activated element has values "true" or "false". When set to "true" the service type is activated. This must be present on the creation of the parent service type.
aoc-service-obligatory	Optional	The aoc-service-obligatory indicates that the user is provisioned with the obligatory type of AOCl(information) for this service type. This must be present on the creation of the parent service type.
operator-aoc-e	Optional	The presence of the operator-aoc-e element indicates that the user is provisioned with the AOC-E(nd) service type.
activated	Optional	The activated element has values "true" or "false". When set to "true" the service type is activated. This must be present on the creation of the parent service type.
aoc-service-obligatory	Optional	The aoc-service-obligatory indicates that the user is provisioned with the obligatory type of AOCl(information) for this service type. This must be present on the creation of the parent service type.
currency-or-units	Mandatory for creation of Advice of Charge service	The currency-or-units element contains the users choice of how Advice of Charge data is to be presented. This element must be present on the creation of the advice-of-charge service.
currency-as-ISO-4217-numeric	Mandatory	The elements currency-as-ISO-4217-numeric and units are mutually exclusive, meaning that one of these must be used. The presence of the currency-as-ISO-4217-numeric element indicates that the user prefers to receive their Advice of Charge data in currency. The element content is a numeric value that indicates the actual currency as defined by ISO 4217.
units	Mandatory	The elements currency-as-ISO-4217-numeric and units are mutually exclusive, meaning that one of these must be used. The presence of the units element indicates that the user prefers to receive the Advice of Charge data in units.



26.1.3 Call Admission Control Group Membership

The following table covers the parameters used for call admission control group membership.

Table 46 Attributes Definition Call Admission Control Group Membership

Parameter	Occurrence	Description
call-admission-control-group-membership	Optional	The user membership of call admission control group service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
cac-group-membership-operator-configuration	Optional	The configuration parameters for the user membership of call admission group service that are available to the operator rather than the user. This must be present on the creation of the <code>call-admission-control-group-membership</code> service.
activated	Optional	The <code>activated</code> element has values <code>true</code> or <code>false</code> . When set to <code>"true"</code> the user is provisioned with the user membership of call admission group service. If set to <code>"false"</code> , this withdraws the service from the user. This must be present on the creation of the <code>call-admission-control-group-membership</code> service.
cac-group-identity	Optional	The identity of the Call Admission Control Group that this user is a member of. Is to be a SIP URI (RFC 3261) or a tel URI (RFC 3966). This must be present on the creation of the <code>call-admission-control-group-membership</code> service.

26.1.4 Call Completion

The following table covers the parameters used for call completion.

Table 47 Attributes Definition for Call Completion

Parameter	Occurrence	Description
call-completion	Optional	The communication completion service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
cc-operator-configuration	Optional	The configuration parameters for the communication completion service that are available to the operator rather than the user. This must be present on the creation of the <code>call-completion</code> service.
activated	Optional	The <code>activated</code> element has values <code>"true"</code> or <code>"false"</code> . When set to <code>"true"</code> the user is provisioned with the communication completion service. If set to <code>"false"</code> , this withdraws the service from the user. This must be present on the creation of the <code>call-completion</code> service.
ccbs	Optional	The <code>ccbs</code> element has values <code>"activated"</code> or <code>"deactivated"</code> . When set to <code>"activated"</code> it provisions the user with the communication completion on busy service.
ccnr	Optional	The <code>ccnr</code> element has values <code>"activated"</code> or <code>"deactivated"</code> . When set to <code>"activated"</code> it provisions the user with the communication completion by no reply service.
ccnl	Optional	The <code>ccnl</code> element has values <code>"activated"</code> or <code>"deactivated"</code> . When it is set to <code>"activated"</code> , it provisions the user with the communication completion on not logged-in service.
ccivr	Optional	The <code>ccivr</code> element has values <code>"activated"</code> or <code>"deactivated"</code> . When set to <code>"activated"</code> , it provisions the user with the communication completion Interactive Voice Recognition (IVR) feature for all the types of communication completion that the user has activated.

**Table 47** *Attributes Definition for Call Completion*

Parameter	Occurrence	Description
cc-monitor-queue-size	Optional	The cc-monitor-queue-size element is an optional element to set the size of the monitor queue on the terminating MTAS. If present, it provisions the subscriber with an alternative queue size, which overrides the CM attribute mtasCcMonitorQueueSize. Its type is integer.
max-number-of-ccbs-requests-in-monitor-queue	Optional	The max-number-of-ccbs-requests-in-monitor-queue element is an optional element to set the limit on the number of CCBS service requests in the monitor queue on the terminating MTAS. This element is mandatory in case cc-monitor-queue-size has been provisioned and not allowed in case that cc-monitor-queue-size has not been provisioned. Its type is integer.
max-number-of-ccnr-requests-in-monitor-queue	Optional	The max-number-of-ccnr-requests-in-monitor-queue element is an optional element to set the limit on the number of CCNR service requests in the monitor queue on the terminating MTAS. This element is mandatory in case cc-monitor-queue-size has been provisioned and not allowed in case cc-monitor-queue-size has not been provisioned. Its type is integer.
max-number-of-ccnl-requests-in-monitor-queue	Optional	The max-number-of-ccnl-requests-in-monitor-queue element is an optional element to set the limit on the number of CCNL service requests in the monitor queue on the terminating MTAS. This element is mandatory in case cc-monitor-queue-size has been provisioned and not allowed in case cc-monitor-queue-size has not been provisioned. Its type is integer.

26.1.5 Call Completion Monitor Opt Out

The following table covers the parameters used for call completion monitor opt-out.

Table 48 *Attributes Definition for Call Completion Monitor Opt Out*

Parameter	Occurrence	Description
call-completion-monitor-opt-out	Optional	The communication completion monitor opt-out service. This allows a subscriber to be opted out of being monitored to support communication completion services to that subscriber. This is specified as an opt-out because the communication completion is more valuable the more targets for which communication completion is possible. Use xsi:nil="true" to withdraw the entire service.
cc-monitor-opt-out-operator-configuration	Optional	The configuration parameters for the communication completion monitor opt-out service that are available to the operator rather than the user. This must be present on the creation of the call-completion-monitor-opt-out service.
activated	Optional	<p>The activated element has values true or false. When set to "true", the user is provisioned with the communication completion monitor opt-out service. If set to "false", this withdraws the service from the user. This must be present on the creation of the call-completion-monitor-opt-out service.</p> <p>There are optional suboptions for this service that are of the activation type. If a suboption is present and is set to the "deactivated" value, then the opt-out is overridden and communication completion is offered for that suboption of communication completion. If a suboption is present and is set to the "activated" value, or the suboption is not provided at all, then the opt-out applies and no communication completion is offered.</p>



Table 48 *Attributes Definition for Call Completion Monitor Opt Out*

Parameter	Occurrence	Description
ccbs	Optional	The <code>ccbs</code> element has values "activated" or "deactivated". When set to "deactivated", it disables the monitor opt-out for the communication completion on busy service and <code>ccbs</code> is offered from the served user. When set to the value "activated", the opt-out applies.
ccnr	Optional	The <code>ccnr</code> element has values "activated" or "deactivated". When set to "deactivated", it disables the monitor opt-out for the communication completion by no reply service and <code>ccnr</code> is offered from the served user. When set to the value "activated", the opt-out applies.
ccnl	Optional	The <code>ccnl</code> element has values "activated" or "deactivated". When it is set to "deactivated", it disables the monitor opt-out for the communication completion by not logged-in service and <code>ccnl</code> is offered from the served user. When it is set to the value "activated", the opt-out applies.

26.1.6 Call Return

The following table covers the parameters used for call return.

Table 49 *Attributes Definition for Call Return*

Parameter	Occurrence	Description
call-return	Optional	The call return service. Use <code>xsi:nil=true</code> to withdraw the entire service.
call-return-operator-configuration	Optional	The configuration parameters for the call return service that are available to the operator rather than the user. This must be present on the creation of the <code><call-return></code> service.
activated	Optional	The <code>activated</code> element has values <code>true</code> or <code>false</code> . When set to <code>true</code> , the user is provisioned with the call return service. This must be present on the creation of the call return service.

26.1.7 Calling Name Identity Presentation

The following table covers the parameters used for calling name identity presentation.

Table 50 *Attributes Definition for Calling Name Identity Presentation*

Parameter	Occurrence	Description
calling-name-identity-presentation	Optional	The calling name identity presentation service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
cnip-operator-configuration	Optional	The configuration parameters for the calling name identity presentation service that are available to the operator rather than the user. This must be present on the creation of the <code>calling-name-identity-presentation</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the calling name identity presentation service. If set to "false", this withdraws the user service and the <code>cnip-user-configuration</code> element must be deleted at the same time. This must be present on the creation of the <code>calling-name-identity-presentation</code> service.

**Table 50** *Attributes Definition for Calling Name Identity Presentation*

Parameter	Occurrence	Description
cnip-user-configuration	Optional	The configuration parameters for the calling name identity presentation service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, cnip-operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" and "false". It controls whether the calling name identity presentation service is active or not for this subscriber. The calling name identity presentation service requires that the user also has the originating identity presentation service active.

26.1.8 Calling Party Category

The following table covers the parameters used for calling party category.

Table 51 *Attributes Definition for Calling Party Category*

Parameter	Occurrence	Description
calling-party-category	Optional	The calling party category service. Use xsi:nil="true" to withdraw the entire service.
cpc-operator-configuration	Optional	The configuration parameters for the calling party category service that are available to the operator rather than the user. This must be present on the creation of the calling-party-category service.
activated	Optional	The activated element has values "true" or "false". When the value is set to "true", the user is provisioned with the calling-party-category service. If the value is set to "false", this withdraws the service from the user. This must be present on the creation of the calling-party-category service.
cpc-value	Optional	The cpc-value element is a string value, which specifies the calling party category value for the user. To clear the calling-party-category value for a user, an empty cpc-value element is included in the Set request.

26.1.9 Carrier Pre-select

The following table covers the parameters used for Carrier Pre-select.

Table 52 *Attributes Definition for Carrier Pre-select*

Parameter	Occurrence	Description
carrier-pre-select	Optional	The carrier pre-select service. Use xsi:nil="true" to withdraw the entire service.
cps-operator-configuration	Optional	The configuration parameters for the carrier pre-select service that are available to the operator rather than the user. This must be present on the creation of the carrier-pre-select service.



Table 52 Attributes Definition for Carrier Pre-select

Parameter	Occurrence	Description
activated	Optional	The <activated> element has values "true" or "false". When set to "true" the user is provisioned with the carrier pre-select service. If set to "false", this withdraws the service from the user. This must be present on the creation of the <carrier-pre-select> service.
call-type-carrier	Optional	The call-type-carrier element specifies a mapping between a call type and the carrier code to be pre-selected for calls of that type. The call-type-carrier element is a sub-MO allowing multiple instances with call-type as the unique key.
call-type	Optional	The type of call. This is a string of from 1 through 32 characters that is to match a call type configured into the node level configuration. This must be present on the creation of a call-type-carrier.
carrier-code	Optional	The carrier code to be used for a call of the given type. This is a string beginning with a '+' and followed by from 3 through 8 digits. This must be present on the creation of a call-type-carrier.

26.1.10 Carrier Pre-select Rn

The following table covers the parameters used for carrier pre-select rn.

Table 53 Attributes Definition for Carrier Pre-select Rn

Parameter	Occurrence	Description
carrier-pre-select-rn	Optional	The carrier pre-select rn service. Use xsi:nil="true" to withdraw the entire service.
cpsrn-operator-configuration	Optional	The configuration parameters for the carrier-pre-select-rn service that are available to the operator rather than the user. This must be present on the creation of the carrier-pre-select-rn service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the carrier-pre-select-rn service. If set to "false", this withdraws the service from the user. This must be present on the creation of the carrier-pre-select-rn service.
call-type-carrier-rn	Optional	The call-type-carrier-rn element specifies a mapping between a call type and the global carrier code to be pre-selected for calls of that type along with the domain for that carrier. The call-type-carrier-rn element is a sub-MO allowing either one or two instances with call-type as the unique key.
call-type	Optional	The type of call either "LOCAL" or "REMOTE". This must be present on the creation of a call-type-carrier-rn. The value "LOCAL" corresponds to calls to numbers with the same area code as the user. The value "REMOTE" corresponds to all other calls.
global-carrier-code	Optional	The global carrier code to be used for a call of the given type. This is a string of from 3 through 8 digits. This must be present on the creation of a call-type-carrier-rn.



26.1.11 Carrier Select

The following table covers the parameters used for carrier select.

Table 54 Attributes Definition for Carrier Select

Parameter	Occurrence	Description
carrier-select	Optional	The carrier select service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
cs-operator-configuration	Optional	The configuration parameters for the carrier select service that are available to the operator rather than the user. This must be present on the creation of the <code>carrier-select</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the carrier select service. If set to "false", this withdraws the service from the user. This must be present on the creation of the <code>carrier-select</code> service.

26.1.12 Carrier Select Rn

The following table covers the parameters used for carrier select rn.

Table 55 Attributes Definition for Carrier Select Rn

Parameter	Occurrence	Description
carrier-select-rn	Optional	The carrier select rn service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
csrn-operator-configuration	Optional	The configuration parameters for the carrier select rn service that are available to the operator rather than the user. This must be present on the creation of the <code>carrier-select-rn</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true", the user is provisioned with the carrier select rn service. If set to "false" this withdraws the service from the user. This must be present on the creation of the <code>carrier-select-rn</code> service. Preventing call by call carrier selection is sometimes known as call by call block or lock. This is achieved by not provisioning the user with the <code>carrier-select-rn</code> service.

26.1.13 Closed User Group

The following table covers the parameters used for closed user group.

Table 56 Attributes Definition for Closed User Group

Parameter	Occurrence	Description
closed-user-group	Optional	The closed user group service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
cug-operator-configuration	Optional	The configuration parameters for the closed user group service that are available to the operator rather than the users. This must be presented on the creation of the closed user group service.



Table 56 *Attributes Definition for Closed User Group*

Parameter	Occurrence	Description
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the closed user group service. If set to "false", this withdraws the service from the user. This must be presented on the creation of the closed user group service.
cug-interlock-code	Optional	The <code>cug</code> element specifies a closed user group that the user is a member of. The <code>cug</code> element is a sub-MO allowing multiple instances with <code>cug-index</code> as the unique key. This is limited to one member but is extended. The local index for the CUG currently limited to 1. This must be present on the creation of a <code>cug</code> element.
cug-index	Optional	The local index for the CUG currently limited to 1. This must be present on the creation of a <code>cug</code> element.
cug-network-identity	Optional	The network identity for the CUG. This must be presented on the creation of the <code>cug</code> element.
cug-binary-code	Optional	The interlock code for the CUG. This must be presented on the creation of the <code>cug</code> element.

26.1.14 Common Data

The following table covers the parameters used for common data.

Table 57 *Attributes Definition for Common Data*

Parameter	Occurrence	Description
common-data	Optional	Common data available across services. This data is available to the operator rather than the user. Unlike services this is never to be withdrawn so this is not nillable.
area-code	Optional	Area code 0-6 digits. Leave empty for numbering plans to which it does not apply.
country-code	Optional	Country code 1-4 digits
display-name	Optional	Name of subscriber of length between 0-64 characters
integration	Optional	The integration element specifies the mapping between a key and a corresponding value. This can be used for transparent storage of values required for integration with other systems. The integration element is a sub-MO allowing multiple instances with <code>key</code> as the unique key. There can be from 0 through 5 integration elements.
key	Optional	The key for integration data. String of 1–20 characters. This must be present on the creation of an integration element.
value	Optional	The value of the integration data that corresponds to the key. String of 0-50 characters. This must be present on the creation of an integration element.
language-tag	Optional	Preferred language 0-64 characters. The non-standard character "_" is supported.
rule-global-limit	Optional	The maximum number of allowed rules in the user document. Not specified or zero means no limit.

**Table 57** *Attributes Definition for Common Data*

Parameter	Occurrence	Description
service-profile-identity	Optional	The identity of a service profile that a user is linked to. The value needs to be a SIP URI (RFC 3261). If the <code>service-profile-identity</code> element contains an empty string, the semantic is to remove the service profile link.
vtp-domain	Optional	This element contains the VTP domain set for the subscriber. If this domain is matched with one of the VTP domains configured on the node, then that matched VTP domain will be used for the subscriber, otherwise it will fall back to OTP domain. The VTP domain string must be between 1 and 255 characters.

26.1.15 Communication Distribution

The following table covers the parameters used for communication distribution.

Table 58 *Attributes Definition for Communication Distribution*

Parameter	Occurrence	Description
communication-distribution	Optional	The communication distribution service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
fcd-operator-configuration	Optional	The configuration parameters for the flexible communication distribution service that are available to the operator rather than the user. This must be present on the creation of the communication-distribution service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the communication distribution service. If set to "false", this withdraws the service from the user. This must be present on the creation of the communication-distribution service.
max-targets	Optional	The <code>max-targets</code> element controls the maximum number of distinct targets that the user can have for communication distribution in addition to the PRIMARY identity. Integer value from 2 through 10. This must be present on the creation of the communication-distribution service.
primary-hosting	Optional	The <code>primary-hosting</code> element defines where the primary identity is hosted. This must be present on the creation of the communication-distribution service.
rule-limit	Optional	The maximum number of allowed FCD rules in the user document. Not specified or zero means no limit.
fcd-divert-primary	Optional	The <code>fcd-divert-primary</code> element has values "activated" or "deactivated". When the value is set to "activated", the user is able to use <code>divert-primary</code> element to divert the "incoming communication distributed to PRIMARY" to different target. If the value is set to "deactivated", this withdraws the <code>divert-primary</code> service from the user.
user-no-reply-timer	Optional	The <code>user-no-reply-timer</code> has values <code>activated</code> or <code>deactivated</code> . When set to <code>activated</code> , it allows the subscriber to control the length of the no reply timer for the user, thus overriding the configured FCD no reply node timer.
fcd-op-conditions	Optional	The <code>fcd-op-conditions</code> element is a grouping element for fine-grain provisioning options that control which conditions the subscriber is permitted to use in communication distribution rules.



Table 58 Attributes Definition for Communication Distribution

Parameter	Occurrence	Description
anonymous-condition	Optional	The anonymous-condition element has values activated or deactivated. When set to activated, it allows the subscriber to use the anonymous condition in communication distribution rules.
busy-condition	Optional	The busy-condition element has values activated or deactivated. When set to activated, it allows the subscriber to use the fcd-call-state condition with the value of busy in communication distribution rules.
identity-condition	Optional	The identity-condition element has values activated or deactivated. When set to activated, it allows the subscriber to use the identity condition in communication distribution rules.
media-condition	Optional	The media-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use media conditions in communication distribution rules.
not-registered-condition	Optional	The not-registered-condition element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the fcd-call-state condition with the value of "not-registered" in communication distribution rules.
no-answer-condition	Optional	The no-answer-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the fcd-call-state condition with the value of "no-answer" in communication distribution rules.
presence-status-condition	Optional	The presence-status-condition element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use presence-status conditions in communication distribution rules.
not-reachable-condition	Optional	The not-reachable-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the fcd-call-state condition with the value of "not-reachable" in communication distribution rules.
validity-condition	Optional	The validity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the validity conditions in communication distribution rules.
valid-periods-condition	Optional	The valid-periods-condition element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the valid-periods condition in communication distribution rules.
invalidity-condition	Optional	The invalidity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the invalidity condition in communication distribution rules.
served-identity-condition	Optional	The served-identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the served-identity condition in communication distribution rules.
fcd-op-actions	Optional	The fcd-op-actions element is a grouping element for fine-grain provisioning options to control which actions the user is permitted to use for communication diversion rules.
rule-no-reply-timer	Optional	The rule-no-reply-timer has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the no reply timer in the action of communication distribution rules to control the length of the no reply timer on a per rule basis.

Table 58 *Attributes Definition for Communication Distribution*

Parameter	Occurrence	Description
play-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the play-announcement action in communication distribution rules to control whether the caller is presented by specific announcement handled by generic announcement service.
fcd-user-configuration	Optional	The configuration parameters for the flexible communication distribution service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, fcd-operator-configuration is present and activated is "true".
active	Optional	Controls whether the flexible communication distribution service is active or not for this subscriber.
divert-primary	Optional	The divert-primary element is used for diverting the "incoming communication distributed to PRIMARY" to an alternative target.
active	Optional	The active element has values "true" or "false". It indicates whether FCD divert-primary service is activated or not. This must be present on the creation of divert-primary element.
forward-to	Optional	The target element specifies the identity to which the communication is to be diverted. This takes the form of a sip: or tel: URI or "voicemail:internal" for forwarding to voicemail. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number, or a number that can be normalized after removing a dynamic ad-hoc presentation SSC or a CSC. This must be present on the creation of a cdiv-rule.
target	Optional	The target element specifies the identity to which the communication needs to be diverted. This takes the form of a sip: or tel: URI or "voicemail:internal" for forwarding to voicemail. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number, or a number that can be normalized after removing a dynamic ad-hoc presentation SSC or a CSC. This must be present on the creation of a cdiv-rule.
notify-caller	Optional	The notify-caller element has values "true" or "false". It controls whether the caller is notified that the call is being forwarded. If it is not included, then the default behavior is to notify the caller (true).
reveal-identity-to-caller	Optional	The reveal-identity-to-caller element has values "true" or "false". It controls whether the caller being notified that the call is being forwarded receives the targets identity information. If it is not included, then the default behavior is to reveal the targets identity to the caller ("true").
notify-served-user	Optional	The notify-served-user element has values "true" or "false". It controls whether the served user is notified that the call is being forwarded. If it is not included, then the default behavior is not to notify the served user ("false").
notify-served-user-on-outbound-call	Optional	The notify-served-user-on-outbound-call element has values "true" or "false". It controls whether the served user is notified that calls are being forwarded when making a call attempt. If it is not included, then the default behavior is not to notify the served user on outbound calls ("false").
reveal-identity-to-target	Optional	The notify-served-user-on-outbound-call element has values "true" or "false". It controls whether the served user is notified that calls are being forwarded when making a call attempt. If it is not included, then the default behavior is not to notify the served user on outbound calls ("false").



