

# Function Specification MTAS

## Ericsson Dynamic Activation 1

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### FUNCTION SPECIFICATION

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# 1 Introduction

This section contains information about the purpose, scope, and target group for the document.

## 1.1 Purpose and Scope

This document gives a brief introduction to the MultiMedia Telephony (MMTel) provisioning solution on Multimedia Telephony Application Server (MTAS), provided by Ericsson™ Dynamic Activation (EDA).

For general functionality of Dynamic Activation , see *Function Specification Resource Activation*, Reference [1].

## 1.2 Target Group

The target group for this document is as follows:

- Application Administrator
- Marketing
- Network Administrator
- System Administrator
- Network Supervision Administrator
- Application Designer

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

## 1.3 Typographic Conventions

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

## 2 MTAS Provisioning Solution

### 2.1 Overview

An overview of the MTAS provisioning and included nodes is shown in Figure 1. For detailed information about MTAS NE configuration, refer to *User Guide for Resource Activation*, Reference [5] and *Configuration Manual for Resource Activation*, Reference [4].

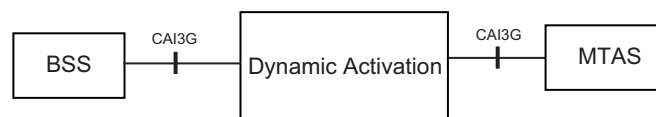


Figure 1 Provisioning Flow for MTAS

- **BSS** - Initiates the provisioning request towards Dynamic Activation.
- **Dynamic Activation** - A provisioning system that provides a single provisioning interface towards the Business Support System (BSS), by hiding the complexities of provisioning multiple underlying network elements.

For more information about configuration of Dynamic Activation in the deployment, see *Configuration Manual for Resource Activation*, Reference [4].

- **MTAS** - An application server for the MMTel, which implements the standard multimedia telephony based on 3GPP IMS R6 with certain additions for 3GPP R7, Telecoms & Internet converged Services & Protocols for Advanced Networks (TISPA).

### 2.2 Data Model MTAS

An MMTel subscription, XML user document containing service configurations, is provisioned through MTAS/XDMS, owner of the MMTel subscription. It is stored in monolithic HSS or CUDB, through HSS-FE, as Sh transparent data.

Dynamic Activation is responsible to map the CAI3G order to MTAS XML user document, and supports below MTAS services.

Table 1 shows the MTAS services supported in Dynamic Activation:



**Table 1** MTAS Services in Dynamic Activation

Service	Detailed Information	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A/vMTAS 1
MMTel Subscription Service	Table 2	x	x	x	x	x	x	x	x	x
MMTel Shared Profile Service	Table 3	x	x	x	x	x	x	x	x	x
MMTel Service Number Service	Section 2.3.3 on page 9	x	x	x	x	x	x	x	x	x
MMTel Scheduled Conference Service	Table 4	x	x	x	x	x	x	x	x	x
SIP Trunking Service	Table 5	-	-	-	-	x	x <sup>(1)</sup>	x <sup>(1)</sup>	x <sup>(1)</sup>	x <sup>(1)</sup>
SIP Trunking Referral Service	Table 6	-	-	-	-	x	x <sup>(1)</sup>	x <sup>(1)</sup>	x <sup>(1)</sup>	x <sup>(1)</sup>

(1) It supports the same services as MTAS 15A

## 2.3 MTAS Provisioning

The following sections contain the MMTel services supported in Dynamic Activation. These services are compatible with Dynamic Activation Classic MTAS open interface. All services support the following operations:

- Create
- Set
- Get
- Delete

For more information about the provisioning interface, see *MTAS Provisioning over CAI/3G*, Reference [2]az .

### 2.3.1 MMTel Subscription Service

The `MMTelSubscriptionService` is used for provisioning of MMTel subscription.

**Note:** To create an MMTel Subscription, define the user in the HSS.



Table 2 Services for MMTelSubscriptionService

Service	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A/vMT AS 1
abbreviated-dialing	X	X	X	X	X	X	X	X	X
advice-of-charge	X	X	X	X	X	X	X	X	X
call-admission-control-group-membership	X	X	X	X	X	-	X	X	X
call-completion	X	X	X	X	X	X	X	X	X
call-completion-monitor-opt-out	X	X	X	X	X	X	X	X	X
call-return	X	X	X	X	X	X	X	X	X
calling-name-identity-presentation	X	X	X	X	X	X	X	X	X
calling-party-category	X	X	X	X	X	X	X	X	X
carrier-pre-select	X	X	X	X	X	X	X	X	X
carrier-pre-select-rn	X	X	X	X	X	X	X	X	X
carrier-select	X	X	X	X	X	X	X	X	X
carrier-select-rn	X	X	X	X	X	X	X	X	X
closed-user-group	-	X	X	X	X	X	X	X	X
common-data	X	X	X	X	X	X	X	X	X
communication-distribution	X	X	X	X	X	X	X	X	X
communication-diversion	X	X	X	X	X	X	X	X	X
communication-diversion-no-answer-timer	X	X	X	X	X	X	X	X	X
communication-waiting	X	X	X	X	X	X	X	X	X
conference	X	X	X	X	X	X	X	X	X
customized-alerting-tone	X	X	X	X	X	X	X	X	X
dial-tone-management	X	X	X	X	X	X	X	X	X
dialog-event-notifier	-	-	-	-	-	-	-	-	X
distinctive-ring	-	-	X	X	X	X	X	X	X





