

# MTAS Calling Party Category Management Guide

## MTAS

---

### USER GUIDE

**Copyright**

© Ericsson AB 2016, 2017. All rights reserved. No part of this document may be reproduced in any form without the written permission of the copyright owner.

**Disclaimer**

The contents of this document are subject to revision without notice due to continued progress in methodology, design and manufacturing. Ericsson shall have no liability for any error or damage of any kind resulting from the use of this document.

**Trademark List**

All trademarks mentioned herein are the property of their respective owners. These are shown in the document Trademark Information.



# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Prerequisites	1
<b>2</b>	<b>Overview</b>	<b>3</b>
2.1	Subfunctions	3
2.2	Terminal and Network Interaction	4
2.3	Interaction with Other Services	4
<b>3</b>	<b>CPC Service Configuration</b>	<b>7</b>
3.1	CPC Administrative State Configuration	7
3.2	Wholesale for CPC Configuration	7
3.3	Service Data Configuration	7
<b>4</b>	<b>Performance Management</b>	<b>9</b>
<b>5</b>	<b>Fault Management</b>	<b>11</b>





# 1 Introduction

This document describes how to configure the Calling Party Category (CPC) service in the MTAS.

## 1.1 Prerequisites

It is assumed that the user of this document is familiar with the O&M area, in general.

### 1.1.1 Licenses

To enable the CPC service, the MMTel AS Voice Base license must be installed.

For more information about licensing, refer to *MTAS Licenses*.

### 1.1.2 Documents

Before starting any procedure in this document, ensure that the following documents are available:

- *Ericsson Command-Line Interface User Guide*
- *Managed Object Model (MOM)*

### 1.1.3 Conditions

The following condition must apply:

- An Ericsson Command-Line Interface (ECLI) session in Exec mode is in progress.





## 2 Overview

The CPC service allows the operator to assign CPC values to users. When the user initiates a call, the originating MTAS adds the CPC value of the user to the `P-Asserted-Identity` header. When the served user causes the call to become transit, the CPC value is added to the diverting URI of the user in the `History-Info` header.

CPC value for the user is stored in the operator part of the transparent service data of the user and can be provisioned by the operator using CAI3G.

The charging messages generated by MTAS include the CPC value.

### 2.1 Subfunctions

The subfunctions included in the CPC service are described in this section.

#### 2.1.1 Add CPC Parameter to P-Asserted-Identity

Originating Party initiates a call by sending an `INVITE` to the Terminating Party. Originating MTAS acting on behalf of the Originating Party is provisioned with CPC service. Originating MTAS adds the CPC value Originating Party is provisioned with to the `P-Asserted-Identity` header in the outgoing `INVITE`. The CPC parameter is also present in the charging messages.

#### 2.1.2 Add CPC Value When Diverting Call

Originating Party initiates a call to Diverting Party. Diverting Party has an active diversion that diverts the call to Terminating Party. Diverting Party is also provisioned with CPC service. The MTAS of the Diverting-Party becomes a transit MTAS. The CPC value of Diverting-Party is added to the `History-Info` header. `P-Asserted-Identity` header is not affected. If there is a CPC parameter in the `P-Asserted-Identity` header, it is copied to the outgoing MTAS without change.

#### 2.1.3 Add CPC Value When Distributing Call

Originating Party initiates a call to Terminating Party. Terminating Party has active Flexible Communication Distribution (FCD). If the primary user is an IMS user, the call to the primary user is a normal terminating call and the `P-Asserted-Identity` header (if not removed by the MTAS) is copied from the incoming `INVITE`, along with its optional CPC parameter. If the primary user is a non-IMS user or the call is distributed to related users, the `INVITE` is



generated according to the diverting call scenario described in section Section 2.1.2 Add CPC Value When Diverting Call on page 3.

## 2.2 Terminal and Network Interaction

MGC must be configured to map the CPC parameter in the `P-Asserted-Identity` header to and from CPC field in ISUP.

## 2.3 Interaction with Other Services

This section describes the CPC interaction with other services.