Table 58 Attributes Definition for Communication Distribution

Parameter	Occurrence	Description
fcd-service-options	Optional	Grouping element for a set of zero or more service options.
NoReplyTimer	Optional	The NoReplyTimer element specifies the time that must expire without any response before the noanswer condition is triggered. The value is an integer giving the timer in the range of 5–180 seconds. This value applies to rules with no-answer conditions which do not contain their own individual timer.
target-list	Optional	A list of all the related targets that can be included in communication distribution rules in addition to the PRIMARY number itself, that is, that of the served user. Up to 10 entries can be included.
fixed-targets	Optional	If fixed-targets is set to "true", then the target identities are set by the operator and cannot be changed by the user.
target	Optional	The target element is a sub-MO allowing multiple instances with name as the unique key.
name	Optional	The name for the distribution target. This is the name by which distribution rules refer to targets. This must be present on the creation of a target element.
id	Optional	The id is the identity of the target. It is a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number. This must be present on the creation of a target element.
auto-answer-avoidance ⁽¹⁾	Optional	The auto-answer-avoidance flag marks the target as applicable for the auto-answer avoidance feature. If set to true DTMF confirmation is required to confirm the call establishment.
fcd-ruleset	Optional	Grouping element for a set of zero or more flexible communication distribution user rules.
fcd-rule	Optional	An individual rule controlling communication distribution behavior. The fcd-rule element is a sub-MO allowing multiple instances with id as the unique key.
id	Optional	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of a fcd-rule.
fcd-conditions	Optional	The fcd-conditions element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect. If no conditions are present, then the rule is always applicable.
rule-deactivated	Optional	The rule-deactivated element has values "true" or "false". If present with the value "true" this has the effect of deactivating the individual rule and the rule is not checked. Set to "false" to remove this condition.
valid-periods	Optional	The valid-periods element is a grouping element for recurring time periods (intervals) within which the rule is valid. In order for the valid-periods condition to be satisfied the current date/time must match one of the valid-days if present and one of the valid-times if present. See Section 26.2.9 on page 185 for detailed valid-periodselement contents.
validity	Optional	The validity element is a grouping element for absolute time periods (intervals) within which the rule is valid. See Section 26.2.11 on page 188 for detailed validityelement contents.
invalidity	Optional	The invalidity element is a grouping element for time periods (intervals) within which the rule is NOT valid. The invalidity condition must contain at least one interval.



Table 58 Attributes Definition for Communication Distribution

Parameter					Occurrence	Description
				interval	Optional	The <code>interval</code> element specifies a date and time period within which the <code>validity</code> condition is satisfied. The <code>interval</code> element is a sub-MO allowing multiple instances with <code>from</code> as the unique key.
				from	Optional	The date and time that specifies the start of the valid interval. It is a standard <code>dateTime</code> value, for example, "2008-11-27T20:00:00Z" for a UTC time or "2008-10-12T20:00:00-08:00" for a time with 8 hours offset from UTC. This must be present on the creation of an <code>interval</code> element. To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
				until	Optional	The date and time that specifies the end of the valid interval. It is a standard <code>dateTime</code> value, for example, "2008-11-27T20:00:00Z" for a UTC time or "2008-10-12T20:00:00-08:00" for a time with 8 hours offset from UTC. This must be present on the creation of an <code>interval</code> element. To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
				fcd-call-state	Optional	The <code>fcd-call-state</code> condition controls which state the user must be in for the rule to apply. The value "busy" is satisfied if the user is busy in other calls. The value "no-answer" applies when there is no answer from the user. The value "not-registered" applies when the user is not registered on the MTAS. The value <code>notreachable</code> applies when the user is not reachable because either a specific response has been received or the not reachable timer expires. The value <code>unconditional</code> is used to clear the other call state values so that the condition is satisfied regardless of the users call state.
				fcd-caller-identity	Optional	The <code>fcd-caller-identity</code> element is a grouping element for conditions which are based on the callers identity (or lack of an identity in the case of anonymous).
				anonymous	Mandatory	The elements <code>anonymous</code> and <code>identity</code> are mutually exclusive, meaning that one of these must be used. The <code>anonymous</code> element is an empty element specifying a condition which is satisfied if the caller is anonymous. This can be removed by deleting the enclosing <code>fcd-caller-identity</code> element or by replacing it with an <code>identity</code> element.
				identity	Mandatory	The elements <code>anonymous</code> and <code>identity</code> are mutually exclusive, meaning that one of these must be used. The <code>identity</code> element is a grouping element for conditions which are based on the callers identity. The condition is satisfied if any of the included one or many elements within it is matched. See Section 26.2.10 on page 187 for detailed <code>identity</code> element contents.
				media	Optional	The <code>media</code> element contains a media type that the session must include for the condition to be matched for example "audio" or "video". This is a multi-value parameter so it can appear more than once with several media values that must all be satisfied for the overall condition to be matched.
				presence-status	Optional	The <code>presence-status</code> element contains a presence status value that the user must satisfy for the condition to be matched for example "meal", "meeting", "travel", "vacation". This is a multi-value parameter so it can appear more than once with several presence status values that must all be satisfied for the overall condition to be matched.



Table 58 Attributes Definition for Communication Distribution

Parameter				Occurrence	Description
			served-identity ⁽²⁾	Optional	The served-identity element is a grouping element for conditions which are based on a served users identity. The condition is satisfied if any of the one elements within it is matched. The served-identity condition must contain at least one subelement to be valid. If an update would result in no contained subelements, then the served-identity condition is to be deleted.
			one	Mandatory	The one element specifies an individual served-identity to be matched. The <one> element is a sub-MO allowing multiple instances with id as the unique key.
			id	Optional	The individual served-identity to be matched. For all uses this takes the form of a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number. This element must be present on the creation of a one element.
			in-sip-request ⁽²⁾	Optional	The in-sip-request element is a grouping element for regexp conditions on contents of a SIP request. It evaluates to true if all the conditions included within it are fulfilled.
			flexcondition	Mandatory	The flexcondition element refers to the actual definition of the SIP regexp condition in the User Common Data. It evaluates to true when a value of the specified header or header parameter in the SIP request triggering FCD service matches the regular expression (or if it does not match if the "match-inverse" attribute in the condition definition is set to true). The flexcondition element is a sub-MO allowing multiple instances with id as the unique key.
			Id	Optional	This element holds reference to actual definition of the SIP regexp condition in the User Common Data.
			fcd-actions	Optional	The fcd-actions element is a grouping element for the actions for a rule. This must be present on the creation of a fcd-rule.
			parallel-distribution	Mandatory	The elements parallel-distribution, serial-distribution, and flexible-distribution are mutually exclusive, meaning that one of these must be used. The parallel-distribution element is a grouping element with details of the targets to which the communication is to be distributed in parallel.
			ring-period	Optional	The maximum time period for which the targets is to be left ringing in parallel without an answer.
			target	Optional	The target element is a sub-MO allowing multiple instances with name as the unique key. It is a reference by name to a target identity to which the communication is to be distributed. At least one target must be present on creation of a parallel-distribution element.
			name	Optional	The name of a target identity. The name must be the value of the name of a target in the target-list or the special value PRIMARY. The name must be present on the creation of a target element.
			serial-distribution	Mandatory	The elements parallel-distribution, serial-distribution, and flexible-distribution are mutually exclusive, meaning that one of these must be used. The serial-distribution element is a grouping element with details of the targets to which the communication is to be distributed in series.



Table 58 Attributes Definition for Communication Distribution

Parameter	Occurrence	Description
target	Optional	The target element is a sub-MO allowing multiple instances with <code>name</code> as the unique key. It is a reference by name to a target identity to which the communication is to be distributed. At least one target must be present on creation of a serial-distribution element.
name	Optional	The name of a target identity. The name must be the value of the name of a target in the target-list or the special value PRIMARY. The name must be present on the creation of a target element.
ring-period	Optional	The maximum time period for which this target is to be left ringing in without an answer before switching to the next target.
flexible-distribution	Mandatory	The elements <code>parallel-distribution</code> , <code>serial-distribution</code> , and <code>flexible-distribution</code> are mutually exclusive, meaning that one of these must be used. The <code>flexible-distribution</code> element is a grouping element with details of the targets to which the communication is to be distributed in a flexible way.
target	Optional	The target element is a sub-MO allowing multiple instances with <code>name</code> as the unique key. It is a reference by name to a target identity to which the communication is to be distributed.
name	Optional	The name of a target identity. The name must be one of the following: the name of a target defined in <code>user-common-data</code> ; the name of a target-device defined in <code>user-common-data</code> ; the special value PRIMARY for all the users devices or, in the case of communication distribution the name of a target defined in the target-list within that service. The name must be present on the creation of a target element.
ring-mode	Optional	The ring mode type, serial, or parallel, that is to be used within the flexible distribution.
ring-period	Optional	The maximum time period for which all the targets is to be left ringing in without an answer before switching to the next target.
play-announcement	Optional	The <code>play-announcement</code> element has string values from 0 to 32 characters. When the play-announcement action is set with the string value containing characters with the length between 1–32, if there is any satisfying corresponding conditions and being diverted, the caller is presented with the specific announcement handled by generic announcement service. When the play-announcement action is set with the string value containing character with the length of 0, any play-announcement action element in the rule is deleted from the rule.
fcd-action-options	Optional	Grouping element for a set of zero or more action options
NoReplyTimer	Optional	The <code>NoReplyTimer</code> element specifies the time that must expire without answer before the no-answer condition is triggered. The value is an integer giving the timer in the range of 5–180 seconds. This is only to be present in rules with the value “no-answer” in a <code>fcd-call-state</code> condition.

(1) Only available for MMTel Shared Profile and MMTel Profile.

(2) This element is only available for MMTelSubscription and MMTelProfile.

26.1.16 Communication Diversion

The following table covers the parameters used for communication diversion.



Table 59 Attributes Definition for Communication Diversion

Parameter	Occurrence	Description
communication-diversion	Optional	The communication diversion service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
cdiv-operator-configuration	Optional	The configuration parameters for the communication diversion service that are available to the operator rather than the user. This must be present on the creation of the communication-diversion service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the communication diversion service. If set to "false", this withdraws the user service and the cdiv-user-configuration element must be deleted at the same time. This must be present on the creation of the communication-diversion service.
cdiv-ruleset	Optional	Grouping element for a set of zero or more operator rules. This ruleset is evaluated before the ruleset in the user configuration. See Section 26.2.5 on page 182 for detailed cdiv-ruleset element contents.
cdiv-ruleset-for-post-evaluation	Optional	Grouping element for a set of zero or more operator rules that will be evaluated after any user rules. These rules apply regardless of whether activated is "true" or "false".
cdiv-ruleset	Optional	Grouping element for a set of zero or more operator rules. This ruleset is evaluated before the ruleset in the user configuration. See Section 26.2.5 on page 182 for detailed cdiv-ruleset element contents.
user-no-reply-timer	Optional	The user-no-reply-timer has values "activated" or "deactivated". When the value is set to "activated", it allows subscribers to control the length of the no-reply-timer for the user and thus override the configured CFNR nodal timer.
cdiv-op-conditions	Optional	The cdiv-op-conditions element is a grouping element for fine-grain provisioning options that control which conditions the subscriber is permitted to use in communication diversion rules.
anonymous-condition	Optional	The anonymous-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the anonymous condition in communication diversion rules.
busy-condition	Optional	The busy-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the cdiv-call-state condition with the value of "busy" in communication diversion rules.
identity-condition	Optional	The identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the identity condition in communication diversion rules.
media-condition	Optional	The media-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use media conditions in communication diversion rules.
not-registered-condition	Optional	The not-registered-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the cdiv-call-state condition with the value of "not-registered" in communication diversion rules.
no-answer-condition	Optional	The no-answer-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the cdiv-call-state condition with the value of "no-answer" in communication diversion rules.



Table 59 Attributes Definition for Communication Diversion

Parameter	Occurrence	Description
presence-status-condition	Optional	The presence-status-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use presence-status conditions in communication diversion rules.
validity-condition	Optional	The validity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the validity condition in communication diversion rules.
not-reachable-condition	Optional	The not-reachable-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the cdiv-call-state condition with the value of "not-reachable" in communication diversion rules.
valid-periods-condition	Optional	The valid-periods-condition element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the valid-periods-condition in communication diversion rules.
invalidity-condition	Optional	The invalidity-condition element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the invalidity condition in communication diversion rules.
served-identity-condition	Optional	The served-identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the served-identity condition in communication distribution rules.
unconditional-condition	Optional	<p>The unconditional-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the cdiv-call-state condition with the value of "unconditional" in communication diversion rules.</p> <p>This is when there is no cdiv-conditions set, empty element <code><cdiv-conditions/></code> or <code><cdiv-conditions></cdiv-conditions></code> and an element <code>cdiv-actions</code> specified.</p> <p>If the <code>unconditional-condition</code> element is absent it allows the subscriber to use the <code>cdiv-call-state</code> condition with the value of "unconditional" in communication diversion rules.</p>
cdiv-op-actions	Optional	The cdiv-op-actions element is a grouping element for fine-grain provisioning options to control which actions the user is permitted to use for communication diversion rules.
notify-caller-action	Optional	The notify-caller-action element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the notify-caller action in communication diversion rules to control whether the caller is notified that the call is being forwarded.
notify-served-user-action	Optional	The notify-served-user-action element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the notify-served-user action in communication diversion rules to control whether the served user is notified that the call is being forwarded.
notify-served-user-on-outbound-call-action	Optional	The notify-served-user-on-outbound-call-action element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the notify-served-user-on-outbound-call action in communication diversion rules to control whether the served user is notified that calls are being forwarded when a call attempt is made.



Table 59 Attributes Definition for Communication Diversion

Parameter	Occurrence	Description
reveal-identity-to-caller-action	Optional	The reveal-identity-to-caller-action has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the reveal-identity-to-caller action in communication diversion rules to control whether the caller being notified that the call is being forwarded receives the targets identity information.
reveal-identity-to-target-action	Optional	The reveal-identity-to-target-action has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the reveal-identity-to-target action in communication diversion rules to control whether the diverted-to party receives identity information of the diverting party.
rule-no-reply-timer	Optional	The rule-no-reply-timer has values "activated" or "deactivated". When the value is set to "activated", it allows subscribers to use the no-reply-timer in the action of communication diversion rules to control the length of the no-reply-timer on a per rule basis.
do-not-disturb-action	Optional	The do-not-disturb-action element has values "activated" or "deactivated". When the value is set to "activated", it allows subscribers to use the do-not-disturb-action in communication diversion rules to control whether the caller is handled by do-not-disturb service (for example, treated with specific charging scheme).
play-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When the value is set to "activated", it allows subscribers to use the play-announcement-action in communication diversion rules to control whether the caller is presented by specific announcement handled by the generic announcement service.
rule-limit	Optional	The maximum number of allowed CDIV rules in the user document. Not specified or zero means no limit.
cdiv-user-configuration	Optional	The configuration parameters for the communication diversion service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, cdiv-operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the communication diversion service is active or not for this subscriber.
cdiv-service-options	Optional	The grouping element for a set of zero or more service options.
NoReplyTimer	Optional	The NoReplyTimer element specifies the time that must expire without answering before the no answer condition is triggered. The value is an integer giving the timer in the range of 5–180 seconds. This value applies to rules with no-answer conditions which do not contain their own individual timer.
cdiv-ruleset	Optional	Grouping element for a set of zero or more user rules. See Section 26.2.5 on page 182 for detailed cdiv-ruleset element contents.

26.1.17 Communication Diversion No Answer Timer

The following table covers the parameters used for communication diversion no answer timer.

**Table 60** *Attributes Definition for Communication Diversion No Answer Timer*

Parameter	Occurrence	Description
communication-diversion-no-answer-timer	Optional	The communication diversion no answer timer service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
cdiv-no-answer-timer-operator-configuration	Optional	The configuration parameters for the communication diversion no answer timer service that are available to the operator rather than the user. This must be present on the creation of the <code>cdiv-no-answer-timer-operator-configuration</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the communication diversion no answer timer service. If set to "false", this withdraws the user service and the <code>cdiv-no-answer-timer-user-configuration</code> element must be deleted at the same time. This must be present on the creation of the <code>cdiv-no-answer-timer-operator-configuration</code> service.
cdiv-no-answer-timer-user-configuration	Optional	The configuration parameters for the communication diversion no answer timer service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, <code>cdiv-no-answer-timer-operator-configuration</code> is present and <code>activated</code> is "true".
active	Optional	The <code>active</code> element has values "true" or "false". It controls whether the communication diversion no answer timer service is active or not for this subscriber. If <code>active</code> is set to "false", the timer configured at node level applies.
no-answer-timeout	Optional	The <code>no-answer-timeout</code> element specifies the time that must expire without answer before the no answer condition is triggered. The value is an integer giving the timer in the range of 5–60 seconds.

26.1.18 Communication Waiting

The following table covers the parameters used for communication waiting.

Table 61 *Attributes Definition for Communication Waiting*

Parameter	Occurrence	Description
communication-waiting	Optional	The communication waiting service. Use <code>xsi:nil="true"</code> to withdraw the entire service. The communication waiting service depends on the user call admission control service. The communication waiting service can only be activated if the user call admission control service is also activated and the <code>waiting-limit</code> is set to greater than zero. Because of the mutual dependency with user call admission control, both services must be updated in the same request in which communication waiting is activated or deactivated.
cw-operator-configuration	Optional	The configuration parameters for the communication waiting service that are available to the operator rather than the user. This must be present on the creation of the <code>communication-waiting</code> service.



Table 61 *Attributes Definition for Communication Waiting*

Parameter	Occurrence	Description
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the communication waiting service. If set to "false", this withdraws the user service and the <code>cw-user-configuration</code> element must be deleted at the same time. This must be present on the creation of the communication-waiting service.
cw-user-configuration	Optional	The configuration parameters for the communication waiting service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, <code>cw-operator-configuration</code> is present and activated is "true".
active	Optional	The <code>active</code> element has values "true" and "false". It controls whether the communication waiting service is active or not

26.1.19 Conference

The following table covers the parameters used for conference.

Table 62 *Attributes Definition for Conference*

Parameter	Occurrence	Description
conference	Optional	The conference service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
conf-operator-configuration	Optional	The configuration parameters for the conference service that are available to the operator rather than the user. This must be present on the creation of the conference service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the conference service. If set to "false", this withdraws the service from the user. This must be present on the creation of the conference service.
max-number-of-parties	Optional	The maximum number of parties allowed in a conference created by this user. This is an integer in the range 3-32. This must be present on the creation of the conference service.
answer-confirmation	Optional	If the <code>answer-confirmation</code> element is present the called party will be played an entry announcement and asked for a DTMF confirmation. Use <code>xsi:nil="true"</code> to delete this element.
block-dialout-invitations	Optional	When the element is present the user is blocked from requesting the conference focus to invite participants using the dial-out method (including URI-list usage). This element is optional.

26.1.20 Customized Alerting Tones

The following table covers the parameters used for customized alerting tones.

**Table 63** *Attributes Definition for Customized Alerting Tones*

Parameter	Occurrence	Description
customized-alerting-tone	Optional	The customized alerting tones service.
cat-operator-configuration	Optional	The configuration parameters for the customized alerting tones service that are available to the operator rather than the user. This must be present on the creation of the customized alerting tones service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the customized alerting tones service. If set to "false", this withdraws the service from the user. This must be present on the creation of the customized alerting tones service.

26.1.21 Dial Tone Management

The following table covers the parameters used for dial tone management.

Table 64 *Attributes Definition for Dial Tone Management*

Parameter	Occurrence	Description
dial-tone-management	Optional	The dial tone management service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
dtm-operator-configuration	Optional	The configuration parameters for the dial tone management service that are available to the operator rather than the user. This must be present on the creation of the dial-tone-management service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the dial tone management service. If set to "false", this withdraws the service from the user. This must be present on the creation of the dial-tone-management service.

26.1.22 Dialog Event Notifier

The following table covers the parameters used for Dialog Event Notifier.

Table 65 *Attributes Definition for Dialog Event Notifier*

Parameter	Occurrence	Description
dialog-event-notifier	Optional	The dialog event notifier service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
den-operator-configuration	Mandatory	The configuration parameters for the dialog event notifier service that are available to the operator rather than the user. This must be present on the creation of the dialog-event-notifier service.



Table 65 Attributes Definition for Dialog Event Notifier

Parameter	Occurrence	Description
activated	Mandatory	The activated element has values <code>true</code> or <code>false</code> . When set to <code>true</code> , the user is provisioned with the dialog event notifier service. This must be present on the creation of the <code>dialog-event-notifier</code> service.
block-device-group-usage	Optional	When the element is present, a device belonging to the device group is blocked from using the dialog event notifier service. Allowed device groups are <code>MOBILE</code> and <code>FIXED</code> . Use <code>xsi:nil="true"</code> to delete this element.

26.1.23 Distinctive Ring

The following table covers the parameters used for distinctive ring.

Table 66 Attributes Definition for Distinctive Ring

Parameter	Occurrence	Description
distinctive-ring	Optional	The distinctive ring service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
dr-operator-configuration	Optional	The configuration parameters for the distinctive ring service that are available to the operator rather than the user. This must be present on the creation of the <code>distinctive-ring</code> service.
activated	Optional	The activated element has values <code>"true"</code> or <code>"false"</code> . When set to <code>"true"</code> the user is provisioned with the distinctive ring service. This must be present on the creation of the <code>distinctive-ring</code> service.
dr-user-configuration	Optional	The configuration parameters for the distinctive ring service that are available for the user to set directly. These can also be set on the users behalf by the operator.
active	Optional	The active element has values <code>"true"</code> and <code>"false"</code> . It controls whether the distinctive ring service is active or not for this subscriber.
dr-ruleset	Optional	Grouping element for a set of zero or more user rules.
dr-rule	Optional	An individual rule controlling distinctive ring behavior. The <code>dr-rule</code> element is a sub-MO allowing multiple instances with <code>id</code> as the unique key.
id	Optional	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of a <code>dr-rule</code> .
dr-conditions	Optional	The <code>dr-conditions</code> element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect. If no conditions are present, then the rule is always applicable.
served-identity	Optional	The <code>served-identity</code> element is a grouping element for conditions which are based on the users served identity. The condition is satisfied if any of the included elements within it is matched.
one	Mandatory	The <code>one</code> element specifies an individual served-identity to be matched. The <code>one</code> element is a sub-MO allowing multiple instances with <code>id</code> as the unique key.