**Table 2** *Services for MMTelSubscriptionService*

Service	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A/vMTAS 1
dynamic-black-list	X	X	X	X	X	X	X	X	X
explicit-communication-transfer	X	X	X	X	X	X	X	X	X
flexible-identity-presentation	X	X	X	X	X	X	X	X	X
hotline	X	X	X	X	X	X	X	X	X
incoming-communication-barring	X	X	X	X	X	X	X	X	X
malicious-communication-identification	X	X	X	X	X	X	X	X	X
malicious-communication-rejection	X	X	X	X	X	X	X	X	X
media-policy	-	-	-	-	X	X	X	X	X
multi-device-conference-policy	-	-	-	-	-	-	X	X	X
multi-device-user-call-admission-control	-	-	-	-	-	-	X	X	X
northbound-call-control	X	X	X	X	X	X	X	X	X
number-portability-announcement	-	-	X	X	X	X	X	X	X
operator-controlled-outgoing-barring-programs	X	X	X	X	X	X	X	X	X
outgoing-barring-programs	X	X	X	X	X	X	X	X	X
outgoing-communication-barring	X	X	X	X	X	X	X	X	X
originating-calling-name-identity-presentation	X	X	X	X	X	X	X	X	X
originating-identity-presentation	X	X	X	X	X	X	X	X	X
originating-identity-presentation-restriction	X	X	X	X	X	X	X	X	X

**Table 2** *Services for MMTelSubscriptionService*

Service	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A/vMTAS 1
priority-call	X	X	X	X	X	X	X	X	X
session-transfer-to-own-device	X	X	X	X	X	X	X	X	X
supplementary-service-codes	X	X	X	X	X	X	X	X	X
terminating-identity-presentation	X	X	X	X	X	X	X	X	X
terminating-identity-presentation-restriction	X	X	X	X	X	X	X	X	X
three-pty	X	X	X	X	X	X	X	X	X
user-call-admission-control	X	X	X	X	X	X	X	X	X
user-common-data	X	X	X	X	X	X	X	X	X
voice-mail	X	X	X	X	X	X	X	X	X

### 2.3.2 MMTel Shared Profile Service

The `MMTelSharedProfileService` allows the operator to define different service profiles. A service profile is a template that lists a specific set of supplementary services that can be assigned to a group of subscribers.

**Table 3** *Services Supported in MMTelSharedProfileService*

Services	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A/vMTAS 1
abbreviated-dialing	X	X	X	X	X	X	X	X	X
advice-of-charge	X	X	X	X	X	X	X	X	X
call-completion	X	X	X	X	X	X	X	X	X
call-completion-monitor-opt-out	X	X	X	X	X	X	X	X	X
call-return	X	X	X	X	X	X	X	X	X
calling-name-identity-presentation	X	X	X	X	X	X	X	X	X



**Table 3** *Services Supported in MMTelSharedProfileService*

Services	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A/vMTAS 1
calling-party-category	X	X	X	X	X	X	X	X	X
carrier-pre-select	X	X	X	X	X	X	X	X	X
carrier-pre-select-rn	X	X	X	X	X	X	X	X	X
carrier-select	X	X	X	X	X	X	X	X	X
carrier-select-rn	X	X	X	X	X	X	X	X	X
closed-user-group	-	X	X	X	X	X	X	X	X
communication-distribution	X	X	X	X	X	X	X	X	X
communication-diversion	X	X	X	X	X	X	X	X	X
communication-diversion-no-answer-timer	X	X	X	X	X	X	X	X	X
communication-waiting	X	X	X	X	X	X	X	X	X
conference	X	X	X	X	X	X	X	X	X
customized-alerting-tone	X	X	X	X	X	X	X	X	X
dial-tone-management	X	X	X	X	X	X	X	X	X
dialog-event-notifier	-	-	-	-	-	-	-	-	X
explicit-communication-transfer	X	X	X	X	X	X	X	X	X
flexible-identity-presentation	X	X	X	X	X	X	X	X	X
hotline	X	X	X	X	X	X	X	X	X
incoming-communication-barring	X	X	X	X	X	X	X	X	X
malicious-communication-identification	X	X	X	X	X	X	X	X	X

