

MTAS Announcement Management Guide

MTAS

USER GUIDE

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1 Introduction

An announcement is played for audio or video, or both, in different services provided by the MTAS. When configuring an announcement, the announcement codes and the announcement names must be set by the operator. This document lists suggested values to be set to the announcement codes.

1.1 Prerequisites

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

1.1.1 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)*

1.1.2 Conditions

The following condition must apply:

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



2 Overview

An audio announcement or a video announcement, or a combination of both, can be played for several services provided by the MTAS. Depending on the offered media provided by the User Equipment (UE) and the configuration of the MTAS to a specific service, several possible combinations of announcements can be played. The combinations are shown in Figure 1.

MTAS Configuration			
		Audio	Video
Offered Media	Audio + Video	Audio	AV Audio + AV Video
	Audio	Audio	No Announcement
	Video	No Announcement	Video

Figure 1 Played Announcement Combinations

The announcements are sent in-band, if and only if the Session Description Protocol (SDP) supports it. The type of announcement is configurable. Announcements in early media session procedure use normal SDP offer/answer exchange plus the following:

- PRACK (option tag 100rel)
- Support for Quality of Service (QoS) preconditions
- P-Early-Media header
- UPDATE

The different services send this SDP answer to the calling party in a 183 Session Progress message, modifying the To: tag so that the 183 Session Progress message is in a new dialogue.



It is not possible to play infinite final error announcements during the call setup phase. This is done to prohibit the caller from using network resources for an infinite time.

Announcements in an established session use the `re-INVITE` message. The different services send SDP to the announcement recipient in the `re-INVITE` within the dialogue associated with the established session.



3 Announcement Attributes

This section lists the services where the announcement feature is included, their announcement attributes, and suggested value. Each service Managed Object Class (MOC) includes attributes which enable or disable the announcement feature or contains attributes which point to instances of the *MtasGaAnnMO*, or both. Examples of announcement enabling attributes are *mtasAcrPlayAudioAnnouncement*, *mtasCDivPlayVideoAnnouncement*, and *mtasMmtAudioAnnouncement*.

Examples of Generic Announcement pointer attributes are *mtasOcbBCatAnnouncementName* and *mtasOcbLocalnessAnnouncementName*.

For more information about the announcement attributes, refer to *Managed Object Model (MOM)*.

3.1 Call Admission Control

Call Admission Control (CAC) includes the services Group Call Admission Control (GCAC) and User Call Admission Control (UCAC).

3.1.1 Group Call Admission Control

The announcement attributes in the GCAC service are listed in Table 1. The GCAC service is represented by the *MtasGCacMO*.

Table 1 GCAC Announcement Attributes

Attribute Name	Suggested Value
mtasGCacOrigPlayAudioAnn	0 = disabled
	1 = enabled
mtasGCacOrigPlayVideoAnn	0 = disabled
	1 = enabled
mtasGCacOrigAudioAnn	240
mtasGCacOrigVideoAnn	241
mtasGCacOrigAVAudioAnn	242
mtasGCacOrigAVVideoAnn	243



3.1.2 User Call Admission Control

The announcement attributes in the UCAC service are listed in Table 2. The UCAC service is represented by the *MtasUCac* MO.

Table 2 UCAC Announcement Attributes

Attribute Name	Suggested Value
mtasUCacOrigPlayAudioAnn	0 = disabled
	1 = enabled
mtasUCacOrigPlayVideoAnn	0 = disabled
	1 = enabled
mtasUCacOrigAudioAnn	250
mtasUCacOrigVideoAnn	251
mtasUCacOrigAVAudioAnn	252
mtasUCacOrigAVVideoAnn	253

3.2 Call Return

The announcement attributes in the Call Return service are listed in Table 3. The Call Return service is represented by the *MtasCr* MO.

Table 3 Call Return Announcement Attributes

Attribute Name	Suggested Value
mtasCrNoSavedCallAnnName	Type: String Length: 0–32
mtasCrPrivacyCallSavedAnnName	Type: String Length: 0–32
mtasCrPromptAnnName	Type: String Length: 0–32
mtasCrNoPhonePromptAnnName	Type: String Length: 0–32
mtasCrAutoAnnName	Type: String Length: 0–32



3.3 Carrier Select

The announcement attributes in the Carrier Select (CS) service are listed in Table 4. The CS service is represented by the *MtasCs* MO.