**Table 66** *Attributes Definition for Distinctive Ring*

Parameter	Occurrence	Description
id	Optional	The individual served-identity to be matched. For all uses this takes the form of a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number. This element must be present on the creation of a <code>one</code> element.
dr-actions	Optional	The <code>dr-actions</code> element is a grouping element for the actions for a rule. This must be present on the creation of a <code>dr-rule</code> .
alert-info	Optional	The <code>alert-info</code> element specifies the name which is used to find value of the Alert-info header for INVITE message. This must be present on the creation of a <code>dr-rule</code> .

26.1.24 Dynamic Black List

The following table covers the parameters used for dynamic blacklist.

Table 67 *Attributes Definition for Dynamic Blacklist*

Parameter	Occurrence	Description
dynamic-black-list	Optional	The dynamic blacklist service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
dbl-operator-configuration	Optional	The configuration parameters for the Dynamic Blacklist service that are available to the operator rather than the user. This must be present on the creation of the <code>dynamic-black-list</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the dynamic blacklist service. If set to "false", this withdraws the service from the user. This must be present on the creation of the <code>dynamic-black-list</code> service.
caller-details	Optional	Details of a callers identity to be used for incoming communication barring. Details are held here for callers to be barred whose identity is not to be revealed to the user. The <code>caller-details</code> element is a sub-MO allowing multiple instances with <code>insertion-time</code> as the unique key.
insertion-time	Optional	The <code>insertion-time</code> element records the time that the <code>caller-details</code> element was added to <code>dynamic-black-list</code> . This must be present on the creation of a <code>caller-details</code> element.
identity-list	Optional	The <code>identity-list</code> element is a list of identities of the caller that is to be barred. This must be present on the creation of a <code>caller-details</code> element.
identity	Mandatory	The <code>identity</code> element records one of the public identities of the caller that is to be barred. The <code>identity</code> element is restricted to be a sip: URI, as defined in RFC 3261, or a tel: URI, as defined in RFC 3966. tel: URIs, and sip: URIs that have been converted from a tel: URI in accordance with Reference [7], must be normalized. This is a multi-value parameter. See Section 26.2.10 on page 187 for detailed <code>identity</code> element contents.



Table 67 *Attributes Definition for Dynamic Blacklist*

Parameter	Occurrence	Description
expiry-time	Optional	The expiry-time element records the time that the caller-details element expires and is no longer to be used to bar calls. Absence of this element from a caller-details element, means that the caller-details element do not expire.
reason	Optional	The reason element records the service that added the caller-details element to the dynamic-black-list. A value of "DBL" indicates that the caller-details element was added by an invocation of the dynamic blacklist service. A value of "MCR" indicates that the caller-details element was added by an invocation of the Malicious Communication Rejection service. This must be present on the creation of a caller-details element.

26.1.25 Explicit Communication Transfer

The following table covers the parameters used for explicit communication transfer.

Table 68 *Attributes Definition for Explicit Communication Transfer*

Parameter	Occurrence	Description
explicit-communication-transfer	Optional	The explicit communication transfer service. Use xsi:nil="true" to withdraw the entire service.
ect-operator-configuration	Optional	The configuration parameters for the explicit communication transfer service that is available to the operator rather than the user. This must be present on the creation of the explicit-communication-transfer service.
activated	Optional	The activated element has values "true" or "false". When the value is set to "true", the user is provisioned with the explicit-communication-transfer service. This must be present on the creation of the explicit-communication-transfer service.

26.1.26 Flexible Identity Presentation

The following table covers the parameters used for flexible identity presentation.

Table 69 *Attributes Definition for Flexible Identity Presentation*

Parameter	Occurrence	Description
flexible-identity-presentation	Optional	The flexible identity presentation service.
fip-operator-configuration	Optional	The configuration parameters for the flexible identity presentation service that are available to the operator rather than the user. This must be present on the creation of the flexible-identity-presentation service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the flexible identity presentation service. If set to "false" this withdraws the user service, but the fip-user-configuration element is kept. This must be present on the creation of the flexible-identity-presentation service.
fip-suppression	Optional	This parameter contains in what cases the flexible identity presentation shall be suppressed for the subscriber. The value TOLLFREE will suppress FIP service for toll-free call types. Allowed suppress value is "TOLLFREE".

**Table 69** *Attributes Definition for Flexible Identity Presentation*

Parameter	Occurrence	Description
fip-user-configuration	Optional	The configuration parameters for the flexible identity presentation service that are available for the user to set directly. This can also be set on the users behalf by the operator. This is only to be present if the service is provisioned.
active	Optional	Controls whether the flexible identity presentation service is active or not for this subscriber.
fip-identity	Optional	This element is read-only on the user interface. It can be written only on the operator interface.
msn-fip-identity	Optional	The MSN identity which can be selected by the MSN service to replace the served users own identity The <code>msn-fip-identity</code> element specifies the mapping between an <code>id</code> and the identity to be substituted when the <code>id</code> is used. The <code>msn-fip-identity</code> element is a sub-MO allowing multiple instances with <code>id</code> as the unique key.
id	Optional	The <code>id</code> must be present on the creation of a <code>msn-fip-identity</code> element.
identity	Optional	This element is read-only on the user interface. It can be written only on the operator interface.

26.1.27 Hotline

The following table covers the parameters used for hotline.

Table 70 *Attributes Definition for Hotline*

Parameter	Occurrence	Description
hotline	Optional	The hotline service. Use <code>xsi:nil=true</code> to withdraw the entire service.
hotline-operator-configuration	Optional	The configuration parameters for the <code>hotline</code> service that are available to the operator rather than the user. This must be presented in the creation of the <code><hotline></code> service.
activated	Optional	The activated element has values <code>true</code> or <code>false</code> . When set to <code>true</code> the user is provisioned with the <code>hotline</code> service. If set to <code>false</code> , this withdraws the user service, but the <code>hotline-user-configuration</code> element is kept. This must be presented on the creation of the <code>hotline</code> service.
unconditional-condition	Optional	The unconditional-condition element groups parameters for Unconditional Hotline (Automatic Re-routing to Customer Care).
activated	Optional	The activated element has values <code>true</code> or <code>false</code> . When set to <code>true</code> , the unconditional-condition is active and used by <code>hotline</code> service.
hotline-number	Optional	The hotline-number is a number used for unconditional hotline diversion.
instant-condition	Optional	The instant-condition element groups parameters for Instant Hotline.
activated	Optional	The activated element has values <code>true</code> or <code>false</code> . When set to <code>true</code> , the instant-condition is active and used by <code>hotline</code> service.
hotline-number	Optional	The hotline-number is a number used for instant hotline diversion, if applicable (hotline call, unconditional condition is not present or not active, instant condition is active).
delayed-condition	Optional	The delayed-condition element groups parameters for Delayed Hotline.



Table 70 Attributes Definition for Hotline

Parameter	Occurrence	Description
activated	Optional	The activated element has values <code>true</code> or <code>false</code> . When set to <code>true</code> , the delayed-condition (in operator part) is active and used by hotline service.
hotline-user-configuration	Optional	The configuration parameters for the hotline service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, <code><hotlineoperator-configuration></code> is present and <code>activated</code> is set to <code>true</code> .
active	Optional	The active element has values <code>true</code> and <code>false</code> . It controls whether the hotline service (delayed) is active or not for this subscriber.
hotline-number	Optional	The <code>hotline-number</code> , is a number used for delayed hotline diversion if applicable (hotline call, unconditional condition not present or not active, instant condition not present or not active, delayed condition is active at operator and user level).
called-number	Optional	The triggering number allows specifying additional criteria for Hotline service triggering (apart the service code defined in CM <code>mtasHotlineServiceCode</code>). The triggering number takes precedence over <code>mtasHotlineServiceCode</code> CM.

26.1.28 Incoming Communication Barring

The following table covers the parameters used for incoming communication barring.

Table 71 Attributes Definition for Incoming Communication Barring

Parameter	Occurrence	Description
incoming-communication-barring	Optional	The incoming-communication-barring service
icb-operator-configuration	Optional	The configuration parameters for the incoming communication barring service that are available to the operator rather than the user. This must be present on the creation of the incoming-communication-barring service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the incoming communication barring service. If set to false, this withdraws the user service and the <code>icb-user-configuration</code> element must be deleted at the same time. This must be present on the creation of the incoming-communication-barring service.
icb-ruleset	Optional	Grouping element for a set of zero or more operator rules. These rules apply regardless of whether <code>activated</code> is "true" or "false". See Section 26.2.1 on page 173 for detailed <code>icb-ruleset</code> element contents.
icb-op-conditions	Optional	The <code>icb-op-conditions</code> element is a grouping element for fine-grain provisioning options that control which condition elements the user is permitted to use in incoming communication barring rules.
anonymous-condition	Optional	The <code>anonymous-condition</code> element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the <code>anonymous</code> condition in incoming communication barring rules.
roaming-condition	Optional	The <code>roaming-condition</code> element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the <code>roaming-condition</code> in incoming-communication-barring rules.

Table 71 *Attributes Definition for Incoming Communication Barring*

Parameter		Occurrence	Description
	communication-diverted-condition	Optional	The communication-diverted-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the communication-diverted condition in incoming communication barring rules.
	identity-condition	Optional	The identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the identity condition in incoming communication barring rules.
	media-condition	Optional	The media-condition element has values "activated" and "deactivated". When set to "activated" it allows the subscriber to use media conditions in incoming communication barring rules.
	other-identity-condition	Optional	The other-identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the other-identity condition in incoming communication barring rules.
	presence-status-condition	Optional	The presence-status-condition element has values "activated" and "deactivated". When set to "activated" it allows the subscriber to use presence-status conditions in incoming communication barring rules. This is not currently supported by incoming communication barring and is to be omitted or set to "deactivated".
	validity-condition	Optional	The validity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the validity condition in incoming communication barring rules.
	valid-periods-condition	Optional	The valid-periods-condition element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the valid-periods condition in incoming communication barring rules.
	invalidity-condition	Optional	The invalidity-condition element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the invalidity condition in incoming communication barring rules.
	served-identity-condition	Optional	The served-identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the served-identity condition in communication distribution rules.
	unconditional-condition	Optional	The unconditional-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use unconditional condition in incoming communication barring rules. This is when there is no icb-conditions set, empty element icb-conditions/ or icb-conditions/icb-conditions and an element cb-actions specified.
	icb-op-actions	Optional	The icb-op-actions element is a grouping element for fine-grain provisioning options to control which action elements the user is permitted to use in incoming communication barring rules.
	allow-true-action	Optional	The allow-true-action element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the allow action with the value of "true" in incoming communication barring rules to allow incoming communications that match the associated conditions. With this absent or set to "deactivated" the subscriber is only permitted to use the allow action with the value of "false" to bar incoming communications.



Table 71 *Attributes Definition for Incoming Communication Barring*

Parameter	Occurrence	Description
do-not-disturb-action	Optional	The do-not-disturb-action element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the do-not-disturb action in incoming communication barring rules to control whether the caller is handled by do-not-disturb service (for example, treated with specific charging scheme).
play-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the play-announcement action in incoming communication barring rules to control whether the caller is presented by the specific announcement handled by the generic announcement service.
play-segmented-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the play-segmented-announcement action in outgoing communication barring rules to control whether the caller is presented by specific segmented announcement handled by generic announcement service.
rule-limit	Optional	The maximum number of allowed incoming communication barring rules in the user document. Not specified or zero means no limit.
icb-user-configuration	Optional	The configuration parameters for the incoming communication barring service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, icb-operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the incoming communication barring service is active or not for this subscriber. This controls the user rules but has no effect on the operator rules.
icb-ruleset	Optional	Grouping element for a set of zero or more user rules. See Section 26.2.1 on page 173 for detailed icb-ruleset element contents.

26.1.29 Malicious Communication Identification

The following table covers the parameters used for malicious communication identification.

Table 72 *Attributes Definition for Malicious Communication Identification*

Parameter	Occurrence	Description
malicious-communication-identification	Optional	The malicious communication identification service. Use xsi:nil="true" to withdraw the entire service.
mcid-operator-configuration	Optional	The configuration parameters for the malicious communication identification service that are available to the operator rather than the user. This must be present on the creation of the malicious-communication-identification service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the malicious communication identification service. If set to "false", this withdraws the service from the user. This must be present on the creation of the malicious-communication-identification service.

**Table 72** *Attributes Definition for Malicious Communication Identification*

Parameter	Occurrence	Description
mcid-mode	Optional	The mcid-mode element has values "permanent" or "temporary". If set to "permanent" then all communications are logged. If set to "temporary" this allows a recent communication to be logged on user request. This must be present on the creation of the malicious-communication-identification service.
mcid-orig-mode	Optional	The mcid-orig-mode element has values "permanent" or "inactive". If set to "permanent" then all originating communications are logged. If set to "inactive" then logging of originating communications is disabled.

26.1.30 Malicious Communication Rejection

The following table covers the parameters used for malicious communication rejection.

Table 73 *Attributes Definition for Malicious Communication Rejection*

Parameter	Occurrence	Description
malicious-communication-rejection	Optional	The malicious communication rejection service. Use xsi:nil="true" to withdraw the entire service.
mcr-operator-configuration	Optional	The configuration parameters for the malicious communication rejection service that is available to the operator rather than the user. This must be present on the creation of the malicious-communication-rejection service.
activated	Optional	The activated element has values "true" or "false". When the value is set to "true", users are provisioned with the malicious-communication-rejection service. If the value is set to "false", this withdraws the service from the user. This must be present on the creation of the malicious-communication-rejection service.

26.1.31 Media Policy

The following table covers the parameters used for media policy.

Table 74 *Attributes Definition for Media Policy*

Parameter	Occurrence	Description
media-policy	Optional	The media policy service. Use xsi:nil="true" to withdraw the entire service.
mp-operator-configuration	Optional	The configuration parameters for the media policy service that are available to the operator rather than the user. This must be present on the creation of the media-policy service.
activated	Optional	The activated element has values "true" or "false". When set to "true", the user is provisioned with the media-policy service. This must be present on the creation of the media-policy service.
mp-ruleset	Optional	Grouping element for a set of zero or more operator rules.



Table 74 Attributes Definition for Media Policy

Parameter	Occurrence	Description
mp-rule	Optional	An individual rule controlling media policy behavior. The mp-rule element is a sub-MO allowing multiple instances with id as the unique key.
id	Optional	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of an mp-rule element.
mp-conditions	Optional	The mp-conditions element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect.
media	Optional	The media element contains a media type that must be included in the session for the condition to be matched. Possible values are "audio", "video", "text", "application" and "message". This parameter can appear once in a rule and must be present on the creation of an mp-rule element.
mp-actions	Optional	The mp-actions element is a grouping element for the actions for a rule. This must be present on the creation of an mp-rule element.
allow	Optional	The allow element has values "true" or "false". If set to "false" then any media line matching the condition will be blocked. If set to "true" then the media line will not be affected. This element must be present on the creation of an mp-rule element.

26.1.32 Multi Device Conference Policy

The following table covers the parameters used for multi device conference policy.

Table 75 Attributes Definition for Multi Device Conference Policy

Parameter	Occurrence	Description
multi-device-conference-policy	Optional	The multi device conference policy service. Use xsi:nil="true" to withdraw the entire service.
mdcp-operator-configuration	Optional	The configuration parameters for the multi device conference policy service that are available to the operator rather than the user. This must be present on the creation of the multi-device-conference-policy service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the multi device conference policy service. If set to "false" this will withdraw the service from the user. This must be present on the creation of the multi-device-conference-policy service.
mdcp-device-group	Optional	Defines the group of the devices. Operator can create several device groups. The mdcp-device-group element is a sub-MO allowing multiple instances with "name" as the unique key.
name	Optional	Defines the name of the device group. MTAS allows "FIXED".

**Table 75** *Attributes Definition for Multi Device Conference Policy*

Parameter	Occurrence	Description
block-conference-usage	Optional	When the element is present a device belonging to the device-group is blocked from using the conference service. Use <code>xsi:nil="true"</code> to delete this element.
block-dialout-invitations	Optional	When the element is present a device belonging to the device-group is blocked from requesting the conference focus to invite participants using the dial-out method (including URI-list usage). Use <code>xsi:nil="true"</code> to delete this element.

26.1.33 Multi Device User Call Admission Control

The following table covers the parameters used for multi device user call admission control.

Table 76 *Attributes Definition for Multi Device User Call Admission Control*

Parameter	Occurrence	Description
multi-device-user-call-admission-control	Optional	The multi device user call admission control service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
mducac-operator-configuration	Optional	The configuration parameters for the multi device user call admission control service that is available to the operator rather than the user. This must be present on the creation of the multi-device-user-call-admission-control service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the multi device user call admission control service. If set to "false" this will withdraw the service from the user. This must be present on the creation of the multi-device-user-call-admission-control service.
mducac-device-group	Optional	Defines the group of the devices. Operator can create several device groups, but only "ALL" must be present on the creation and is mandatory. The <code>mducac-device-group</code> element is a sub-MO allowing multiple instances with "name" as the unique key. Use <code>xsi:nil="true"</code> to delete this element.
name	Optional	Defines the name of the device group. MTAS allows "ALL", "MOBILE" and "FIXED".
total-call-limit	Optional	Defines the limit of sessions (originating and terminating) on all devices within the device group. The device group "ALL" must be present on the creation. Use <code>xsi:nil="true"</code> to delete this element. For all other groups this element is optional.
simultaneous-device-usage	Optional	Defines the limit of simultaneous sessions for a particular group of devices. Use <code>xsi:nil="true"</code> to delete this element. This element is optional. For the device group "ALL" this element is ignored.



26.1.34 Northbound Call Control

The following table covers the parameters used for northbound call control.

Table 77 Attributes Definition for Northbound Call Control

Parameter	Occurrence	Description
northbound-call-control	Optional	The Northbound Call Control service.
ncc-operator-configuration	Optional	The configuration parameters for the Northbound Call Control service are available to the operator only. This element must be present on the creation of the Northbound Call Control service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the northbound call control service. If set to "false", this withdraws the service from the user. This must be present on the creation of the northbound call control service.
gsm-scf-address	Mandatory	The elements gsm-scf-address and originating-service-key are mutually exclusive, meaning one of these must be used. This E.164 number is the address of the gsmSCF.
originating-service-key	Mandatory	The elements gsm-scf-address and originating-service-key are mutually exclusive, meaning one of these must be used. This is the key that identifies the application within the gsmSCF. A value of -1 can be provisioned, which means that CAMEL application is not triggered for the user on the originating side.
terminating-service-key	Optional	This is the key that identifies the application within the gsmSCF. A value of -1 can be provisioned, which means that CAMEL application is not triggered for the user on the terminating side.
default-call-handling	Optional	Defines how the call is to proceed in case of signaling failure towards the gsmSCF. Possible values are continue and release.
imsi	Optional	The IMSI for this subscriber. Used by the NCC service CAMEL interaction service in MTAS, for the case when the served user is unregistered. Typically this will happen when an IMS user originates a call from a CS access (ICS use-case). This element is mandatory if CM attribute mtasNccImsiBehavior is set to 1. Refer to MTAS Parameter Description , Reference [6].
px-originating-trigger	Optional	The px-originating-trigger element is a grouping element for the data to be used for an originating Parlay X session.
px-application-address	Optional	This is the URL, including the port, to the Parlay X application server to be used for an originating Parlay X session.
px-call-notification	Mandatory	This element defines the possible Call Events that is to be reported on the CallNotification interface. This is a multi-value parameter so it can appear more than once with several call event values.
px-terminating-trigger	Optional	The px-terminating-trigger element is a grouping element for the data to be used for a terminating Parlay X session.
px-application-address	Optional	This is the URL, including the port, to the Parlay X application server to be used for a terminating Parlay X session.
px-call-notification	Mandatory	This element defines the possible Call Events that is to be reported on the CallNotification interface. This is a multi-value parameter so it can appear more than once with several call event values.



26.1.35 Number Portability Announcement

The following table covers the parameters used for number portability announcement.

Table 78 *Attributes Definition for Number Portability Announcement*

Parameter	Occurrence	Description
number-portability-announcement	Optional	The number portability announcement service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
npa-operator-configuration	Optional	The configuration parameters for the number portability announcement service that are available to the operator rather than the user. This must be present on the creation of the number-portability-announcement service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the number portability announcement service. This must be present on the creation of the number portability announcement service.

26.1.36 Operator Controlled Outgoing Barring Programs

The following table covers the parameters used for operator controlled outgoing barring programs.

Table 79 *Attributes Definition for Operator Controlled Outgoing Barring Programs*

Parameter	Occurrence	Description
operator-controlled-outgoing-barring-programs	Optional	The operator controlled outgoing barring programs service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
ocobp-operator-configuration	Optional	The configuration parameters for the operator controlled outgoing barring programs service that are available to the operator rather than the user. This must be present on the creation of the operator-controlled-outgoing-barring-programs service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the operator controlled outgoing barring programs service. If set to "false", this withdraws the service from the user. This must be present on the creation of the operator-controlled-outgoing-barring-programs service.
operator-barring-program	Optional	The operator-barring-program element is a container for each of the categories of outgoing communications that is to be barred by the service.
category-name	Optional	The category-name element contains the name of a category of calls to be barred. This is a multi-value parameter and can appear from 0 through 16 times to cover each category of outgoing communications to be barred. The value of each category-name element is a string of up to 32 characters.
operator-permitted-program	Optional	The operator-permitted-program element is a container for each of the categories of outgoing communications that are to be allowed by the service. The operator-barring-program and operator-permitted-program are mutually exclusive.



Table 79 Attributes Definition for Operator Controlled Outgoing Barring Programs

Parameter	Occurrence	Description
category-name	Optional	The category-name element contains the name of a category of calls to be barred. This is a multi-value parameter and can appear from 0 through 16 times to cover each category of outgoing communications to be barred. The value of each category-name element is a string of up to 32 characters.
operator-diversion-barring-program	Optional	The operator-diversion-barring-program element is a container for each of the categories of outgoing communications that is to be barred as diversion targets.
category-name	Optional	The category-name element contains the name of a category of calls to be barred as a diversion target. This is a multi-value parameter and can appear from 0 through 16 times to cover each category of outgoing communications to be barred. The value of each category-name element is a string of up to 32 characters.