### 2.3.1 Charging

If the CPC service adds CPC parameter to the `P-Asserted-Identity` in the initial `INVITE`, the charging message generated by MTAS also contains the CPC parameter in the Calling Party Address Attribute-Value Pair (AVP). If the CPC service adds CPC parameter to the served `History-Info` entry of the user, the charging message generated by MTAS also contains the CPC parameter in the Redirecting-Party-Address AVP. In both cases, Supplementary-Service-Identity AVP with a service code allocated for CPC service is included into the charging message.

For more information on charging management, refer to *MTAS Charging Management Guide*.

### 2.3.2 Incoming Communication Barring

The CPC parameter is considered when evaluating global Incoming Communication Barring (ICB) blacklist rules. These rules are strings that are matched as substrings against the entire `P-Asserted-Identity` header value. If any part of the CPC parameter in the `P-Asserted-Identity` header value matches a global ICB blacklist entry, the call is barred.

The CPC parameter is not copied into the Dynamic Black List when the user activates this function and is not considered when the incoming call is evaluated against the Dynamic Black List.

For more information about the ICB service, refer to *MTAS Barring and Dial Plan Services Management Guide*.

### 2.3.3 Communication Completion

If the calling user with CPC service configured activates the Communication Completion services (CC), the CPC parameter will be added to the `P-Asserted-Identity` header in the `INVITE` placed by CC services after





the called user becomes available. The CPC parameter is present only in the `INVITE` request sent to the Terminating Party.

For more information about the CC services, refer to *MTAS Communication Completion Management Guide*.

### 2.3.4 Conference

If the Conference Creator is configured with CPC value, the CPC parameter is present in the `INVITE` placed by the conference focus.

For more information about the conference service, refer to *MTAS Ad-hoc Conference Management Guide*.

### 2.3.5 Abbreviated Dialing

If the calling user with CPC configured also has Abbreviated dialing configured, the CPC parameter is present in the `INVITE` placed by the Abbreviated dialing service.

For more information about the Abbreviated dialing service, refer to *MTAS Abbreviated Dialing Management Guide*.

### 2.3.6 Application Server Interworking

If the called user has both CPC and Application Service (AS) Interworking activated and the AS Interworking service creates `History-Info` entries, the CPC parameter of the called user is added to the `History-Info` entry that belongs to the called user.

For more information about the AS Interworking service, refer to *MTAS Application Server Interworking Management Guide*.





## 3 CPC Service Configuration

The CPC service of the MTAS is controlled by the *MtasCpc* MO and its attributes. An overview of the CPC MO structure is shown in Figure 1.

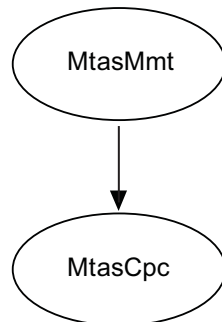


Figure 1 CPC MO Structure

For configurable MOs and attributes, related to the CPC service, refer to *Managed Object Model (MOM)*.

### 3.1 CPC Administrative State Configuration

The CPC service is enabled by setting the `mtasCpcAdministrativeState` attribute to 1 (Unlocked). If the `mtasCpcAdministrativeState` is set to 0 (Locked), no CPC service is provided by the MTAS.

### 3.2 Wholesale for CPC Configuration

The CPC service supports Wholesale. CPC is configurable on Virtual Telephony Provider level.

Wholesale for CPC is activated when the following attributes are set to 1 (Unlocked):

- The `vtasCpcAdministrativeState` attribute in the *VtasCpc* MO.
- The `mtasCpcAdministrativeState` attribute in the *MtasCpc* MO.

For more information about the Wholesale service, refer to *MTAS Wholesale Support Management Guide*.

### 3.3 Service Data Configuration

CPC service can be activated and CPC values can be assigned per subscriber by the operator over the CAI3G interface, refer to *MTAS CAI3G Interface*.





## 4 Performance Management

For measurements, related to the CPC service, refer to *Managed Object Model (MOM)*.





## 5 Fault Management

For alarms, related to the CPC service, refer to *MTAS Alarm list*.