**Table 3** *Services Supported in MMTELSharedProfileService*

<b>Services</b>	<b>MTAS 13A</b>	<b>MTAS 13B</b>	<b>MTAS 14A</b>	<b>MTAS 14B</b>	<b>MTAS 15A</b>	<b>MTAS 15B</b>	<b>MTAS 16A</b>	<b>MTAS 16B</b>	<b>MTAS 17A/vMT AS 1</b>
media-policy	-	-	-	-	X	X	X	X	X
multi-device-conference-policy	-	-	-	-	-	-	X	X	X
multi-device-user-call-admission-control	-	-	-	-	-	-	X	X	X
northbound-call-control	X	X	X	X	X	X	X	X	X
number-portability-announcement	-	-	X	X	X	X	X	X	X
operator-controlled-outgoing-barring-programs	X	X	X	X	X	X	X	X	X
outgoing-barring-programs	X	X	X	X	X	X	X	X	X
outgoing-communication-barring	X	X	X	X	X	X	X	X	X
originating-calling-name-identity-presentation	X	X	X	X	X	X	X	X	X
originating-identity-presentation	X	X	X	X	X	X	X	X	X
originating-identity-presentation-restriction	X	X	X	X	X	X	X	X	X
priority-call	X	X	X	X	X	X	X	X	X
session-transfer-to-own-device	X	X	X	X	X	X	X	X	X
terminating-identity-presentation	X	X	X	X	X	X	X	X	X
terminating-identity-presentation-restriction	X	X	X	X	X	X	X	X	X
three-pty	X	X	X	X	X	X	X	X	X



**Table 3** *Services Supported in MMTelSharedProfileService*

Services	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A/vMTAS 1
user-call-admission-control	X	X	X	X	X	X	X	X	X
voice-mail	X	X	X	X	X	X	X	X	X

### 2.3.3 MMTel Service Number Service

The `MMTelServiceNumberService` is used for provisioning of MMTel Service Number. This service is used for the operator to manipulate the service number data for a scheduled conference.

`MMTelServiceNumberService` is also backward compatible from MTAS 13A to latest version.

**Note:** Service Number is not available in virtualized MTAS.

### 2.3.4 MMTel Scheduled Conference Service

The `MMTelSchedConfService` is used for provisioning of MMTel scheduled conference. This service allows the subscribers to schedule and create a conference resource in advance, distribute an invitation including the conference identity, and have conference participants dial-in to the conference at a scheduled time.

**Note:** Create a `MMTelServiceNo` first, when performing a `create MMTelSchedConf` request, using service-number.

**Table 4** *Services Supported in MMTelSchedConfService*

Service	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A
scheduled-conference	X	X	X	X	X	X	X	X	X

**Note:** Scheduled Conference is not available in virtualized MTAS.

### 2.3.5 SIP Trunking Service

The `MMTelSipTrunkingService` is used for provisioning of MMTel Session Initiation Protocol (SIP) Trunking service for IP-PBXs in static and dynamic mode connection with IMS network."

**Table 5** *Services Supported in MMTelSipTrunkingService*

Service	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A/vMTAS 1
publicId	-	-	-	-	X	X	X	X	X
concurrency-control	-	-	-	-	X	X	X	X	X
sip-trunking-control	-	-	-	-	X	X	X	X	X
st-call-admission-control	-	-	-	-	X	X	X	X	X
st-carrier-pre-select-rn	-	-	-	-	X	X	X	X	X
st-carrier-select-rn	-	-	-	-	X	X	X	X	X
st-common-data	-	-	-	-	X	X	X	X	X
st-communication-diversion	-	-	-	-	X	X	X	X	X
st-incoming-communication-barring	-	-	-	-	X	X	X	X	X
st-malicious-communication-identification	-	-	-	-	X	X	X	X	X
st-operator-controlled-outgoing-barring-programs	-	-	-	-	X	X	X	X	X
st-originating-identity-presentation	-	-	-	-	X	X	X	X	X
st-originating-identity-presentation-restriction	-	-	-	-	X	X	X	X	X
st-outgoing-communication-barring	-	-	-	-	X	X	X	X	X

### 2.3.6 SIP Trunking Referral Service

The MMTelSipTrunkingReferralService provisioning is used for provisioning of MMTel SIP Trunking Referral service for phone number ranges in IP-PBX.

*Table 6 Services Supported in MMTelSipTrunkingReferralService*

Service	MTAS 13A	MTAS 13B	MTAS 14A	MTAS 14B	MTAS 15A	MTAS 15B	MTAS 16A	MTAS 16B	MTAS 17A/vM TAS 1
publicId	-	-	-	-	X	X	X	X	X
refer-to-i dentity	-	-	-	-	X	X	X	X	X
concurrenc y-control	-	-	-	-	X	X	X	X	X







## Reference List

### Ericsson Documents

- [1] *Function Specification Resource Activation*, 3/155 17-2/CRH 109 1438 Uen
- [2] *MTAS Provisioning over CAI3G*, 30/155 19-2/CRH 109 1438 Uen
- [3] *Library Overview*, 18/1553-CSH 109 628 Uen
- [4] *Configuration Manual for Resource Activation*, 2/1543-CSH 109 628 Uen
- [5] *User Guide for Resource Activation*, 1/1553-CSH 109 628 Uen