26.1.37 Outgoing Barring Programs

The following table covers the parameters used for outgoing barring programs.

Table 80 Attributes Definition for Outgoing Barring Programs

Parameter	Occurrence	Description
outgoing-barring-programs	Optional	The outgoing barring programs service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
obp-operator-configuration	Optional	The configuration parameters for the outgoing barring programs service that are available to the operator rather than the user. This must be present on the creation of the outgoing-barring-programs service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the outgoing barring programs service. If set to "false", this withdraws the user service and the obp-user-configuration element must be deleted at the same time. This must be present on the creation of the outgoing-barring-programs service.
scheme	Optional	The element scheme has values "single" and "multiple" and controls which type of barring programs apply to the subscriber. The "single" scheme allows one program at a time. With the "multiple" scheme, several programs can be combined at any time, allowing the individual programs to be simpler. This must be present on the creation of the outgoing-barring-programs service.
default-barring-program	Optional	The element default-barring-program contains the number of the barring program to be used when the user by supplementary service codes activates barring program without providing a barring program. If the scheme is "single" allowed values are 0-255, while if scheme is "multiple" allowed values are 0-49. The element can be deleted by using <code>xsi:nil="true"</code> in a CAI3G Set request.
obp-user-configuration	Optional	The configuration parameters for the outgoing barring programs service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, obp-operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the outgoing barring programs service is active or not for this subscriber.

**Table 80** *Attributes Definition for Outgoing Barring Programs*

Parameter	Occurrence	Description
provisioned-program	Optional	The provisioned-program element is a containing element allowing the choice between either single-program or multiple-programs. The choice must reflect the provisioned value of scheme.
single-program	Mandatory	The elements single-program and multiple-programs are mutually exclusive, meaning one of these must be used. The single-program element contains the number of the combined barring program to be used. It is an integer in the range 0-255.
multiple-programs	Mandatory	The elements single-program and multiple-programs are mutually exclusive, meaning one of these must be used. The multiple-programs element is a container for each of the categories of outgoing communications that is to be barred by the service.
category-name	Mandatory	The category-name element contains the name of a category of calls to be barred. This is a multi-value parameter and can appear from 0 through 16 times to cover each category of outgoing communications to be barred. The value of each category-name element is a string of up to 32 characters.

26.1.38 Outgoing Communication Barring

The following table covers the parameters used for outgoing communication barring.

Table 81 *Attributes Definition for Outgoing Communication Barring*

Parameter	Occurrence	Description
outgoing-communication-barring	Optional	The outgoing communication barring service. Use xsi:nil="true" to withdraw the entire service.
ocb-operator-configuration	Optional	The configuration parameters for the outgoing communication barring service that are available to the operator rather than the user. This must be present on the creation of the outgoing-communication-barring service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the outgoing communication barring service. If set to false, this withdraws the user service and the ocb-user-configuration element must be deleted at the same time. This must be present on the creation of the outgoing-communication-barring service.
ocb-ruleset	Optional	Grouping element for a set of zero or more operator rules. These rules apply regardless of whether activated is "true" or "false". See Section 26.2.2 on page 175 for detailed ocb-ruleset element contents.
ocb-op-conditions	Optional	The ocb-op-conditions element is a grouping element for fine-grain provisioning options that control which condition elements the user is permitted to use in outgoing communication barring rules.
identity-condition	Optional	The identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the identity condition in outgoing communication barring rules.



Table 81 *Attributes Definition for Outgoing Communication Barring*

Parameter	Occurrence	Description
roaming-condition	Optional	The roaming-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the roaming condition in outgoing communication barring rules.
international-condition	Optional	The international-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the international condition in outgoing communication barring rules.
international-exHC-condition	Optional	The international-exHC-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the international-exHC condition in outgoing communication barring rules.
media-condition	Optional	The media-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use media conditions in outgoing communication barring rules.
other-identity-condition	Optional	The other-identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the other-identity condition in outgoing communication barring rules.
presence-status-condition	Optional	The presence-status-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use presence-status conditions in outgoing communication barring rules. This is not currently supported by outgoing communication barring and is to be omitted or set to "deactivated".
validity-condition	Optional	The validity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the validity condition in outgoing communication barring rules.
valid-periods-condition	Optional	The valid-periods-condition element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the valid-periods condition in outgoing communication barring rules.
invalidity-condition	Optional	The invalidity-condition element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the invalidity condition in outgoing communication barring rules.
carrier-condition	Optional	The carrier-condition element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the carrier condition in outgoing communication barring rules.
carrier-select-code	Optional	The carrier-select-code element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the carrier-select-code element of the carrier condition in outgoing communication barring rules.
served-identity-condition	Optional	The served-identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the served-identity condition in outgoing communication barring rules.
unconditional-condition	Optional	<p>The unconditional-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use unconditional condition in outgoing communication barring rules.</p> <p>This is when there is no ocb-conditions set, empty element ocb-conditions/Or ocb-conditions/ocb-conditions and an element cb-actions specified.</p>

**Table 81** *Attributes Definition for Outgoing Communication Barring*

Parameter	Occurrence	Description
ocb-op-actions	Optional	The ocb-op-actions element is a grouping element for fine-grain provisioning options to control which action elements the user is permitted to use in outgoing communication barring rules.
allow-true-action	Optional	The allow-true-action element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the allow action with the value of "true" in outgoing communication barring rules to allow outgoing communications that match the associated conditions. With this absent or set to "deactivated" the subscriber is only permitted to use the allow action with the value of "false" to bar outgoing communications.
play-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the play-announcement action in outgoing communication barring rules to control whether the caller is presented by specific announcement handled by generic announcement service.
play-segmented-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the play-segmented-announcement action in outgoing communication barring rules to control whether the caller is presented by specific segmented announcement handled by generic announcement service.
rule-limit	Optional	The maximum number of allowed outgoing communication barring rules in the user document. Not specified or zero means no limit.
ocb-user-configuration	Optional	The configuration parameters for the outgoing communication barring service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, ocb-operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the outgoing communication barring service is active or not for this subscriber. This controls the user rules but has no effect on the operator rules.
ocb-ruleset	Optional	Grouping element for a set of zero or more user rules. ocb-ruleset. See Section 26.2.2 on page 175 for detailed ocb-ruleset element contents.

26.1.39 Originating Calling Name Identity Presentation

The following table covers the parameters used for originating calling name identity presentation.

Table 82 *Attributes Definition for Originating Calling Name Identity Presentation*

Parameter	Occurrence	Description
originating-calling-name-identity-presentation	Optional	The originating calling name identity presentation service. Use xsi:nil=true to withdraw the entire service.



Table 82 *Attributes Definition for Originating Calling Name Identity Presentation*

Parameter	Occurrence	Description
ocnip-operator-configuration	Optional	The configuration parameters for the originating calling name identity presentation service that are available to the operator rather than the user. This must be present on the creation of the originating-calling-name-identity-presentation service.
activated	Optional	The activated element has values true or false. When set to true, the user is provisioned with the originating calling name identity presentation service. If set to false, this withdraws the user service, but the ocnip-user-configuration element is kept. This must be present on the creation of the originating-calling-name-identity presentation service.

26.1.40 Originating Identity Presentation

The following table covers the parameters used for originating identity presentation.

Table 83 *Attributes Definition for Originating Identity Presentation*

Parameter	Occurrence	Description
originating-identity-presentation	Optional	The originating identity presentation service. Use xsi:nil="true" to withdraw the entire service.
oip-operator-configuration	Optional	The configuration parameters for the originating identity presentation service that are available to the operator rather than the user. This must be present on the creation of the originating-identity-presentation service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the originating identity presentation service. If set to "false", this withdraws the user service and the oip-user-configuration element must be deleted at the same time. This must be present on the creation of the originating-identity-presentation service.
restriction-override	Optional	The restriction-override element has values "override-active" or "override-not-active". The value "override-active" means that the originating identity is presented even if the calling party has requested for their presentation to be restricted.
oip-user-configuration	Optional	The configuration parameters for the originating identity presentation service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, oip-operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the originating identity presentation service is active or not for this subscriber.

26.1.41 Originating Identity Presentation Restriction

The following table covers the parameters used for originating identity presentation restriction.

Table 84 Attributes Definition for Originating Identity Presentation Restriction

Parameter	Occurrence	Description
originating-identity-presentation-restriction	Optional	The originating identity presentation restriction service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
oir-operator-configuration	Optional	The configuration parameters for the originating identity presentation restriction service that are available to the operator rather than the user. This must be present on the creation of the originating-identity-presentation-restriction service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the originating identity presentation restriction service. If set to "false", this withdraws the user service and the oir-user-configuration element must be deleted at the same time. This must be present on the creation of the originating-identity-presentation-restriction service.
mode	Optional	<p>The mode element has values "permanent", "temporary", "ad-hoc-temporary-presentation-restricted" or "ad-hoc-temporary-presentation-not-restricted". The value "permanent" is used to give the user a permanent restriction service. In this case, there must be no oir-user-configuration element. The value "temporary" gives an identity presentation restriction service where the user can choose default behavior and also whether to override this on a per-call basis. This must be present on the creation of the originating-identity-presentation-restriction service. The value "ad-hoc-temporary-presentation-restricted" gives an identity presentation restriction service where the user has "presentation-restricted" however the user can override this on a per-call basis. The element oir-user-configuration must have element active set to "true" and the default-behaviour element set to "presentation-restricted".</p> <p>The value "ad-hoc-temporary-presentation-not-restricted" gives an identity presentation restriction service where the user has presentation-not-restricted however the user can override this on a per-call basis. The element oir-user-configuration must have element active set to "true" and the default-behaviour element set to "presentation-not-restricted".</p>
restriction	Optional	The restriction element has values "only-identity" or "all-private-information" and selects whether just the identity of the user is restricted or all private information. This must be present on the creation of the originating-identity-presentation-restriction service.
oir-user-configuration	Optional	The configuration parameters for the originating identity presentation restriction service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, oir-operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the originating identity presentation restriction service is active or not for this subscriber.
default-behaviour	Optional	The default-behaviour element has values "presentation-restricted" or "presentation-not-restricted". It selects the default behavior in temporary mode when the user does not select explicitly within the call whether to restrict their identity or not.

26.1.42 Priority Call

The following table covers the parameters used for priority call.



Table 85 Attributes Definition for Priority Call

Parameter	Occurrence	Description
priority-call	Optional	The priority call service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
priority-call-operator-configuration	Optional	The configuration parameters for the priority call service that are available to the operator rather than the user. This must be present on the creation of the <code>priority-call</code> service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the priority call service. This must be present on the creation of the <code>priority-call</code> service.

26.1.43 Scheduled Conference

The following table covers the parameters used for scheduled conference.

Table 86 Attributes Definition for Scheduled Conference

Parameter	Occurrence	Description
scheduled-conference	Mandatory ⁽¹⁾	The user data for scheduled conference service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
scheduled-conference-operator-configuration	Mandatory ⁽¹⁾	The configuration parameters for the scheduled-conference service. These parameters are only available to the operator
activated	Mandatory ⁽¹⁾	The activated element has values true or false. When it is set to true, the scheduled conference is ready for traffic operation. This element must be present when creating the scheduled-conference service.
service-number	Optional	The identity of the scheduled conference service number that this user is served by. It must be a TEL URI (RFC 3966). This element must be present when creating the scheduled-conference service. In addition, the service number must be a valid PSI in HSS.

⁽¹⁾ This parameter is mandatory for Scheduled Conference MO. For other MOs, this parameter is optional.

26.1.44 Session Transfer to Own Device

The following table covers the parameters used for session transfer to own device.

Table 87 Attributes Definition for Session Transfer to Own Device

Parameter	Occurrence	Description
session-transfer-to-own-device	Optional	The session transfer to own device service.
stod-operator-configuration	Optional	The configuration parameters for the session transfer to own device service that are available to the operator rather than the user. This must be present on the creation of the session-transfer-own-device service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the session-transfer-own-device service. If set to "false", this withdraws the service from the user. This must be present on the creation of the session-transfer-own-device service.

Table 87 *Attributes Definition for Session Transfer to Own Device*

Parameter		Occurrence	Description
	max-targets	Optional	The max-targets element controls the maximum number of distinct targets that the user can have for session-transfer-own device. Integer value from 2 through 10. This must be present on the creation of the session-transfer-own-device service.
	primary-hosting	Optional	The primary-hosting element defines where the primary identity is hosted with values "IMS" for users hosted on the IMS network the MTAS is serving and "non-IMS" for users who have communication distribution performed by the IMS network but are not registered on the IMS network for example users on a separate circuit-switched network. This must be present on the creation of the communication-distribution service.
	rule-limit	Optional	The maximum number of allowed FCD rules in the user document. Not specified or zero limit means no limit.
	stod-user-configuration	Optional	The configuration parameters for the session transfer to own device service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, stod-operator-configuration is present and activated is "true".
	active	Optional	Controls whether the session-transfer-to-own-device service is active or not for this subscriber.
	target-list	Optional	A list defining related targets that can be included in session transfer to own device. The target-list in user-common-data is the preferred way to define related targets so they are available across multiple services.
	fixed-targets	Optional	If fixed-targets is set to "true", then the target identities are set by the operator and cannot be changed by the user.
	target	Optional	The target element is a sub-MO allowing multiple instances with "name" as the unique key.
	name	Optional	The name for the distribution target. This is the name by which distribution rules refer to targets. This must be present on the creation of a target element.
	id	Optional	The id is the identity of the target. It is a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number. This must be present on the creation of a target element.
	auto-answer-avoidance ⁽¹⁾	Optional	The auto-answer-avoidance flag marks the target as applicable for the auto-answer avoidance feature. If set to true, DTMF confirmation is required to confirm the call establishment.
	stod-ruleset	Optional	Grouping element for a set of zero or more flexible communication distribution user rules.
	fcd-rule	Optional	An individual rule controlling communication distribution behavior. The fcd-rule element is a sub-MO allowing multiple instances with id as the unique key.
	id	Optional	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of a fcd-rule.
	fcd-conditions	Optional	The fcd-conditions element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect. If no conditions are present, then the rule is always applicable.



Table 87 Attributes Definition for Session Transfer to Own Device

Parameter					Occurrence	Description
				rule-deactivated	Optional	The rule-deactivated element has values "true" or "false". If present with the value "true" this has the effect of deactivating the individual rule and the rule is not checked. Set to "false" to remove this condition.
				valid-periods	Optional	The valid-periods element is a grouping element for recurring time periods (intervals) within which the rule is valid. See Section 26.2.9 on page 185 for detailed valid-periodselement contents.
				validity	Optional	The validity element is a grouping element for absolute time periods (intervals) within which the rule is valid. See Section 26.2.11 on page 188 for detailed validityelement contents.
				invalidity	Optional	The invalidity element is a grouping element for time periods (intervals) within which the rule is NOT valid. The invalidity condition must contain at least one interval.
				interval	Optional	The interval element specifies a date and time period within which the validity condition is satisfied. The interval element is a sub-MO allowing multiple instances with "from" as the unique key.
				from	Optional	<p>The date and time that specifies the start of the valid interval. It is a standard date Time value for example, 2008-11-27T20:00:00Z for a UTC time or 2008-10-12T20:00:00-08:00 for a time with 8 hours offset from UTC.</p> <p>To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.</p>
				until	Optional	<p>The date and time that specifies the end of the valid interval. It is a standard date Time value for example, 2008-11-27T20:00:00Z for a UTC time or 2008-10-12T20:00:00-08:00 for a time with 8 hours offset from UTC.</p> <p>To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.</p>
				fcd-call-state	Optional	The fcd-call-state condition controls which state the user must be in for the rule to apply. The value "busy" is satisfied if the user is busy in other calls. The value "no-answer" applies when there is no answer from the user. The value "not-registered" applies when the user is not registered on the MTAS. The value notreachable applies when the user is not reachable because either a specific response has been received or the not reachable timer expires. The value unconditional is used to clear the other call state values so that the condition is satisfied regardless of the users call state.
				fcd-caller-identity	Optional	The fcd-caller-identity element is a grouping element for conditions which are based on the callers identity (or lack of an identity in the case of anonymous).
				anonymous	Mandatory	<p>The elements anonymous and identity are mutually exclusive, meaning one of these must be used.</p> <p>The anonymous element is an empty element specifying a condition which is satisfied if the caller is anonymous. This can be removed by deleting the enclosing fcd-caller-identity element or by replacing it with an identity element.</p>

Table 87 Attributes Definition for Session Transfer to Own Device

Parameter					Occurrence	Description
				identity	Mandatory	<p>The elements <code>anonymous</code> and <code>identity</code> are mutually exclusive, meaning one of these must be used.</p> <p>The <code>identity</code> element is a grouping element for conditions which are based on the callers identity. The condition is satisfied if any of the included one or many elements within it is matched. See Section 10.7.6.51.4 for detailed identity element contents.</p>
				media	Optional	<p>The <code>media</code> element contains a media type that the session must include for the condition to be matched for example "audio" or "video". This is a multi-value parameter so it can appear more than once with several media values that must all be satisfied for the overall condition to be matched.</p>
				presence-status	Optional	<p>The <code>presence-status</code> element contains a presence status value that the user must satisfy for the condition to be matched for example "meal", "meeting", "travel", "vacation". This is a multi-value parameter so it can appear more than once with several presence status values that must all be satisfied for the overall condition to be matched.</p>
				served-identity ⁽²⁾	Optional	<p>The <code>served-identity</code> element is a grouping element for conditions which are based on a served users identity. The condition is satisfied if any of the one element within it is matched. The <code>served-identity</code> condition must contain at least one subelement to be valid. If an update would result in no contained subelements, then the <code>served-identity</code> condition is to be deleted.</p>
				one	Mandatory	<p>The <code>one</code> element specifies an individual served-identity to be matched. The <code>one</code> element is a sub-MO allowing multiple instances with "id" as the unique key.</p>
				id	Optional	<p>The individual served-identity to be matched. For all uses this takes the form of a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI contains a normalized number. This element must be present on the creation of a one element.</p>
				in-sip-request ⁽²⁾	Optional	<p>The <code>in-sip-request</code> element is a grouping element for regexp conditions on contents of a SIP request. It evaluates to true if all the included conditions are fulfilled.</p>
				flexcondition ⁽²⁾	Mandatory	<p>The <code>flexcondition</code> element refers to the actual definition of the SIP regexp condition in the User Common Data. It evaluates to true when a value of the specified header or header parameter in the SIP request triggering FCD service matches the regular expression (or if it does not match if the "match-inverse" attribute in the condition definition is set to true). The <code>flexcondition</code> element is a sub-MO allowing multiple instances with "id" as the unique key.</p>
				id ⁽²⁾	Optional	<p>This element holds reference to actual definition of the SIP regexp condition in the User Common Data.</p>
				fcd-actions	Optional	<p>The <code>fcd-actions</code> element is a grouping element for the actions for a rule. This must be present on the creation of a <code>fcd-rule</code>.</p>
				parallel-distribution	Mandatory	<p>The elements <code>parallel-distribution</code>, <code>serial-distribution</code>, and <code>flexible-distribution</code> are mutually exclusive, meaning one of these must be present on the creation of a <code>fcd-rule</code>.</p> <p>The <code>parallel-distribution</code> element is a grouping element with details of the targets to which the communication is to be distributed in parallel.</p>
				ring-period	Optional	<p>The maximum time period for which the targets is to be left ringing in parallel without an answer.</p>



Table 87 Attributes Definition for Session Transfer to Own Device

Parameter	Occurrence	Description
target	Optional	The target element is a sub-MO allowing multiple instances with "name" as the unique key. It is a reference by name to a target identity to which the communication is to be distributed. At least one target must be present on creation of a parallel-distribution element.
name	Optional	The name of a target identity. The name must be the value of the name of a target in the target-list or the special value PRIMARY. The name must be present on the creation of a target element.
serial-distribution	Mandatory	<p>The elements parallel-distribution, serial-distribution, and flexible-distribution are mutually exclusive, meaning one of these must be present on the creation of a fcd-rule.</p> <p>The serial-distribution element is a grouping element with details of the targets to which the communication is to be distributed in series.</p>
target	Optional	The target element is a sub-MO allowing multiple instances with "name" as the unique key. It is a reference by name to a target identity to which the communication is to be distributed. At least one target must be present on creation of a serial-distribution element.
name	Optional	The name of a target identity. The name must be the value of the name of a target in the target-list or the special value PRIMARY. The name must be present on the creation of a target element.
ring-period	Optional	The maximum time period for which this target is to be left ringing in without an answer before switching to the next target.
flexible-distribution	Mandatory	<p>The elements parallel-distribution, serial-distribution, and flexible-distribution are mutually exclusive, meaning one of these must be present on the creation of a fcd-rule.</p> <p>The flexible-distribution element is a grouping element with details of the targets to which the communication is to be distributed in parallel or series.</p>
target	Optional	The target element is a sub-MO allowing multiple instances with "name" as the unique key. It is a reference by name to a target identity to which the communication is to be distributed.
name	Optional	The name of a target identity. The name must be one of the following: the name of a target defined in user-common-data; the name of a target-device defined in user-common-data; the special value PRIMARY for all the users devices or, in the case of communication distribution the name of a target defined in the target-list within that service. The name must be present on the creation of a target element.
ring-mode	Optional	The ring mode type, serial, or parallel, that is to be used within the flexible distribution.
ring-period	Optional	The maximum time period for which all the targets is to be left ringing in without an answer before switching to the next target.
play-announcement	Optional	The play-announcement element has string values from 0 to 32 characters. When the play-announcement action is set with the string value containing characters with the length between 1–32, if there is any satisfying corresponding conditions and being diverted, the caller is presented with the specific announcement handled by generic announcement service. When the play-announcement action is set with the string value containing character with the length of 0, any play-announcement action in the rule is deleted from the rule.