Table 4 CS Announcement Attributes

Attribute Name	Suggested Value
mtasCsLocalDisallowAudioAnnCtrl	0 = disabled
	1 = enabled
mtasCsLocalDisallowVideoAnnCtrl	0 = disabled
	1 = enabled
mtasCsDestDisallowAudioAnnCtrl	0 = disabled
	1 = enabled
mtasCsDestDisallowVideoAnnCtrl	0 = disabled
	1 = enabled
mtasCsLocalDisallowedAudioAnn	220
mtasCsLocalDisallowedVideoAnn	221
mtasCsLocalDisallowedAVAudioAnn	222
mtasCsLocalDisallowedAVVideoAnn	223
mtasCsDestDisallowedAudioAnn	224
mtasCsDestDisallowedVideoAnn	225
mtasCsDestDisallowedAVAudioAnn	226
mtasCsDestDisallowedAVVideoAnn	227

3.4 Communication Barring

The Communication Barring includes the services Anonymous Communication Rejection (ACR), Do Not Disturb Communication Barring (DNDCB), Incoming Communication Barring (ICB), and Outgoing Communication Barring (OCB).

3.4.1 Anonymous Communication Rejection

The announcement attributes in the ACR service are listed in Table 5. The ACR service is represented by the *MtasAcr* MO.

The service can also use Generic Announcement, see Section 3.9 Generic Announcement on page 15, instead of the regular announcement specified by the announcement attributes specified in the table.

*Table 5 ACR Announcement Attributes*

Attribute Name	Suggested Value
mtasAcrPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtasAcrPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtasAcrAudioAnnounceCode	150
mtasAcrVideoOnlyCode	151
mtasAcrAVAudioCode	152
mtasAcrAVVideoCode	153

3.4.2 Do Not Disturb Communication Barring

Do Not Disturb Communication Barring (DNDCB) has no own announcement attributes. It is either using generic announcement (see Section 3.9 Generic Announcement on page 15) or if no generic announcement is configured, then it is using ACR announcement (if the rule is a combination of ACR and DNDCB) or ICB announcement.

3.4.3 Incoming Communication Barring

The announcement attributes in the ICB service are listed in Table 6. The ICB service is represented by the *Mtaslcb* MO.

The service can also use Generic Announcement, see Section 3.9 Generic Announcement on page 15, instead of the regular announcement specified by the announcement attributes specified in the table.

Table 6 ICB Announcement Attributes

Attribute Name	Suggested Value
mtaslcbPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtaslcbPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtaslcbAudioAnnounceCode	170
mtaslcbVideoOnlyCode	171
mtaslcbAVAudioCode	172
mtaslcbAVVideoCode	173



3.4.4 Outgoing Communication Barring

The announcement attributes in the OCB service are listed in Table 7. The OCB service is represented by the *MtasOcb* MO.

The service can also use Generic Announcement, see Section 3.9 Generic Announcement on page 15, instead of the regular announcement specified by the announcement attributes specified in the table.

Table 7 OCB Announcement Attributes

Attribute Name	Suggested Value
mtasOcbPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtasOcbPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtasOcbAudioAnnounceCode	140
mtasOcbVideoOnlyCode	141
mtasOcbAVAudioCode	142
mtasOcbAVVideoCode	143

3.4.4.1 User Barring Category

Each User Barring Category is defined by an instance of *MtasOcbBCat* listed in Table 8, which contains attributes that specify which announcement to play.

Table 8 User Barring Category Announcement Attributes

Attribute Name	Suggested Value
mtasOcbBCatAnnouncementName	
mtasOcbBCatAnnouncementControl	0 = use attributes in MtasOcb (Table 7)
	1 = use attribute mtasOcbBCatAnnouncementName

3.4.4.2 Operator Barring Category

Each Operator Barring Category is defined by an instance of *MtasOcbOpBCat* listed in Table 9, which contains attributes that specify which announcement to play.

*Table 9 Operator Barring Category Announcement Attributes*

Attribute Name	Suggested Value
mtasOcbOpBCatAnnouncementName	
mtasOcbOpBCatAnnouncementControl	0 = use attributes in MtasOcb (Table 7)
	1 = use attribute mtasOcbOpBCatAnnouncementName

3.4.4.3 Localness Barring Category

Each Localness Barring Category is defined by configuration within MO NumAnaLocalCallTable and its children and grandchildren MOs. The announcements associated with each Localness Barring category are defined by the attributes of *MtasOcbLocalnessBCat* and listed in Table 10.