Table 87 Attributes Definition for Session Transfer to Own Device

Parameter	Occurrence	Description
fcd-action-options	Optional	Grouping element for a set of zero or more action options
NoReplyTimer	Optional	The NoReplyTimer element specifies the time that must expire without answer before the no-answer condition is triggered. The value is an integer giving the timer in the range of 5–180 seconds. This is only to be present in rules with the value “no-answer” in a fcd-call-state condition.

(1) This is only available for MMTelProfile and MMTelSharedProfile.

(2) This is only available for MMTelSubscription and MMTelProfile.

26.1.45 SIP Trunking Control

Table 88 Attributes Definition for SIP Trunking Control

Parameter	Occurrence	Description
sip-trunking-control	Optional	The SIP Trunking service. This data is available to the operator. Unlike services, this element should never be withdrawn so it is not nillable. It must be present on the creation of SIP Trunking service.
operator-configuration	Optional	The configuration parameters for the sip trunking control service that is available to the operator. This must be present on the creation of the sip-trunking-control service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the PBX is provisioned with the SIP Trunking service. It must be present on the creation of the service.
disable-identity-validation	Optional	The disable-identity-validation element disables the confirmation of the identity of the PBX. Use <code>xsi:nil="true"</code> to withdraw this element.
auxiliary-identity	Optional	The auxiliary PBX identity is one of the identities used in static mode PBX connect to validate the calling user identity received in the P-Asserted-Identity headers. If a valid P-Asserted-Identity header is missing, the auxiliary identity is used to populate the P-Asserted-Identity header field. This parameter is a sip URI with or without the user part. Use <code>xsi:nil="true"</code> to withdraw this element. Examples: sip:+4680123456@st.operator.com;user=phone or sip:st.operator.com
static-route	Optional	The static-route element is a sub-MO allowing multiple instances with “id” as the unique key. The static-route and dynamic-route are mutually exclusive. Use <code>xsi:nil="true"</code> to withdraw this element.
id	Optional	The id of the static route. It must be unique within the scope of the complete document. It must be present on the creation of a static-route.
disabled	Optional	The disabledelement is set to disable the route. Use <code>xsi:nil="true"</code> to withdraw this element.
stand-by-route	Optional	The standby-route element is set if this is a standby route. Use <code>xsi:nil="true"</code> to withdraw this element.
routes	Optional	The routes element can have 0 or any number of route elements. The content of this element define the pre-loaded route-set used to target this static route. Use <code>xsi:nil="true"</code> to withdraw this element.



Table 88 Attributes Definition for SIP Trunking Control

Parameter	Occurrence	Description
route	Optional	The <code>route</code> element is a sub-MO allowing multiple instances with "id" as the unique key. Its content define the Route header field inserted into the pre-loaded route.set. Use <code>xsi:nil="true"</code> to withdraw this element.
id	Optional	The id of the route. It must be unique within the scope of the complete document. It must be present on the creation of the route
uri	Optional	The route URI. It must take the form of a sip URI. It must be present on the creation of the route. Examples: sip:scb1.operator.com or sip:[2000:fe::12fe]:5060
dynamic-route	Optional	The <code>dynamic-route</code> element is a sub-MO allowing multiple instances with "id" as the unique key. The static-route and dynamic-route are mutually exclusive. Use <code>xsi:nil="true"</code> to withdraw this element.
id	Optional	The id of the dynamic route. It must be a sip URI specifying the Address of Record used for registration of the route. It must be unique within the scope of the complete document. It must be present on the creation of the dynamic-route.
disabled	Optional	The <code>disabled</code> element is set to disable the route. Use <code>xsi:nil="true"</code> to withdraw this element.
stand-by-route	Optional	The <code>standby-route</code> element is set if this is a standby route. Use <code>xsi:nil="true"</code> to withdraw this element.

26.1.46 ST Call Admission Control

Table 89 Attributes Definition for ST Call Admission Control

Parameter	Occurrence	Description
st-call-admission-control	Optional	The call admission control service. Use <code>xsi:nil="true"</code> to withdraw the entire element.
operator-configuration	Optional	The configuration parameters for the ST Call Admission Control service that are available to the operator. It must be present on the creation of the <code>st-call-admission-control</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the PBX is provisioned with the ST call admission control service. If set to "false" this will withdraw the service from the PBX. It must be present on the creation of the <code>st-call-admission-control</code> service.
orig-all-limit	Optional	Defines the limit of all originating sessions for this PBX. It must be present on the creation of the <code>st-call-admission-control-service</code> .
term-all-limit	Optional	Defines the limit of all terminating sessions for this PBX. It must be present on the creation of the <code>st-call-admission-control</code> service.
total-all-limit	Optional	Defines the limit of all sessions for this PBX. It must be present on the creation of the <code>st-call-admission-control</code> service.



26.1.47 ST Carrier Pre-Select Rn

The following table covers the parameters used for ST carrier pre-select rn.

Table 90 Attributes Definition for ST Carrier Pre-select Rn

Parameter	Occurrence	Description
st-carrier-pre-select-rn	Optional	The ST carrier pre-select rn service. Use xsi:nil="true" to withdraw the entire service.
operator-configuration	Mandatory	The configuration parameters for the st-carrier-pre-select-rn service are available to the operator. This must be present on the creation of the st-carrier-pre-select-rn service.
activated	Mandatory	The activated element has values "true" or "false". When set to "true" the PBX is provisioned with the st-carrier-pre-select-rn service. If set to "false", the service is withdrawn from the PBX. This must be present on the creation of the st-carrier-pre-select-rn service.
call-type-carrier-rn	Optional	The call-type-carrier-rn element specifies a mapping between a call type and the global carrier code to be pre-selected for calls of that type along with the domain for that carrier. The call-type-carrier-rn element is a sub-MO allowing either one or two instances with call-type as the unique key.
call-type	Optional	The type of call either "LOCAL" or "REMOTE". The value "LOCAL" corresponds to calls to numbers with the same area code as the user. The value "REMOTE" corresponds to all other calls. This must be present on the creation of a call-type-carrier-rn.
global-carrier-code	Optional	The global carrier code to be used for a call of the given type. This is a string of from 3 through 8 digits. This must be present on the creation of a call-type-carrier-rn.

26.1.48 ST Carrier Select Rn

The following table covers the parameters used for ST carrier select rn.

Table 91 Attributes Definition for Carrier Select Rn

Parameter	Occurrence	Description
st-carrier-select-rn	Optional	The ST carrier select rn service. Use xsi:nil="true" to withdraw the entire service.
operator-configuration	Mandatory	The configuration parameters for the ST carrier select rn service are available to the operator. This must be present on the creation of the st-carrier-select-rn service.
activated	Mandatory	The activated element has values "true" or "false". When set to "true", the PBX is provisioned with the ST carrier select rn service. If set to "false" the service is withdrawn from the PBX. This must be present on the creation of the st-carrier-select-rn service. P

26.1.49 ST Common Data

The following table covers the parameters used for ST common data.



Table 92 Attributes Definition for ST Common Data

Parameter	Occurrence	Description
st-common-data	Optional	The ST common data is available across services. This data is available to the operator. Unlike services this is never to be withdrawn so this is not nillable.
area-code	Optional	Area code 0-6 digits. Leave empty for numbering plans to which it does not apply. Use <code>xsi:nil="true"</code> to withdraw this element.
country-code	Optional	Country code 1-4 digits. Use <code>xsi:nil="true"</code> to withdraw this element.
rule-global-limit	Optional	The maximum number of allowed rules in the PBX service document. Not specified or zero means no limit.

26.1.50 ST Communication Diversion

The following table covers the parameters used for ST communication diversion.

Table 93 Attributes Definition for ST Communication Diversion

Parameter	Occurrence	Description
communication-diversion	Optional	The ST communication diversion service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
operator-configuration	Optional	The configuration parameters for the ST communication diversion service that is available to the operator. This must be present on the creation of the <code>st-communication-diversion</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the communication diversion service. If set to "false", this withdraws the user service and the <code>cdiv-user-configuration</code> element must be deleted at the same time. This must be present on the creation of the <code>communication-diversion</code> service.
cdiv-op-conditions	Optional	The <code>cdiv-op-conditions</code> element is a grouping element for fine-grain provisioning options that controls which conditions the PBX is permitted to use in communication diversion rules. Use <code>xsi:nil="true"</code> to withdraw this element.
not-registered-condition	Optional	The <code>not-registered-condition</code> element has values "activated" or "deactivated". When set to "activated" it allows the PBX to use the <code>cdiv-call-state</code> condition with the value of "not-registered" in communication diversion rules. The <code>not-registered-condition</code> element is not applicable for a PBX in static mode.
not-reachable-condition	Optional	The <code>not-reachable-condition</code> element has values "activated" or "deactivated". When set to "activated" it allows the PBX to use the <code>cdiv-call-state</code> condition with the value of "not-reachable" in communication diversion rules.
cdiv-op-actions	Optional	The <code>cdiv-op-actions</code> element is a grouping element for fine-grain provisioning options to control which actions the user is permitted to use for communication diversion rules.
notify-caller-action	Optional	The <code>notify-caller-action</code> element has values "activated" or "deactivated". When set to "activated", it allows the PBX to use the <code>notify-caller</code> action in communication diversion rules to control whether the caller is notified that the call is being forwarded.

Table 93 *Attributes Definition for ST Communication Diversion*

Parameter			Occurrence	Description
		reveal-identity-to-caller-action	Optional	The reveal-identity-to-caller-action has values "activated" or "deactivated". When set to "activated", it allows the PBX to use the reveal-identity-to-caller action in communication diversion rules to control whether the caller being notified that the call is being forwarded receives the targets identity information.
		reveal-identity-to-target-action	Optional	The reveal-identity-to-target-action has values "activated" or "deactivated". When set to "activated", it allows the PBX to use the reveal-identity-to-target action in communication diversion rules to control whether the diverted-to party receives identity information of the diverting party.
		play-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When the value is set to "activated", it allows PBX to use the play-announcement-action in communication diversion rules to control whether the caller is presented by specific announcement handled by the generic announcement service.
		rule-limit	Optional	The maximum number of allowed CDIV rules in the user document. Not specified or zero means no limit.
		user-configuration	Optional	The configuration parameters for the ST communication diversion service can be set on the PBX's behalf by the operator. This shall only be present if the service is provisioned , that is, operator-configuration is present and activated is "true".
		active	Optional	The active element has values "true" or "false". It controls whether the communication diversion service is active or not for this PBX.
		cdiv-ruleset	Optional	Grouping element for a set of zero or more user rules.
		cdiv-rule	Optional	An individual rule controlling communication diversion behavior. The cdiv-rule element is a sub-MO allowing multiple instances with id as the unique key.
		id	Mandatory	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of a cdiv-rule.
		cdiv-conditions	Optional	The cdiv-conditions element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect. If no conditions are present, the rule is always applicable. The conditions that are permitted depend on the fine grain provisioning options in cdiv-op-conditions.
		rule-deactivated	Optional	The rule-deactivated element has values "true" or "false". If present with the value "true" this has the effect of deactivating the individual rule and the rule is not checked. Set to "false" to remove this condition.
		cdiv-call-state	Optional	The cdiv-call-state condition controls which state the PBX must be in for the rule to apply. The value "not-registered" applies when none of the configured links have been registered by the PBX (valid only in dynamic mode). The value "not-reachable" applies when the PBX is not reachable because either a specific response has been received or the Access Profile Timeout timer expires. The value "unconditional" is used to clear the other call state values so that the condition is satisfied regardless of the PBX's call state.
		cdiv-actions	Mandatory	The cdiv-actions element is a grouping element for the actions for a rule. It must be present on the creation of a cdiv-rule.



Table 93 Attributes Definition for ST Communication Diversion

Parameter	Occurrence	Description
forward-to	Mandatory	The forward-to element is a grouping element with details of the target to which the communication is to be diverted and optional control of notifications and which identities are revealed to whom. This must be present on the creation of a cddiv-rule.
target	Optional	The target element specifies the identity to which the communication should be diverted. It can take the form of a sip or tel URI. A tel URI and sip URI that was converted from a tel URI according to Reference [7], is normalized before it is stored. This element must be present on the creation of a cddiv-rule.
notify-caller	Optional	The notify-caller element has values "true" or "false". It controls whether the caller is notified that the call is being forwarded. If it is not included, then the default behavior is to notify the caller (true).
reveal-identity-to-caller	Optional	The reveal-identity-to-caller element has values "true" or "false". It controls whether the caller being notified that the call is being forwarded receives the targets identity information. If it is not included, the default behavior is to reveal the targets identity to the caller (true).
notify-served-user	Optional	The notify-served-user element has values "true" or "false". It controls whether the served user is notified that the call is being forwarded. If it is not included then the default behavior is not to notify the served user (false).
notify-served-user-on-outbound-call	Optional	The notify-served-user-on-outbound-call element has values true or false. It controls whether the served user is notified that calls are being forwarded when he makes a call attempt. If it is not included then the default behavior is not to notify the served user on outbound calls (false).
reveal-identity-to-target	Optional	The reveal-identity-to-target element has values "true" and "false". It controls whether the diverted-to party receives identity information of the diverting party. If it is not included, then the default behavior is to reveal the diverting party's identity to the target (true).
play-announcement	Optional	When the play-announcement action is set with the string value containing characters with the length between 1 to 32, the caller will be presented with the specific announcement handled by generic announcement service. When the play-announcement action is set with zero-length string, the play-announcement action element in the rule is deleted from the rule.

26.1.51 ST Incoming Communication Barring

The following table covers the parameters used for ST incoming communication barring.

Table 94 Attributes Definition for ST Incoming Communication Barring

Parameter	Occurrence	Description
st-incoming-communication-barring	Optional	The st-incoming-communication-barring service. Use xsi:nil="true" to withdraw the entire service.
operator-configuration	Optional	The configuration parameters for the ST incoming communication barring service that are available to the operator. This must be present on the creation of the st-incoming-communication-barring service.



Table 94 Attributes Definition for ST Incoming Communication Barring

Parameter	Occurrence	Description
activated	Optional	The activated element has values "true" or "false". When set to "true" the PBX is provisioned with the st-incoming-communication-barring service. If set to "false" the service is withdrawn, but the user-configuration element is preserved. It must be present on the creation of the incoming-communication-barring service.
icb-op-conditions	Optional	The icb-op-conditions element is a grouping element for fine-grain provisioning options that controls which condition elements the user is permitted to use in incoming communication barring rules.
anonymous-condition	Optional	The anonymous-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the anonymous condition in ST incoming communication barring rules.
communication-diverted-condition	Optional	The communication-diverted-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the communication-diverted condition in ST incoming communication barring rules.
identity-condition	Optional	The identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the identity condition in ST incoming communication barring rules.
other-identity-condition	Optional	The other-identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the other-identity condition in ST incoming communication barring rules.
icb-op-actions	Optional	The icb-op-actions element is a grouping element for fine-grain provisioning options to control which action elements the user is permitted to use in ST incoming communication barring rules.
allow-true-action	Optional	The allow-true-action element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the allow action with the value of "true" in ST incoming communication barring rules to explicitly allow ST incoming communications that match the associated conditions. If value of this element is absent or set to "deactivated" the subscriber is only permitted to use the allow action with the value of "false" to bar incoming communications.
play-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the play-announcement action in ST incoming communication barring rules to control whether the caller is presented by specific announcement handled by generic announcement service.
play-segmented-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the play-segmented-announcement action in ST incoming communication barring rules to control whether the caller is presented by specific segmented announcement handled by generic announcement service.
rule-limit	Optional	The maximum number of allowed incoming communication barring rules in the user document. Not specified or zero means no limit.
user-configuration	Optional	The configuration parameters for the ST incoming communication barring service are available to be set on behalf of the PBX. This is only to be present if the service is provisioned, that is, operator-configuration is present and activated is "true".



Table 94 *Attributes Definition for ST Incoming Communication Barring*

Parameter	Occurrence	Description
active	Optional	The <code>active</code> element has values "true" or "false". It controls whether the ST incoming communication barring service is active or not for this subscriber. This element controls the user rules but has no effect on the operator rules.
icb-ruleset	Optional	Grouping element for a set of zero or more user rules. See Section 26.2.3 on page 178 for detailed ST icb-ruleset element contents.

26.1.52 ST Malicious Communication Identification

The following table covers the parameters used for ST malicious communication identification.

Table 95 *Attributes Definition for ST Malicious Communication Identification*

Parameter	Occurrence	Description
st-malicious-communication-identification	Optional	The ST malicious communication identification service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
operator-configuration	Optional	The configuration parameters for the ST malicious communication identification service that are available to the operator. This must be present on the creation of the <code>st-malicious-communication-identification</code> service.
activated	Mandatory	The <code>activated</code> has values "true" or "false". When set to "true" the PBX is provisioned with the <code>st-malicious-communication-identification</code> service. If set to "false", the service is withdrawn from the PBX. This element must be present on the creation of the <code>st-malicious-communication-identification</code> service.
mcid-extension	Optional	The <code>mcid-extension</code> element specifies an extension number in the PBX where MCID is activated. The element is a sub-MO allowing multiple instances with "id" as the unique key and is limited to 50 instances. If empty, all extension of the PBX has MCID activated..
id	Mandatory	A unique identifier for an individual MCID extension. It must be unique within the scope of the complete document. This element must be present on the creation of the <code>st-malicious-communication-identification</code> service.
uri	Mandatory	The <code>uri</code> is the identity of the <code>mcid</code> extension number. It can take the form of a sip or tel URI. A tel URI, or a sip URI that was converted from a tel URI according to Reference [7], is normalized before it is stored. This element must be present on the creation of the <code>st-malicious-communication-identification</code> service.

26.1.53 ST Operator Controlled Outgoing Barring Programs

The following table covers the parameters used for ST operator controlled outgoing barring programs.

**Table 96** *Attributes Definition for ST Operator Controlled Outgoing Barring Programs*

Parameter	Occurrence	Description
st-operator-controlled-outgoing-barring-programs	Optional	The ST operator controlled outgoing barring programs service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
operator-configuration	Optional	The configuration parameters for the ST operator controlled outgoing barring programs service that are available to the operator. This must be present on the creation of the <code>st-operator-controlled-outgoing-barring-programs</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the PBX is provisioned with the <code>st-operator-controlled-outgoing-barring-programs</code> service. If set to "false", this withdraws the service from the PBX. This must be present on the creation of the <code>st-operator-controlled-outgoing-barring-programs</code> service.
operator-barring-program	Optional	The <code>operator-barring-program</code> element is a container for each of the categories of outgoing communications that is to be barred by the service. The <code>operator-barring-program</code> and <code>operator-permitted-program</code> are mutually exclusive.
category-name	Optional	The <code>category-name</code> element contains the name of a category of calls to be barred. This is a multi-value parameter and can appear from 0 through 83 times to cover each category of outgoing communications to be barred. The value of each <code>category-name</code> element is a string of up to 32 characters. This value must match one of the category names defined by the <code>mtasStOcbOpBCatName</code> attributes described in MTAS Parameter Description , Reference [6] or one of the special values "Local", "Non Local" or "Allow Local".
operator-permitted-program	Optional	The <code>operator-permitted-program</code> element is a container for each of the categories of outgoing communications that are to be allowed by the service. Any identity not matched by one of these categories or the global white list is barred. The <code>operator-barring-program</code> and <code>operator-permitted-program</code> are mutually exclusive.
category-name	Optional	The <code>category-name</code> element contains the name of a category of calls to be permitted. This is a multi-value parameter and can appear between 0 and 83 times to cover each category of outgoing communications to be permitted. The value of each <code>category-name</code> element is a string of up to 32 characters. This value must match one of the category names defined by the <code>mtasStOcbOpBCatName</code> attributes described in MTAS Parameter Description , Reference [6] or one of the special values "Local", "Non Local" or "Allow Local".
operator-diversion-barring-program	Optional	The <code>operator-diversion-barring-program</code> element is a container for each of the categories of outgoing communications that is to be barred as diversion targets.
category-name	Optional	The <code>category-name</code> element contains the name of a category of calls to be barred for diverted communications. This is a multi-value parameter and can appear between 0 and 83 times to cover each category of outgoing communications to be barred. The value of each <code>category-name</code> element is a string of up to 32 characters. This value must match one of the category names defined by the <code>mtasStOcbOpBCatName</code> attributes described in MTAS Parameter Description , Reference [6] or one of the special values "Local", "Non Local" or "Allow Local".

26.1.54 ST Originating Identity Presentation

The following table covers the parameters used for ST originating identity presentation.



Table 97 *Attributes Definition for ST Originating Identity Presentation*

Parameter	Occurrence	Description
st-originating-identity-presentation	Optional	The ST originating identity presentation service. Use xsi:nil="true" to withdraw the entire service.
operator-configuration	Mandatory	The configuration parameters for the st-originating-identity-presentation service that are available to the operator. This must be present on the creation of the st-originating-identity-presentation service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the PBX is provisioned with the st-originating-identity-presentation service. If set to "false", the service is withdrawn, but the user-configuration element is preserved. This element must be present on the creation of the st-originating-identity-presentation service.
restriction-override	Optional	The restriction-override element has values "override-active" or "override-not-active". The value "override-active" means that the originating identity is presented even if the calling party has requested for their presentation to be restricted.
user-configuration	Optional	The configuration parameters for the st-originating-identity-presentation service can be set on the PBX's behalf by the operator. This shall only be present if the service is provisioned, that is, operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the st-originating-identity-presentation service is active or not for this PBX.

26.1.55 ST Originating Identity Presentation Restriction

The following table covers the parameters used for ST originating identity presentation restriction.

Table 98 *Attributes Definition for ST Originating Identity Presentation Restriction*

Parameter	Occurrence	Description
st-originating-identity-presentation-restriction	Optional	The ST originating identity presentation restriction service. Use xsi:nil="true" to withdraw the entire service.
operator-configuration	Mandatory	The configuration parameters for the st-originating-identity-presentation-restriction service that are available to the operator. This must be present on the creation of the st-originating-identity-presentation-restriction service.
activated	Mandatory	The activated element has values "true" or "false". When set to "true" the PBX is provisioned with the st-originating-identity-presentation-restriction service. If set to "false", the service is withdrawn, but the user-configuration element is preserved. This must be present on the creation of the st-originating-identity-presentation-restriction service.
mode	Mandatory	The mode element has values "permanent" or "temporary". The value "permanent" is used to give the PBX a permanent restriction service. In this case there must be no user-configuration element. The value "temporary" gives an identity presentation restriction service where the PBX can choose default behavior and also whether to override this on a per-call basis. This element must be present on the creation of the st-originating-identity-presentation-restriction service.

Table 98 *Attributes Definition for ST Originating Identity Presentation Restriction*

Parameter	Occurrence	Description
restriction	Mandatory	The restriction element has values "only-identity" or "all-private-information" and selects whether just the identity of the PBX is restricted or all private information. This must be present on the creation of the st-originating-identity-presentation-restriction service.
from-header-screening	Optional	The from-header-screening element controls execution of From header screening in requests sent by the originating PBX. It can be set to "enabled" or "disabled". If not present, the From header screening feature is instead controlled by the mtasStFromHeaderScreening node parameter. Use xsi:nil="true" to withdraw this element.
user-configuration	Optional	The configuration parameters for the st-originating-identity-presentation-restriction service can be set on the PBX's behalf by the operator. It shall only be present if the service is provisioned, that is, if operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the st-originating-identity-presentation-restriction service is active or not for this PBX.
default-behaviour	Optional	The default-behaviour element has values "presentation-restricted" or "presentation-not-restricted". It selects the default behavior in temporary mode when the PBX does not select explicitly within the call whether to restrict their identity or not.

26.1.56 ST Outgoing Communication Barring

The following table covers the parameters used for ST outgoing communication barring.

Table 99 *Attributes Definition for ST Outgoing Communication Barring*

Parameter	Occurrence	Description
st-outgoing-communication-barring	Optional	The st-outgoing-communication-barring service. Use xsi:nil="true" to withdraw the entire service.
operator-configuration	Optional	The configuration parameters for the outgoing communication barring service that are available to the operator rather than the user. This must be present on the creation of the st-outgoing-communication-barring service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the PBX is provisioned with the st-outgoing-communication-barring service. If set to false, the service is withdrawn, but the user-configuration element is preserved. It must be present on the creation of the st-outgoing-communication-barring service.
ocb-op-conditions	Optional	The ocb-op-conditions element is a grouping element for fine-grain provisioning options that control which condition elements the user is permitted to use in ST outgoing communication barring rules.
identity-condition	Optional	The identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the identity condition in ST outgoing communication barring rules.
other-identity-condition	Optional	The other-identity-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the other-identity condition in ST outgoing communication barring rules.



Table 99 *Attributes Definition for ST Outgoing Communication Barring*

Parameter	Occurrence	Description
carrier-condition	Optional	The carrier-condition element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the carrier condition in ST outgoing communication barring rules.
carrier-select-code	Optional	The carrier-select-code element has values "activated" or "deactivated". When the value is set to "activated", it allows the subscriber to use the carrier-select-code element of the carrier condition in ST outgoing communication barring rules.
ocb-op-actions	Optional	The ocb-op-actions element is a grouping element for fine-grain provisioning options to control which action elements the user is permitted to use in ST outgoing communication barring rules.
allow-true-action	Optional	The allow-true-action element has values "activated" or "deactivated". When set to "activated", it allows the subscriber to use the allow action with the value of "true" in ST outgoing communication barring rules to explicitly allow outgoing communications that match the associated conditions. If value of this element is absent or set to "deactivated", the subscriber is only permitted to use the allow action with the value of "false" to bar outgoing communications.
play-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the play-announcement action in ST outgoing communication barring rules to control whether the caller is presented by specific announcement handled by generic announcement service.
play-segmented-announcement-action	Optional	The play-announcement-action element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the play-segmented-announcement action in ST outgoing communication barring rules to control whether the caller is presented by specific segmented announcement handled by generic announcement service.
rule-limit	Optional	The maximum number of allowed ST outgoing communication barring rules in the user document. Not specified or zero means no limit.
user-configuration	Optional	The configuration parameters for the ST outgoing communication barring service available to be set on behalf of the PBX.. This is only to be present if the service is provisioned, that is, operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the ST outgoing communication barring service is active or not for this PBX. This controls the user rules but has no effect on the operator rules.
ocb-ruleset	Optional	Grouping element for a set of zero or more user rules. ocb-ruleset. See Section 26.2.4 on page 180 for detailed ST ocb-ruleset element contents.

26.1.57 Supplementary Service Codes

The following table covers the parameters used for supplementary service codes.

**Table 100** *Attributes Definition for Supplementary Service Codes*

Parameter	Occurrence	Description
supplementary-service-codes	Optional	The supplementary service codes service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
ssc-operator-configuration	Optional	The configuration parameters for the supplementary service codes service that are available to the operator rather than the user. This must be present on the creation of the supplementary-service-codes service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the supplementary service codes service. If set to "false", this withdraws the service from the user. This must be present on the creation of the supplementary-service-codes service.
pin-code	Optional	The pin-code element holds the PIN code that the user must enter to authorize any feature access codes requiring a PIN. The PIN can be included in the clear in which case it consists of from 4 through 6 digits. Alternatively it can be encoded as an MD5 hash of the PIN code according to Reference [7]. The MD5 hash consists of 32 hex characters.
pin-failures	Optional	The Element to track failed PIN attempts. Delete this element with <code>xsi:nil="true"</code> to re-enable the PIN with the maximum number of attempts. The pin-failures can also be used to lock a PIN code without deleting it by setting a count greater than the maximum allowed.
count	Optional	The count of consecutive failed PIN attempts. Once this exceeds the configured maximum number of allowed consecutive faulty attempts, the PIN is locked.
first-fault	Optional	The date and time of the first failed PIN attempt. This is used together with the node parameter for release lock hour to determine when the PIN failures element is cleared and SSC commands with PIN is re-enabled.

26.1.58 Terminating Identity Presentation

The following table covers the parameters used for terminating identity presentation.

Table 101 *Attributes Definition for Terminating Identity Presentation*

Parameter	Occurrence	Description
terminating-identity-presentation	Optional	The terminating identity presentation service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
tip-operator-configuration	Optional	The configuration parameters for the terminating identity presentation service that are available to the operator rather than the user. This must be present on the creation of the terminating-identity-presentation service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the terminating identity presentation service. If set to "false", this withdraws the user service and the tip-user-configuration element must be deleted at the same time. This must be present on the creation of the terminating-identity-presentation service.
restriction-override	Optional	The restriction-override element has values "override-active" or "override-not-active". The value "override-active" means that the terminating identity is presented even if the called party has requested for their presentation to be restricted.



Table 101 *Attributes Definition for Terminating Identity Presentation*

Parameter	Occurrence	Description
tip-user-configuration	Optional	The configuration parameters for the terminating identity presentation service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, tip-operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" or "false". It controls whether the terminating identity presentation service is active or not for this subscriber.

26.1.59 Terminating Identity Presentation Restriction

The following table covers the parameters used for terminating identity presentation restriction.

Table 102 *Attributes Definition for Terminating Identity Presentation Restriction*

Parameter	Occurrence	Description
terminating-identity-presentation-restriction	Optional	The terminating identity presentation restriction service. Use xsi:nil="true" to withdraw the entire service.
tir-operator-configuration	Optional	The configuration parameters for the terminating identity presentation restriction service that are available to the operator rather than the user. This must be present on the creation of the terminating-identity-presentation-restriction service.
activated	Optional	The activated element has values "true" or "false". When set to "true" the user is provisioned with the terminating identity presentation restriction service. If set to "false", this withdraws the user service and the tir-user-configuration element must be deleted at the same time. This must be present on the creation of the terminating-identity-presentation-restriction service.
mode	Optional	The mode element has values "permanent" or "temporary". The value "permanent" is used to give the user a permanent restriction service. In this case, there must be no tir-user-configuration element. The value "temporary" gives an identity presentation restriction service where the user can choose a default behavior and also whether to override this on a per-call basis. This must be present on the creation of the terminating-identity-presentation-restriction service. Note: The values "ad-hoc-temporary-presentation-restricted" and "ad-hoc-temporary-presentation-not-restricted" are not allowed and are rejected.
tir-user-configuration	Optional	The configuration parameters for the terminating identity presentation restriction service that are available for the user to set directly. These can also be set on the users behalf by the operator. This is only to be present if the service is provisioned, that is, tir-operator-configuration is present and activated is "true".
active	Optional	The active element has values "true" and "false". It controls whether the terminating identity presentation restriction service is active or not for this subscriber.
default-behaviour	Optional	The default-behaviour element has values "presentation-restricted" and "presentation-not-restricted". It selects the default behavior in temporary mode when the user does not select explicitly within the call whether to restrict their identity or not.



26.1.60 Three Party

The following table covers the parameters used for three party.

Table 103 Attributes Definition for Three Party

Parameter	Occurrence	Description
three-pty	Optional	The three party service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
three-pty-operator-configuration	Optional	The configuration parameters for the three party service that are available to the operator rather than the user. This must be present on the creation of the <code>three-pty</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the three party service. This must be present on the creation of the <code>three-pty</code> service.

26.1.61 User Call Admission Control

The following table covers the parameters used for user call admission control.

Table 104 Attributes Definition for User Call Admission Control

Parameter	Occurrence	Description
user-call-admission-control	Optional	The user call admission control service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
ucac-operator-configuration	Optional	The configuration parameters for the user call admission control service that are available to the operator rather than the user. This must be present on the creation of the <code>user-call-admission-control</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When the value is set to "true", the user is provisioned with the user call admission-control service. If the value is set to "false", this withdraws the service from the user. This must be present on the creation of the <code>user-call-admission-control</code> service.
orig-active-limit	Optional	Defines the limit of originating, active sessions for this user. This must be present on the creation of the <code>user-call-admission-control-service</code> .
term-active-limit	Optional	Defines the limit of terminating, active sessions for this user. This must be present on the creation of the <code>user-call-admission-control-service</code> .
total-active-limit	Optional	Defines the limit of active sessions (that is, the sum of originating and terminating active sessions) for this user. This must be present on the creation of the <code>user-call-admission-control-service</code> .
fixed-active-limit	Optional	Defines the limit of active sessions (originating and terminating) on fixed devices for this user.
orig-all-limit	Optional	Defines the limit of all originating sessions (that is, the sum of active and inactive originating sessions) for this user. This must be present on the creation of the <code>user-call-admission-control-service</code> .
term-all-limit	Optional	Defines the limit of all terminating sessions (that is, the sum of active and inactive terminating sessions) for this user. This must be present on the creation of the <code>user-call-admission-control-service</code> .



Table 104 Attributes Definition for User Call Admission Control

Parameter	Occurrence	Description
total-all-limit	Optional	Defines the limit of all sessions (that is, the sum of all originating and terminating sessions) for this user. This must be present on the creation of the user-call-admission-control-service.
waiting-limit	Optional	Defines the limit of waiting sessions for this user. This must be present on the creation of the user-call-admission-control-service. The waiting limit can only be set greater than zero if the user also has the communication waiting service activated. Because of the mutual dependency with the communication waiting service both services must be updated in the same request on setting the waiting limit between zero and non-zero values.

26.1.62 User Common Data

The following table covers the parameters used for user common data.

Table 105 Attributes Definition for User Common Data

Parameter	Occurrence	Description
user-common-data	Optional	The Common data available to the user across multiple services. Use xsi:nil="true" to delete the user-common-data.
ucd-operator-configuration	Optional	The configuration parameters for the user common data that are available to the operator rather than the user. This must be present on the creation of the user-common-data service.
activated	Optional	The activated element has values "true" or "false". When the value is set to "true", the user is provisioned with the user-common-data. If the value is set to "false", this withdraws the service from the user. This must be present on the creation of the user-common-data service.
max-targets	Optional	The max-targets element controls the maximum number of distinct targets that the user can have in the target-list. The value is integer from 2 through 10. This must be present on the creation of the user-common-data service.
max-device-targets	Optional	The max-device-targets element controls the maximum number of distinct devices that the user can have in the target-device-list. The value is integer value from 2 through 10. This must be present on the creation of the user-common-data service.
target-device-list	Optional	The target-device-list element has values "activated" or "deactivated". When the value is set to "activated", the user is allowed to use the target-device-list element of the user common data. This must be present on the creation of the user common data.
holiday-list	Optional	The holiday-list element has values "activated" or "deactivated". When the value is set to "activated", the user is allowed to use the holiday-list element in the user part of the user common data.
home-location	Optional	Network provided default Home Location of subscriber given in format conforming to P-Access- Network-Info header ABNF syntax described in 3GPP TS 24.229: IP Multimedia Call Control Protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3 (Release 10) section 7.2A.4.
time-zone-area	Optional	The time-zone-area is the user home time zone area. The time-zone-area is in the form "Area/Location" and must be included in the list of time zones in IANA Time Zone Database. Example "Europe/Stockholm".



Table 105 Attributes Definition for User Common Data

Parameter		Occurrence	Description
	mmtel-charging-profile	Optional	The mmtel-charging-profile element specifies the name of the mmtel charging profile to be used. The mmtel charging profile must be configured in MTAS if the mmtel-charging-profile element is set. If the element, mmtel-charging-profile is not set the default charging profile is used.
	auto-answer-avoidance-condition	Optional	The auto-answer-avoidance-condition element has values "activated" or "deactivated". When set to "activated" the user is provisioned with the Auto-Answer Avoidance feature.
	in-sip-request-condition	Optional	The in-sip-request-condition element has values "activated" or "deactivated". When set to "activated" it allows the subscriber to use the in-sip-request condition in supplementary service rules.
	in-sip-request-condition-list	Optional	The in-sip-request-condition-list is a grouping element for definitions of SIP regexp conditions.
	flexcondition-definition	Optional	The flexcondition-definition element is a grouping element for attributes which actually define a SIP regexp condition. The flexcondition-definition element is a sub-MO allowing multiple instances with "id" as the unique key.
	id	Optional	A key uniquely identifying the condition. This must be present on the creation of a flexcondition-definition element.
	header	Optional	A SIP header matched. This must be present on the creation of a flexcondition-definition element.
	parameter	Optional	A SIP header parameter matched.
	value	Optional	A regular expression to match against a given header or header parameter value. This must be present on the creation of a flexcondition-definition element.
	match-inverse	Optional	If set to "true", the SIP regexp condition evaluates to true if the parameter value does NOT match the regular expression.
	feature-tag-preferences	Optional	Defines the target preferences feature tags controlled by MMTel AS. Use xsi:nil="true" to delete this element.
	feature-tags	Optional	Defines the feature tags. In case of multiple feature tags, they must be separated with semicolon. The string must be between 1 and 255 characters.
	subscription	Optional	Specifies the group of subscriber identity attributes. This element is a sub-MO allowing multiple instances with id as the unique key. Currently it is limited to one instance but is designed to be extended. Use xsi:nil="true" to delete this element.
	id	Mandatory	A unique key for the subscription group, currently limited to 1. It must be present at the creation of a subscription element.
	imsi	Optional	The IMSI that is connected to this subscriber. The IMSI is a 15-digit number (maximum), as defined in 3GPP TS 23.003.
	ucd-user-configuration	Optional	The configuration parameters for the user common data that are available for the user to set directly. These can also be set on the users behalf by the operator. This is present if the service is provisioned, for example, when user-common-data is present and activated is "true".



Table 105 Attributes Definition for User Common Data

Parameter	Occurrence	Description
target-device-list	Optional	A list of all the devices associated with the users identity which can be selected individually for distribution of calls. Up to 10 entries can be included.
fixed-targets	Optional	If fixed-targets is set to "true", then the target identities are set by the operator and cannot be changed by the user.
target-device	Optional	The target-device element is a sub-MO allowing multiple instances with "name" as the unique key.
name	Optional	The name for the target device. This is the name with which distribution rules refer to devices as targets. This must be present on the creation of a target-device element.
terminal-selector	Optional	The terminal-selector is the way that the individual device is selected. It is an alphanumeric string consisting of 1 and 30 characters. This must be present on the creation of a target-device element.
target-list	Optional	A list of all the related targets that can be included in distribution rules.
fixed-targets	Optional	If fixed-targets is set to "true", then the target identities are set by the operator and cannot be changed by the user.
target	Optional	The target element is a sub-MO allowing multiple instances with "name" as the unique key.
name	Optional	The name for the distribution target. This is the name with which distribution rules refer to targets. This must be present on the creation of a target element.
id	Optional	The id is the identity of the target. It is a sip: or tel: URI. Each tel: URI or sip: URI that is converted from a tel: URI according to Reference [7] contains a normalized number, or a number that can be normalized after a dynamic ad-hoc presentation supplementary service code or a carrier select code is removed. This must be present on the creation of a target element.
auto-answer-avoidance	Optional	The auto-answer-avoidance flag marks the target as applicable for the auto-answer avoidance feature. If set to true DTMF confirmation is required to confirm the call establishment.
utc-offset	Optional	The utc-offset element specifies the offset to be taken from UTC when determining times of day and when each day starts and ends. This element is used for valid-periods conditions when utc-offset is not specified in the valid-periods condition. If utc-offset element is omitted, then the offset from the node CM attribute is used. It is also used for validity and invalidity conditions, when they are given with local time. If utc-offset element is omitted, then the offset from the node CM attribute is used.
start-day-of-week	Optional	The start-day-of-week element specifies the starting day of the week, used when time conditions related to weeks of year or containing weekly repetition are evaluated. It also serves as the base of determining the week number. When the attribute is set to Monday, the week number is set according to ISO 8601; that is week no.1 in the year if it is the first week with at least 4 days from the new year. Otherwise week no.1 is the week of 1st of January. If start-day-of-week element is omitted, then the starting day from the node CM attribute is used.
non-workday-list	Optional	A list of weekdays considered as non-workdays during evaluation of the time conditions associated with the users identity. Up to seven entries can be included. If non-workday-list element is omitted, then the node CM attribute defining the non-workday-list is used.
weekday	Optional	The weekday element specifies the weekday used as non-workday in the valid-periods condition. This is a multi-value parameter.



Table 105 Attributes Definition for User Common Data

Parameter	Occurrence	Description
holiday-list	Optional	A list of private holidays to be used during evaluation of the time conditions associated with the users identity. Up to 20 entries can be included. Also inheritance of the public holidays configured on node level can be specified.
holiday	Optional	The holiday element specifies one private holiday for the user. This is a multi-value parameter.
use-national	Optional	When the use-national element is set to "TRUE", besides the private holidays set in element holiday, also the public holidays configured on node level are used during evaluation of the time conditions associated with the users identity.

26.1.63 Voice Mail

The following table covers the parameters used for voicemail.

Table 106 Attributes Definition for Voice Mail

Parameter	Occurrence	Description
voice-mail	Optional	The voicemail service. Use <code>xsi:nil="true"</code> to withdraw the entire service.
vm-operator-configuration	Optional	The configuration parameters for the voicemail service that are available to the operator rather than the user. This must be present on the creation of the <code>voice-mail</code> service.
activated	Optional	The <code>activated</code> element has values "true" or "false". When set to "true" the user is provisioned with the voicemail service. This allows the user to include the special identity "voicemail:internal" as the target for communication diversion rules. If set to "false", this withdraws the service from the user. This must be present on the creation of the <code>voice-mail</code> service.
voice-mail-address	Optional	<p>The <code>voice-mail-address</code> element specifies the target identity to be used if a users communication diversion rule specifies diversion to "voicemail:internal". It takes the form of a normalized sip: or tel: URI or the special value "voicemail:internal". If the special value of "voicemail:internal" the communication diversion is sent to the identity specified in the node level configuration parameter. This must be present on the creation of the <code>voice-mail</code> service.</p> <p>This element has a relationship with the <code>voice-mail-retrieval-address</code> element. When <code>voice-mail-retrieval-address</code> element is provisioned, then the target identity in the <code>voice-mail-address</code> element is used only for depositing the voicemail. Otherwise it is used both for depositing and retrieving the voicemail.</p>
voice-mail-retrieval-address	Optional	The <code>voice-mail-retrieval-address</code> element specifies the target identity to be used when the communication is redirected to retrieve the voicemail. It takes the form of a normalized sip: or tel: URI or the special value "voicemail:internal". In case of the special value of "voicemail:internal" the communication is redirected to the identity specified in the node level configuration parameter. Use <code>xsi:nil="true"</code> to remove <code>voice-mail-retrieval-address</code> element.



26.2 Generic Element Contents

26.2.1 Incoming Communication Barring Ruleset

The following table covers the parameters used for incoming communication barring ruleset.

Table 107 *Element Contents for Incoming Communication Barring Ruleset*

Parameter	Occurrence	Description
icb-ruleset	Optional	Grouping element for a set of zero or more incoming-communication-barring rules
icb-rule	Optional	An individual rule controlling incoming communication barring behavior. The icb-rule element is a sub-MO allowing multiple instances with "id" as the unique key.
id	Optional	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of an icb-rule element.
icb-conditions	Optional	The icb-conditions element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect. If no conditions are present, then the rule is always applicable.
rule-deactivated	Optional	The rule-deactivated element has values "true" or "false". If present with the value "true" this has the effect of deactivating the individual rule and the rule is not checked. Set to "false" to remove this condition.
icb-caller-identity	Optional	The icb-caller-identity element is a grouping element for conditions which are based on the callers identity (or lack of an identity in the case of anonymous).
anonymous	Mandatory	The elements anonymous, identity, and other-identity are mutually exclusive, meaning one of these must be used. The anonymous element is an empty element specifying a condition which is satisfied if the caller is anonymous. This can be removed by deleting the enclosing icb-caller-identity element or by replacing it with an identity or other-identity element.
other-identity	Mandatory	The elements anonymous, identity, and other-identity are mutually exclusive, meaning one of these must be used. The other-identity element is an empty element which matches any identity that has not been specified by any of the other rules in the ruleset. It allows for setting a default policy. This can be removed by deleting the enclosing icb-caller-identity element or by replacing it with an anonymous or identity element.
identity	Mandatory	The elements anonymous, identity, and other-identity are mutually exclusive, meaning one of these must be used. The identity element is a grouping element for conditions which are based on the callers identity. The condition is satisfied if any of the included one or many elements within it is matched. This can be removed by deleting the enclosing icb-caller-identity element or by replacing it with an anonymous or other-identity element. See Section 26.2.10 on page 187 for detailed identity element contents.
roaming	Optional	The roaming element has values "true" or "false". If present with the value "true", this condition is satisfied if the subscriber is roaming. Set to "false" to remove this condition.
communication-diverted	Optional	The communication-diverted element has values "true" or "false". If present with the value "true", this condition is satisfied if the incoming communication has been diverted. Set to "false" to remove this condition.



Table 107 Element Contents for Incoming Communication Barring Ruleset

Parameter			Occurrence	Description
		media	Optional	The <code>media</code> element contains a media type that the session must include for the condition to be matched for example "audio" or "video". This is a multi-value parameter so it can appear more than once with several media values that must all be satisfied for the overall condition to be matched.
		validity	Optional	The <code>validity</code> element is a grouping element for time periods (intervals) within which the rule is valid. See Section 26.2.11 on page 188 for detailed <code>validity</code> element contents.
		presence-status	Optional	The <code>presence-status</code> element contains a presence status value that the user must satisfy for the condition to be matched for example "meal", "meeting", "travel", "vacation". This is a multi-value parameter so it can appear more than once with several presence status values that must all be satisfied for the overall condition to be matched. This condition is not currently supported by <code>incoming-communication-barring</code> and always evaluate to false.
		valid-periods	Optional	The <code>valid-periods</code> element is a grouping element that allows assembly of complex time conditions based on several subconditions. In order for the <code>valid-periods</code> condition to be satisfied, the current date or time must match all the included subconditions. See Section 26.2.9 on page 185 for detailed <code>valid-periods</code> element contents.
		invalidity	Optional	The <code>invalidity</code> element is a grouping element for absolute time periods (intervals) within which the rule is not valid.
		interval	Optional	The <code>interval</code> element specifies a date and time period within which the invalidity condition is not satisfied. The <code>interval</code> element is a sub-MO allowing multiple instances with "from" as the unique key.
		from	Optional	The date and time that specifies the start of the interval that is not valid. It is a standard <code>dateTime</code> value, for example, "2008-11-27T20:00:00Z" for a UTC time or "2008-10-12T20:00:00-08:00" for a time with 8-hour offset from UTC. This must be present on the creation of an <code>interval</code> element. To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
		until	Optional	The date and time that specifies the end of the interval that is not valid. It is a standard <code>dateTime</code> value for example, "2008-11-27T20:00:00Z" for a UTC time or "2008-10-12T20:00:00-08:00" for a time with 8-hour offset from UTC. This must be present on the creation of an <code>interval</code> element. To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
		served-identity ⁽¹⁾	Optional	The <code>served-identity</code> element is a grouping element for conditions which are based on a served users identity. The condition is satisfied if any of the <code>one</code> elements within it is matched. The <code>served-identity</code> condition must contain at least one subelement to be valid. If an update would result in no contained subelements, then the <code>served-identity</code> condition is to be deleted.
		one	Mandatory	The <code>one</code> element specifies an individual served-identity to be matched. The <code>one</code> element is a sub-MO allowing multiple instances with "id" as the unique key.
		id	Optional	The individual served-identity to be matched. For all uses this takes the form of a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number. This element must be present on the creation of a <code>one</code> element.
		cb-actions	Optional	The <code>cb-actions</code> element is a grouping element for the actions for a rule. For communication barring, an allow action must be present in each rule. This must be present on the creation of an <code>icb-rule</code> element. There is a choice: either a play-announcement or a play-segmented-announcement can be defined in the list of actions.



Table 107 Element Contents for Incoming Communication Barring Ruleset

Parameter	Occurrence	Description
allow	Optional	The <code>allow</code> element has values "true" or "false". If set to "false", then any incoming communications satisfying the corresponding conditions are barred unless overridden by another rule with <code>allow</code> set to "true". If set to "true" then any incoming communications satisfying the corresponding conditions are allowed, that is, not barred. This must be present on the creation of an <code>icb-rule</code> element.
do-not-disturb	Optional	The <code>do-not-disturb</code> element has values "true" or "false". When set to "true", the <code>do-not-disturb</code> element is added into actions part of the rule and if there is any communications satisfying the corresponding conditions and being barred (<code>allow=false</code>), then the incoming communication is handled by Do Not Disturb service instead of normal incoming communication barring service (for example treated with different charging scheme.). If set to "false", then the element is removed from the subscriber actions part of the rule and the incoming communication is handled by normal incoming communication barring service.
play-announcement	Mandatory	<p>The elements <code>play-announcement</code> and <code>play-segmented-announcement</code> are mutually exclusive, meaning one of these must be used.</p> <p>The <code>play-announcement</code> element has string values from 0 to 32 characters. When the <code>play-announcement</code> action is set with the string value containing characters with the length between 1–32, if there is any communications satisfying the corresponding conditions and being barred (<code>allow=false</code>), the caller is presented with the announcement associated with the announcement code pointed by the string value. When the <code>play-announcement</code> action is set with the string value containing character with the length of 0, any <code>play-announcement</code> action element in the rule is deleted from the rule.</p>
play-segmented-announcement	Mandatory	<p>The elements <code>play-announcement</code> and <code>play-segmented-announcement</code> are mutually exclusive, meaning one of these must be used.</p> <p>If there is any communications satisfying the corresponding conditions, the caller is presented with the segmented announcement associated with the announcement code pointed by the <code>announcement-name</code> attribute of the element. Before trying, to invoke any, the segmented (generic) announcement must be configured in MTAS with the same name as given in the <code>announcement-name</code> attribute. The segmented announcement can contain embedded variables, which can be presented in the <code>announcement-variable</code> child element. The configured segmented (generic) announcement is to contain as many standalone voice variable segments as many <code>announcement-variable</code> child elements are defined for the <code>play-segmented-announcement</code> action. The keyed <code>play-segmented-announcement</code> action with the <code>announcement-name</code> attribute can be deleted from the list of actions by setting the <code>xs:nil</code> attribute to true.</p> <p>The <code>play-segmented-announcement</code> element is a sub-MO allowing instance with <code>announcement-name</code> as the unique key.</p> <p>See Section 26.2.8 on page 185 for detailed <code>play-segmented-announcement</code> element contents.</p>

(1) This is only available for `MMTelSubscription` and `MMTelProfile`.

26.2.2 Outgoing Communication Barring Ruleset

The following table covers the parameters used for outgoing communication barring ruleset.

**Table 108** *Element Contents for Outgoing Communication Barring Ruleset*

Parameter			Occurrence	Description
ocb-ruleset			Optional	Grouping element for a set of zero or more outgoing communication barring rules.
ocb-rule			Optional	An individual rule controlling outgoing communication barring behavior. The ocb-rule element is a sub-MO allowing multiple instances with "id" as the unique key.
	id		Optional	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of an ocb-rule element.
ocb-conditions			Optional	The ocb-conditions element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect. If no conditions are present, then the rule is always applicable.
	rule-deactivated		Optional	The rule-deactivated element has values "true" or "false". If present with the value "true" this has the effect of deactivating the individual rule and the rule is not checked. Set to "false" to remove this condition
ocb-caller-identity			Optional	The ocb-caller-identity element is a grouping element for conditions which are based on the called party identity.
	other-identity		Mandatory	The elements other-identity and identity are mutually exclusive, meaning one of these must be used. The other-identity element is an empty element which matches any identity that has not been specified by any of the other rules in the ruleset. It allows for setting a default policy. This can be removed by deleting the enclosing ocb-caller-identity element or by replacing it with an identity element.
	identity		Mandatory	The elements other-identity and identity are mutually exclusive, meaning one of these must be used. The identity element is a grouping element for conditions which are based on the called party identity. The condition is satisfied if any of the included one or many elements within it is matched. This can be removed by deleting the enclosing ocb-caller-identity element or by replacing it with an other-identity element. See Section 26.2.10 on page 187 for detailed identity element contents.
roaming			Optional	The roaming element has values "true" or "false". If present with the value "true", this condition is satisfied if the subscriber is roaming. Set to "false" to remove this condition.
international			Optional	The international element has values "true" or "false". If present with the value "true", this condition is satisfied if the subscriber calls someone who is in another country than the one where the subscriber calls from. Set to "false" to remove this condition.
international-exHC			Optional	The international-exHC element has values "true" or "false". If present with the value "true", this condition is satisfied if the subscriber calls someone who is in another country than the one where the subscriber calls from and subscribers home country. Set to "false" to remove this condition.
media			Optional	The media element contains a media type that the session must include for the condition to be matched, for example, "audio" or "video". This is a multi-value parameter so it can appear more than once with several media values that must all be satisfied for the overall condition to be matched.
validity			Optional	The validity element is a grouping element for time periods (intervals) within which the rule is valid. See Section 26.2.11 on page 188 for detailed validityelement contents.
presence-status			Optional	The presence-status element contains a presence status value that the user must satisfy for the condition to be matched, for example, "meal", "meeting", "travel", "vacation". This is a multi-value parameter so it can appear more than once with several presence status values that must all be satisfied for the overall condition to be matched. This condition is not currently supported by outgoing communication barring and always evaluate to false.



Table 108 Element Contents for Outgoing Communication Barring Ruleset

Parameter	Occurrence	Description
valid-periods	Optional	The <code>valid-periods</code> element is a grouping element that allows assembly of complex time conditions based on several subconditions. In order for the <code>valid-periods</code> condition to be satisfied, the current date or time must match all the included subconditions. See Section 26.2.9 on page 185 for detailed <code>valid-periods</code> element contents.
invalidity	Optional	The <code>invalidity</code> element is a grouping element for absolute time periods (intervals) within which the rule is not valid.
interval	Optional	The <code>interval</code> element specifies a date and time period within which the <code>invalidity</code> condition is not satisfied. The <code>interval</code> element is a sub-MO allowing multiple instances with "from" as the unique key.
from	Optional	The date and time that specifies the start of the interval that is not valid. It is a standard <code>dateTime</code> value, for example, "2008-11-27T20:00:00Z" for a UTC time, or "2008-10-12T20:00:00-08:00" for a time with 8 hours offset from UTC. This must be present on the creation of an interval element. To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
until	Optional	The date and time that specifies the end of interval that is not valid. It is a standard <code>dateTime</code> value, for example, "2008-11-27T20:00:00Z" for a UTC time or "2008-10-12T20:00:00-08:00" for a time with 8 hours offset from UTC. This must be present on the creation of an interval element. To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
carrier	Optional	The <code>carrier</code> element is a grouping element for conditions that are based on the carrier selected for the calls on the <code>call-by-call</code> basis. If no subelement is specified, all carriers are matched. The carriers that match the pre-subscribed carriers for the current call-type are subject to this condition.
carrier-select-code	Optional	The <code>carrier-select-code</code> element contains the dialed Carrier Select Code. This is a multi-value parameter so it can appear more than once with several Carrier Select Codes. If any of them is matched, the carrier condition is fulfilled.
carrier-name	Optional	The <code>carrier-name</code> element contains an alias name of the carrier selected for the call on <code>call-by-call</code> basis. This is a multi-value parameter so it can appear more than once with several carrier names. If any of them is matched, the carrier condition is fulfilled.
served-identity	Optional	The <code>served-identity</code> element is a grouping element for conditions which are based on a served users identity. The condition is satisfied if any of the <code>one</code> elements within it is matched. The <code>served-identity</code> condition must contain at least one subelement to be valid. If an update would result in no contained subelements, then the <code>served-identity</code> condition is to be deleted.
one	Mandatory	The <code>one</code> element specifies an individual served-identity to be matched. The <code><one></code> element is a sub-MO allowing multiple instances with "id" as the unique key.
id	Optional	The individual served-identity to be matched. For all uses this takes the form of a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number. This element must be present on the creation of a <code>one</code> element.
cb-actions	Optional	The <code>cb-actions</code> element is a grouping element for the actions for a rule. For communication barring, an <code>allow</code> action must be present in each rule. This must be present on the creation of an <code>ocb-rule</code> element.
allow	Optional	The <code>allow</code> element has values "true" or "false". If set to "false", then any outgoing communications satisfying the corresponding conditions are barred unless overridden by another rule with <code>allow</code> set to "true". If set to "true" then any outgoing communications satisfying the corresponding conditions are allowed by this service, that is, not barred. This must be present on the creation of an <code>ocb-rule</code> element.

**Table 108** *Element Contents for Outgoing Communication Barring Ruleset*

Parameter	Occurrence	Description
play-announcement	Mandatory	<p>The elements <code>play-announcement</code> and <code>play-segmented-announcement</code> are mutually exclusive, meaning one of these must be used.</p> <p>The <code>play-announcement</code> element has string values consisting of 0–32 characters. When the <code>play-announcement</code> action is set with the string value containing characters with the length between 1–32, if there is any communications satisfying the corresponding conditions and being barred (allow="false"), the caller is presented with the announcement associated with the announcement code pointed by the string value. When the <code>play-announcement</code> action is set with the string value containing character with the length of 0, any <code>play-announcement</code> action element in the rule is deleted from the rule.</p>
play-segmented-announcement	Mandatory	<p>The elements <code>play-announcement</code> and <code>play-segmented-announcement</code> are mutually exclusive, meaning one of these must be used.</p> <p>If there is any communications satisfying the corresponding conditions, the caller is presented with the segmented announcement associated with the announcement code pointed by the <code>announcement-name</code> attribute of the element. Before trying, to invoke any, the segmented (generic) announcement must be configured in MTAS with the same name as given in the <code>announcement-name</code> attribute. The segmented announcement can contain embedded variables, which can be presented in the <code>announcement-variable</code> child element. The configured segmented (generic) announcement is to contain as many standalone voice variable segments as many <code>announcement-variable</code> child elements are defined for the <code>play-segmented-announcement</code> action. The keyed <code>play-segmented-announcement</code> action with the <code>announcement-name</code> attribute can be deleted from the list of actions by setting the <code>xs:nil</code> attribute to true.</p> <p>See Section 26.2.8 on page 185 for detailed <code>play-segmented-announcement</code> element contents.</p>

(1) This is only available for `MMTelSubscription` and `MMTelProfile`.

26.2.3 ST Incoming Communication Barring Ruleset

The following table covers the parameters used for ST incoming communication barring ruleset.

Table 109 *Element Contents for ST Incoming Communication Barring Ruleset*

Parameter	Occurrence	Description
icb-rule	Optional	An individual rule controlling ST incoming communication barring behavior. The <code>icb-rule</code> element is a sub-MO allowing multiple instances with "id" as the unique key.
id	Mandatory	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of an <code>icb-rule</code> element.
icb-conditions	Optional	The <code>icb-conditions</code> element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect. If no conditions are present, then the rule is always applicable.
rule-deactivated	Optional	The <code>rule-deactivated</code> element has values "true" or "false". If present with the value "true" this has the effect of deactivating the individual rule and the rule is not checked. Set to "false" to remove this condition.
icb-caller-identity	Optional	The <code>icb-caller-identity</code> element is a grouping element for conditions which are based on the caller's identity (or lack of an identity in the case of anonymous).



Table 109 *Element Contents for ST Incoming Communication Barring Ruleset*

Parameter	Occurrence	Description
anonymous	Mandatory	The element <code>anonymous</code> is an empty element specifying a condition which is satisfied if the caller is anonymous. This element can be removed by deleting the enclosing <code>icb-caller-identity</code> element or by replacing it with an <code>identity</code> or <code>other-identity</code> element. The elements <code>anonymous</code> , <code>identity</code> and <code>other-identity</code> are mutually exclusive.
other-identity	Mandatory	The element <code>other-identity</code> is an empty element which matches any identity that has not been specified by any of the other rules in the ruleset. It allows for setting a default policy. This element can be removed by deleting the enclosing <code>icb-caller-identity</code> element or by replacing it with an <code>identity</code> or <code>anonymous</code> element. The elements <code>anonymous</code> , <code>identity</code> and <code>other-identity</code> are mutually exclusive.
identity	Mandatory	The element <code>identity</code> is a grouping element for conditions which are based on the caller's identity. The condition is satisfied if any of the included one or many elements within it is matched. This element can be removed by deleting the enclosing <code>icb-caller-identity</code> element or by replacing it with an <code>other-identity</code> or <code>anonymous</code> element. The elements <code>anonymous</code> , <code>identity</code> and <code>other-identity</code> are mutually exclusive. See Section 26.2.10 on page 187 for detailed <code>identity</code> element contents.
communication-diverted	Optional	The <code>communication-diverted</code> element has values "true" or "false". If present with the value "true", this condition is satisfied when the incoming communication has been diverted. Set to "false" to remove this condition.
cb-actions	Optional	The <code>cb-actions</code> element is a grouping element for the actions for a rule. For communication barring, an <code>allow</code> action must be present in each rule. This must be present on the creation of an <code>icb-rule</code> element. There is a choice: either a <code>play-announcement</code> or a <code>play-segmented-announcement</code> can be defined in the list of actions.
allow	Mandatory	The <code>allow</code> element has values "true" or "false". If set to "false", then any ST incoming communications barring satisfying the corresponding conditions are barred unless overridden by another rule with <code>allow</code> set to "true". If set to "true", any ST incoming communications barring satisfying the corresponding conditions are allowed, that is, not barred. This element must be present on the creation of an <code>icb-rule</code> element.

**Table 109** *Element Contents for ST Incoming Communication Barring Ruleset*

Parameter	Occurrence	Description
play-announcement	Mandatory	When the <code>play-announcement</code> action is set with the string value containing characters with the length between 1 to 32, if there is any communication satisfying the corresponding conditions and being barred (<code>allow=false</code>), the caller will be presented with the announcement associated with the announcement name pointed out by the string value. When the <code>play-announcement</code> action is set with zero-length string, the <code>play-announcement</code> action element in the rule will be deleted from the rule..
play-segmented-announcement	Mandatory	If there is any communications satisfying the corresponding conditions, the caller will be presented with the segmented announcement associated with the announcement code pointed out by the "announcement-name" attribute of the element. Before trying to invoke any, the segmented (generic) announcement must be configured in MTAS with the same name as given in the "announcement-name" attribute. The segmented announcement may contain embedded variables, which can be presented in the "announcement-variable" child element. The configured segmented (generic) announcement shall contain as many standalone voice variable segments as many "announcement-variable" child elements are defined for the "play-segmented-announcement" action. The keyed <code>play-segmented-announcement</code> action with the "announcement-name" attribute can be deleted from the list of actions by setting the "xs:nil" attribute to "true". See Section 26.2.8 on page 185 for detailed <code>play-segmented-announcement</code> element contents.

26.2.4 ST Outgoing Communication Barring Ruleset

The following table covers the parameters used for ST outgoing communication barring ruleset.

Table 110 *Element Contents for ST Outgoing Communication Barring Ruleset*

Parameter	Occurrence	Description
ocb-ruleset	Optional	Grouping element for a set of zero or more ST outgoing communication barring rules.
ocb-rule	Optional	An individual rule controlling outgoing communication barring behavior. The <code>ocb-rule</code> element is a sub-MO allowing multiple instances with "id" as the unique key.
id	Mandatory	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of an <code>ocb-rule</code> element.
ocb-conditions	Optional	The <code>ocb-conditions</code> element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect. If no conditions are present, then the rule is always applicable.
rule-deactivated	Optional	The <code>rule-deactivated</code> element has values "true" or "false". If present with the value "true", it has the effect of deactivating the individual rule and the rule is not checked. Set to "false" to remove this condition
ocb-caller-identity	Optional	The <code>ocb-caller-identity</code> element is a grouping element for conditions which are based on the called party identity.
other-identity	Mandatory	The element <code>other-identity</code> is an empty element which matches any identity that has not been specified by any of the other rules in the ruleset. It allows for setting a default policy. This can be removed by deleting the enclosing <code>ocb-caller-identity</code> element or by replacing it with an <code>identity</code> element. The elements <code>identity</code> and <code>other-identity</code> are mutually exclusive.



Table 110 Element Contents for ST Outgoing Communication Barring Ruleset

Parameter	Occurrence	Description
identity	Mandatory	<p>The element <code>identity</code> is a grouping element for conditions which are based on the called party identity. The condition is satisfied if any of the included one or many elements within it is matched. This can be removed by deleting the enclosing <code>ocb-caller-identity</code> element or by replacing it with an <code>other-identity</code> element. The elements <code>identity</code> and <code>other-identity</code> are mutually exclusive.</p> <p>See Section 26.2.10 on page 187 for detailed <code>identity</code> element contents.</p>
carrier	Optional	<p>The <code>carrier</code> element is a grouping element for conditions that are based on the carrier selected for the calls on the <code>call-by-call</code> basis. If no sub-element is specified, all carriers are matched. The carriers that match the pre-subscribed carriers for the current call-type are subject to this condition.</p>
carrier-select-code	Optional	<p>The <code>carrier-select-code</code> element contains the dialed Carrier Select Code. This is a multi-value parameter so it can appear more than once with several Carrier Select Codes. If any of them is matched, the carrier condition is fulfilled.</p>
carrier-name	Optional	<p>The <code>carrier-name</code> element contains an alias name of the carrier selected for the call on <code>call-by-call</code> basis. This is a multi-value parameter so it can appear more than once with several carrier names. If any of them is matched, the carrier condition is fulfilled.</p>
cb-actions	Mandatory	<p>The <code>cb-actions</code> element is a grouping element for the actions for a rule. For communication barring, an <code>allow</code> action must be present in each rule. This element must be present on the creation of an <code>ocb-rule</code> element. There is a choice: either a <code>play-announcement</code> or a <code>play-segmented-announcement</code> can be defined in the list of actions.</p>
allow	Mandatory	<p>The <code>allow</code> element has values "true" or "false". If set to "false", then any outgoing communications satisfying the corresponding conditions are barred unless overridden by another rule with <code>allow</code> set to "true". If set to "true" then any outgoing communications satisfying the corresponding conditions are allowed by this service, that is, not barred. This element must be present on the creation of an <code>ocb-rule</code> element.</p>
play-announcement	Mandatory	<p>When the <code>play-announcement</code> action is set with the string value between 1 to 32 characters, if there is any communications satisfying the corresponding conditions and being barred (<code>allow=false</code>), the caller will be presented with the announcement associated with the announcement code pointed by the string value.</p> <p>When the <code>play-announcement</code> action is set with zero-length string, any <code>play-announcement</code> action element in the rule will be deleted from the rule.</p>
play-segmented-announcement	Mandatory	<p>If there is any communications satisfying the corresponding conditions, the caller will be presented with the segmented announcement associated with the announcement code pointed by the "announcement-name" attribute of the element.</p> <p>Before trying to invoke any, the segmented (generic) announcement must be configured in MTAS with the same name as given in the "announcement-name" attribute. The segmented announcement may contain embedded variables, which can be presented in the "announcement-variable" child element. The configured segmented (generic) announcement shall contain as many standalone voice variable segments as many "announcement-variable" child elements are defined for the "play-segmented-announcement" action.</p> <p>The keyed <code>play-segmented-announcement</code> action with the "announcement-name" attribute can be deleted from the list of actions by setting the "xs:nil" attribute to "true".</p> <p>See Section 26.2.8 on page 185 for detailed <code>play-segmented-announcement</code> element contents.</p>



26.2.5 Communication Diversion Ruleset

The following table covers the parameters used for communication diversion service.

Table 111 *Element Contents for Communication Diversion Ruleset*

Parameter	Occurrence	Description
<code>cdiv-ruleset</code>	Optional	Grouping element for a set of zero or more operator and user rules.
<code>cdiv-rule</code>	Optional	An individual rule controlling communication diversion behavior. The <code>cdiv-rule</code> element is a sub-MO allowing multiple instances with <code>idas</code> the unique key.
<code>id</code>	Optional	A unique identifier for an individual rule. This must be unique within the scope of the complete document. This must be present on the creation of a <code>cdiv-rule</code> .
<code>cdiv-conditions</code>	Optional	The <code>cdiv-conditions</code> element is a grouping element for conditions for a rule. All conditions must be satisfied for the rule to take effect. If no conditions are present, the rule is always applicable. The conditions that are permitted depend on the fine grain provisioning options in <code>cdiv-op-conditions</code> .
<code>rule-deactivated</code>	Optional	The <code>rule-deactivated</code> element has values “true” or “false”. If present with the value “true” this has the effect of deactivating the individual rule and the rule is not checked. Set to “false” to remove this condition.
<code>cdiv-call-state</code>	Optional	The <code>cdiv-call-state</code> condition controls which state the user must be in for the rule to apply. The value “busy” is satisfied if the user is busy in other calls. The value “no-answer” applies when there is no answer from the user. The value “not-registered” applies when the user is not registered on the MTAS. The value “not-reachable” applies when the user is not reachable because either a specific response has been received or the not reachable timer expires. The value “unconditional” is used to clear the other call state values so that the condition is satisfied regardless of the user’s call state.
<code>cdiv-caller-identity</code>	Optional	The <code>cdiv-caller-identity</code> element is a grouping element for conditions which are based on the caller’s identity (or lack of an identity in the case of anonymous).
<code>anonymous</code>	Optional	The <code>anonymous</code> element is an empty element specifying a condition which is satisfied if the caller is anonymous. This can be removed by deleting the enclosing <code>cdiv-caller-identity</code> element or by replacing it with an <code>identity</code> element. The elements <code>anonymous</code> and <code>identity</code> are mutually exclusive
<code>identity</code>	Optional	The <code>identity</code> element is a grouping element for conditions which are based on the caller’s identity. The condition is satisfied if any of the included one or many elements within it is matched. See Section 26.2.10 on page 187 for details of the contents of the <code>identity</code> element. The elements <code>anonymous</code> and <code>identity</code> are mutually exclusive
<code>media</code>	Optional	The <code>media</code> element contains a media type that the session must include for the condition to be matched for example “audio” or “video”. This is a multi-value parameter so it can appear more than once with several media values that must all be satisfied for the overall condition to be matched.
<code>validity</code>	Optional	The <code>validity</code> element is a grouping element for time periods (intervals) within which the rule is valid. See Section 26.2.11 on page 188 or details of the contents of the <code>validity</code> element.



Table 111 Element Contents for Communication Diversion Ruleset

Parameter	Occurrence	Description
presence-status	Optional	The presence-status element contains a presence status value that the user must satisfy for the condition to be matched for example "meal", "meeting", "travel", "vacation". This is a multi-value parameter so it can appear more than once with several presence status values that must all be satisfied for the overall condition to be matched.
valid-periods	Optional	The valid-periods element is a grouping element that allows assembly of complex time condition based upon several sub-conditions. For the valid-periods condition to be satisfied, the current date/time must match with all the included sub-conditions. See Section 26.2.9 on page 185 for details of the contents of the valid-periods element.
invalidity	Optional	The invalidity element is a grouping element for absolute time periods (intervals) within which the rule is not valid. See Section 26.2.6 on page 184 for details of the contents of the invalidity element.
served-identity ⁽¹⁾	Optional	The served-identity element is a grouping element for conditions which are based on the user's served identity. The condition is satisfied if any of the included elements within it is matched. See Section 26.2.7 on page 184 for details of the contents of the served-identity element.
cdiv-actions	Optional	The cdiv-actions element is a grouping element for the actions for a rule. This must be present on the creation of a cdiv-rule.
forward-to	Optional	The forward-to element is a grouping element with details of the target to which the communication should be diverted and optional control of notifications and which identities are revealed to whom. This must be present on the creation of a cdiv-rule.
target	Optional	The target element specifies the identity to which the communication should be diverted. This takes the form of a sip: or tel: URI or "voicemail:internal" for forwarding to voice mail. Each tel: URI and sip: URI that was converted from a tel: URI contains a normalized number, or a number that can be normalized after removing a dynamic ad-hoc presentation SSC and/or a CSC. This must be present on the creation of a cdiv-rule.
notify-caller	Optional	The notify-caller element has values "true" or "false". It controls whether the caller is notified that the call is being forwarded. If it is not included then the default behavior is to notify the caller (true).
reveal-identity-to-caller	Optional	The reveal-identity-to-caller element has values "true" or "false". It controls whether the caller being notified that the call is being forwarded receives the target's identity information. If it is not included then the default behavior is to reveal the target's identity to the caller (true).
notify-served-user	Optional	The notify-served-user element has values "true" or "false". It controls whether the served user is notified that the call is being forwarded. If it is not included then the default behavior is not to notify the served user (false).
notify-served-user-on-outbound-call	Optional	The notify-served-user-on-outbound-call element has values true or false. It controls whether the served user is notified that calls are being forwarded when he makes a call attempt. If it is not included then the default behavior is not to notify the served user on outbound calls (false).
reveal-identity-to-target	Optional	The reveal-identity-to-target element has values "true" and "false". It controls whether the diverted-to party receives identity information of the diverting party. If it is not included then the default behavior is to reveal the diverting party's identity to the target (true).
do-not-disturb	Optional	The do-not-disturb element has values "true" and "false". If it's set to "true" the element is added into the actions part of the rule. If it's set to "false" the element is removed from the actions part of the rule.

**Table 111** *Element Contents for Communication Diversion Ruleset*

Parameter	Occurrence	Description
play-announcement	Optional	The play-announcement element takes string values from 0 to 32 characters. When the element is set with a string containing between 1 and 32 characters and there are satisfying corresponding conditions, the caller will be presented with the specific announcement handled by generic announcement service. When the element is set with a string value containing 0 characters, any play-announcement action element in the rule will be deleted from the rule.
cdiv-action-options	Optional	Grouping element for a set of zero or more action options.
NoReplyTimer	Optional	The NoReplyTimer element specifies the time that must expire without answer before the no answer condition is triggered. The value is an integer giving the timer in the range of 5 to 180 seconds. This shall only be present in rules with the value "no-answer" in a cdiv-call-state condition.

(1) This is only available for MMTEL Subscription and MMTELProfile.

26.2.6 Invalidity Condition

The following table covers the parameters used for invalid periods.

Table 112 *Element Contents for Invalidity*

Parameter	Occurrence	Description
invalidity	Optional	The invalidity element is a grouping element for time periods (intervals) within which the rule is not valid. The invalidity condition must contain at least one interval.
interval	Optional	The interval element specifies a date and time period within which the validity condition is not satisfied. The interval element is a sub-MO allowing multiple instances with "from" as the unique key.
from	Optional	The date and time that specifies the start of the invalid interval. It is a standard dateTime value, for example, "2008-11-27T20:00:00Z" for a UTC time or "2008-10-12T20:00:00-08:00" for a time with 8 hours offset from UTC. This must be present on the creation of an interval element. To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
until	Optional	The date and time that specifies the end of the invalid interval. It is a standard dateTime value, for example, "2008-11-27T20:00:00Z" for a UTC time or "2008-10-12T20:00:00-08:00" for a time with 8 hours offset from UTC. This must be present on the creation of an interval element. To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.

26.2.7 Served-Identity Condition

The following table covers the parameters used for served-identity.



Table 113 *Element Contents for Served-Identity*

Parameter	Occurrence	Description
served-identity	Optional	The served-identity element is a grouping element for conditions which are based on a user's identity. The condition is satisfied if the one element within it is matched. The served-identity condition must contain at least one sub-element to be valid. If an update would result in no contained sub-elements, the served-identity condition should be deleted.
one	Mandatory	The one element specifies an individual served-identity to be matched. The one element is a sub-MO allowing multiple instances with "id" as the unique key.
id	Optional	The individual served-identity to be matched. For all uses this takes the form of a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number. This element must be present on the creation of a one element.

26.2.8 Play Segmented Announcement

The following table covers the parameters used for play segmented announcement.

Table 114 *Element Contents for Play Segmented Announcement*

Parameter	Occurrence	Description
play-segmented-announcement	Optional	An announcement variable can be embedded into a segmented announcement only once.
announcement-name	Mandatory	Announcement variables, under the scope of a segmented announcement, are made unique by the "variable-name" attribute.
announcement-variable	Optional	The announcement variable to be embedded into the announcement. Its use is optional, that is, a segmented announcement can or cannot contain any variable segment. Maximum 32 announcement variables can be embedded into a segmented announcement. A keyed "announcement-variable" element with the "variable-name" attribute can be deleted from the list of announcement variables by setting the "xs:nil" attribute to true.
variable-name	Optional	The name of the announcement variable to be embedded. This must be present on the creation of an announcement-variable element inside a play-segmented-announcement element.
variable-value	Optional	The variable value is defined in the variable-value child element of the announcement-variable element. According to H.248.9, the allowed characters in place of a variable value are ASCII 0x09, 0x20-0x7E.

26.2.9 Valid Periods

The following table covers the parameters used for valid periods.

Table 115 *Element Contents for Valid Periods*

Parameter	Occurrence	Description
valid-periods	Optional	The valid-periods element is a grouping element that allows assembly of complex time conditions based on several subconditions. In order for the valid-periods condition to be met, the current date or time must match with all the included subconditions.



Table 115 Element Contents for Valid Periods

Parameter	Occurrence	Description
utc-offset	Optional	The <code>utc-offset</code> element specifies the offset to be taken from UTC when determining times of day and when each day starts and ends. If <code>utc-offset</code> is omitted, then the <code>utc-offset</code> specified by the <code>utc-offset</code> element in the user-common-data is used. If it is not included there, then the offset from the node CM attribute is used.
valid-days	Optional	The <code>valid-days</code> element specifies each of the days on which the condition is matched, subject to also meeting the <code>valid-times</code> if present. If <code>valid-days</code> is omitted, then the condition applies to all days of the week.
day	Mandatory	The day of the week. Besides the name of the day, it allows use of literals <code>Workday</code> , <code>NonWorkday</code> , and <code>Holiday</code> . This is a multi-value parameter.
valid-times	Optional	The <code>valid-times</code> element specifies the periods of the day in which the condition is matched, subject to also meeting the <code>valid-days</code> if present. If <code>valid-times</code> is omitted, then the condition applies to all times of the day. The <code>valid-times</code> condition must contain at least one interval.
interval	Mandatory	A time interval. The interval element is a sub-MO allowing multiple instances with "from" as the unique key.
from	Optional	The time of day at which the interval starts. The format is <code>HH:MM</code> in the 24-hour clock. This must be present on the creation of an interval element.
until	Optional	The time of day at which the interval ends. The format is <code>HH:MM</code> in the 24-hour clock. The interval applies until the end of the specified minute. This must be present on the creation of an interval element.
valid-months	Optional	The <code>valid-months</code> element specifies each of the months on which the condition can be matched, subject to also meeting other subconditions if present. If <code>valid-months</code> is omitted, then it applies to all months of the year.
month	Optional	The month of the year. The format is integer of the month number. This is a multi-value parameter.
valid-weeks	Optional	The <code>valid-weeks</code> element specifies each of the weeks in which the condition can be matched, subject to also meeting other subconditions if present. If <code>valid-weeks</code> is omitted, then it applies to all weeks of the year.
week	Optional	The week of the year. The format is integer of the week number. This is a multi-value parameter.
repeat-daily	Optional	The <code>repeat-daily</code> element specifies the starting day and the repetition interval for the days on which the condition can be matched, subject to also meeting other subconditions if present. If <code>repeat-daily</code> is omitted, then it applies to all days of the year.
begin-day	Optional	The start day of the repetition. The format is <code>YYYY-MM-DD</code> . To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
repeat-interval	Optional	The repetition interval in days. The format is integer.
repeat-weekly	Optional	The <code>repeat-weekly</code> element specifies the starting week and the repetition interval for the weeks in which the condition can be matched, subject to also meeting other subconditions if present. If <code>repeat-weekly</code> is omitted, then it applies to all weeks of the year.
begin-day	Optional	The start day of the repetition. The format is <code>YYYY-MM-DD</code> . To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
repeat-interval	Optional	The repetition interval in weeks. The format is integer.



Table 115 Element Contents for Valid Periods

Parameter	Occurrence	Description
repeat-monthly	Optional	The repeat-monthly element specifies the starting month and the repetition interval for the months in which the condition can be matched, subject to also meeting other subconditions if present. If repeat-monthly is omitted, then it applies to all months of the year.
begin-day	Optional	The starting day of the repetition. The format is YYYY-MM-DD. To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.
repeat-interval	Optional	The repetition interval in months. The format is integer.
valid-monthdays	Optional	The valid-monthdays element specifies each of the days on which the condition can be match, subject to also meeting other subconditions if present. If valid-monthdays is omitted, then the condition applies to all days of the month.
monthday	Optional	The day of the month. Allowed formats: 1...31, -1...-31, [-1...-5 1...5][Monday..Sunday] This is a multi-value parameter.
except-holidays	Optional	The except-holidayelement specifies that if the current day matches to the holidays provisioned for the user, then the valid-periods condition is evaluated to "false".

26.2.10 Identity

The following table covers the parameters used for identity.

Table 116 Element Contents for Identity

Parameter	Occurrence	Description
identity	Optional	The identity element is a grouping element for conditions which are based on a users identity. The condition is satisfied if any of the one or many elements within it is matched.
one	Mandatory	The elements one, many and number-match are mutually exclusive, meaning that one of these must be used. The one element specifies an individual identity to be matched. The one element is a sub-MO allowing multiple instances with "id" as the unique key.
id	Optional	The individual identity to be matched. For all uses except incoming communication barring user rules, this takes the form of a sip: or tel: URI. For use within incoming communication barring user rules, this takes the form of a sip: or tel: or hidden: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number. This must be present on the creation of a one element. The use of hidden: URIs in incoming communication barring user rules is new in MTAS 3.1.
many	Mandatory	The elements one, many and number-match are mutually exclusive, meaning that one of these must be used. The many element specifies a match for a set of identities. The many element is a sub-MO allowing multiple instances with "domain" as the unique key.
domain	Optional	The individual domain to be matched. A many element with an explicit domain value matches all identities within that domain. A many element with the special wildcard value "*" matches all identities. This must be present on the creation of a many element.



Table 116 Element Contents for Identity

Parameter	Occurrence	Description
except-id	Mandatory	<p>The elements <code>except-id</code> and <code>except-domain</code> are mutually exclusive, meaning that one of these must be used.</p> <p>An individual identity to be excluded from the identities matching the enclosing <code>many</code>. The <code>except-id</code> element is a sub-MO allowing multiple instances with "id" as the unique key.</p>
id	Optional	<p>The individual identity to be excluded from the match. If this is within a <code>many</code> element with a specific domain, then the excluded identity must be a sip: URI within that domain. If this is within a <code>many</code> element with the special wildcard value of "*", then it can be a sip: or tel: URI. Each tel: URI and sip: URI that was converted from a tel: URI according to Reference [7] contains a normalized number. This must be present on the creation of an <code>except-id</code> element.</p>
except-domain	Mandatory	<p>The elements <code>except-id</code> and <code>except-domain</code> are mutually exclusive, meaning that one of these must be used.</p> <p>An individual domain to be excluded from a <code>many</code> with special value "*" that would otherwise match all identities. The <code>except-domain</code> element is a sub-MO allowing multiple instances with "domain" as the unique key.</p>
domain	Optional	<p>The individual domain to be excluded from the match. This must be present on the creation of an <code>except-domain</code> element.</p>
number-match	Mandatory	<p>The elements <code>one</code>, <code>many</code> and <code>number-match</code> are mutually exclusive, meaning that one of these must be used.</p> <p>The <code>number-match</code> element specifies a match for a set of numerical identities. The <code>number-match</code> element is a sub-MO allowing multiple instances with "starts-with" as the unique key.</p>
starts-with	Optional	<p>The first few characters of the normalized form of the number to be matched. This must be present on the creation of a <code>number-match</code> element.</p>

26.2.11 Validity

The following table covers the parameters used for validity.

Table 117 Element Contents for Validity

Parameter	Occurrence	Description
validity	Optional	<p>The <code>validity</code> element is a grouping element for time periods (intervals) within which the rule is valid. The <code>validity</code> condition must contain at least one <code>interval</code>.</p>
interval	Optional	<p>The <code>interval</code> element specifies a date and time period within which the <code>validity</code> condition is satisfied. The <code>interval</code> element is a sub-MO allowing multiple instances with "from" as the unique key.</p>



Table 117 *Element Contents for Validity*

Parameter		Occurrence	Description
	from	Optional	<p>The date and time that specifies the start of the valid interval. It is a standard <code>dateTime</code> value, for example, "2008-11-27T20:00:00Z" for a UTC time or "2008-10-12T20:00:00-08:00" for a time with 8 hours offset from UTC. This must be present on the creation of an <code>interval</code> element.</p> <p>To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.</p>
	until	Optional	<p>The date and time that specifies the end of the valid interval. It is a standard <code>dateTime</code> value, for example, "2008-11-27T20:00:00Z" for a UTC time or "2008-10-12T20:00:00-08:00" for a time with 8 hours offset from UTC. This must be present on the creation of an <code>interval</code> element.</p> <p>To set date later than year 2036 is not supported on TSP and the value will not be correctly handled.</p>





27 Faults and Errors

The generic structure for fault responses is covered in *Generic CAI3G Interface 1.2*, Reference [3]. 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 MTAS specific error codes are described in this section. These error codes are included in the Fault type `UserProvisioningFault`.

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

27.1 Subordinate MTAS Error Codes

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

Table 118 MTAS Specific Error Codes

Resp Code	Description	MO	Operation
2002	MTAS internal error because of Header and Request error reported by MTAS	Service Subscription	C/G/S/D
36501	MTAS provisioning error because of Client error reported by MTAS	Service Subscription	C/G/S/D
36502	MTAS provisioning error because of Server Fault from MTAS	Service Subscription	C/G/S/D
36503 ⁽¹⁾	MTAS provisioning error because object does not exist.	Service Subscription	C/G/S/D
36504 ⁽¹⁾	MTAS provisioning error because of invalid parameter.	Service Subscription	C/G/S/D

*(1) MTAS property `ErrorCodeMapping` need to be set to 2. For `ErrorCodeMapping` settings, refer to *User Guide for Resource Activation*, Reference [5]*

27.2 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>c4ba92277c564634a2a42b37e7203a8b</cai3g:SessionId>
    <cai3g:SequenceId>1164293593799127242</cai3g:SequenceId>
    <cai3g:TransactionId>1</cai3g:TransactionId>
  </S:Header>
  <S:Body>
    <ns2:Fault xmlns:ns2="http://schemas.xmlsoap.org/soap/envelope/"
      xmlns:ns3="http://www.w3.org/2003/05/soap-envelope">
      <faultcode>ns2:Server</faultcode>
      <faultstring>This is a server fault</faultstring>
      <detail>
        <Cai3gFault:Cai3gFault xmlns="http://schemas.ericsson.com/cai3g1.2/"
          xmlns:Cai3gFault="http://schemas.ericsson.com/cai3g1.2/">
          <faultcode>4006</faultcode>
          <faultreason>
            <reasonText>External error.</reasonText>
          </faultreason>
          <faultrole>NEF</faultrole>
          <details>
            <UserProvisioningFault:UserProvisioningFault
              xmlns="http://schemas.ericsson.com/ema/UserProvisioning/"
              xmlns:UserProvisioningFault="http://schemas.ericsson.com/
                ema/UserProvisioning/">
              <respCode>36502</respCode>
              <respDescription>MTAS Provisioning Error; NE fault code: 4006.
                Reason: External Error, Private: The requested UserData does not exist.
                Can't create MMTel User document. - [Processed by PG Node:
                  vmx-pg-012]</respDescription>
            </UserProvisioningFault:UserProvisioningFault>
          </details>
        </Cai3gFault:Cai3gFault>
      </detail>
    </ns2:Fault>
  </S:Body>
</S:Envelope>
```

Example 26 CAI3G Error Message



Reference List

- [1] *Library Overview*, 18/1553-CSH 109 628 Uen
- [2] *Function Specification MTAS*, 16/155 17-CSH 109 628 Uen
- [3] *Generic CAI3G Interface 1.2*, 2/155 19-FAY 302 0003 Uen
- [4] *CAI3G Implementation*, 26/155 19-CSH 109 628 Uen
- [5] *User Guide for Resource Activation*, 1/1553-CSH 109 628 Uen
- [6] *MTAS Parameter Description*, 1/190 84-AVA 901 09 Uen

Online References

- [7] *SIP: Session Initiation Protocol*, <http://tools.ietf.org/html/rfc3261#section-19.1.6>