Table 10 Localness Barring Category Announcement Attributes

Attribute Name	Suggested Value
mtasOcbLocalnessBCatAnnouncementName	
mtasOcbLocalnessBCatAnnouncementControl	0 = use attributes in MtasOcb, see Table 7
	1 = use attribute mtasOcbLocalnessBCatAnnouncementName

3.5 Communication Completion

The announcement attributes in the Communication Completion (CC) service are listed in Table 11. The CC service is represented by the *MtasCc* Managed Object (MO).

Table 11 CC Announcement Attributes

Attribute Name	Suggested Value
mtasCcPlayRecallAudioAnn	0 = disabled
	1 = enabled
mtasCcPlayRecallVideoAnn	0 = disabled
	1 = enabled
mtasCcPlayRingToneAudioAnn	0 = disabled
	1 = enabled



Attribute Name	Suggested Value
mtasCcPlayRingToneVideoAnn	0 = disabled
	1 = enabled
mtasCcRecallAudioAnn	180
mtasCcRecallVideoAnn	181
mtasCcRecallAVAudioAnn	182
mtasCcRecallAVVideoAnn	183
mtasCcRingToneAudioAnn	184
mtasCcRingToneVideoAnn	185
mtasCcRingToneAVAudioAnn	186
mtasCcRingToneAVVideoAnn	187
mtasCcInvokeSuccessAudioAnn	188
mtasCcInvokeSuccessVideoAnn	189
mtasCcInvokeSuccessAVAudioAnn	190
mtasCcInvokeSuccessAVVideoAnn	191
mtasCcInvokeFailAudioAnn	192
mtasCcInvokeFailVideoAnn	193
mtasCcInvokeFailAVAudioAnn	194
mtasCcInvokeFailAVVideoAnn	195
mtasCcBusyToneAudioAnn	196
mtasCcBusyToneVideoAnn	197
mtasCcBusyToneAVAudioAnn	198
mtasCcBusyToneAVVideoAnn	199
mtasCcCallFailedAudioAnn	200
mtasCcCallFailedVideoAnn	201
mtasCcCallFailedAVAudioAnn	202
mtasCcCallFailedAVVideoAnn	203
mtasCcRetainedBusyToneAudioAnn	204
mtasCcRetainedBusyToneVideoAnn	205
mtasCcRetainedBusyToneAVAudioAnn	206
mtasCcRetainedBusyToneAVVideoAnn	207

The CC service includes the additional services Communication Completion Busy Subscriber (CCBS) and Communication Completion No Reply (CCNR).



3.5.1 Communication Completion Busy Subscriber

The announcement attributes in the CCBS service are listed in Table 12. The CCBS service is represented by the *MtasCcbs* MO.

Table 12 CCBS Announcement Attributes

Attribute Name	Suggested Value
mtasCcbsPlayInvokePromptAudioAnn	0 = disabled
	1 = enabled
mtasCcbsPlayInvokePromptVideoAnn	0 = disabled
	1 = enabled
mtasCcbslvrPlayInvPromptAudioAnn	0 = disabled
	1 = enabled
mtasCcbslvrPlayInvPromptVideoAnn	0 = disabled
	1 = enabled
mtasCcbsInvokePromptAudioAnn	210
mtasCcbsInvokePromptVideoAnn	211
mtasCcbsInvokePromptAVAudioAnn	212
mtasCcbsInvokePromptAVVideoAnn	213
mtasCcbslvrInvPromptAudioAnn	214
mtasCcbslvrInvPromptVideoAnn	215
mtasCcbslvrInvPromptAVAudioAnn	216
mtasCcbslvrInvPromptAVVideoAnn	217

3.5.2 Communication Completion No Reply

The announcement attributes in the CCNR service are listed in Table 13. The CCNR service is represented by the *MtasCcnr* MO.

Table 13 CCNR Announcement Attributes

Attribute Name	Suggested Value
mtasCcnrPlayInvokePromptAudioAnn	0 = disabled
	1 = enabled
mtasCcnrPlayInvokePromptVideoAnn	0 = disabled
	1 = enabled
mtasCcnrlvrPlayInvPromptAudioAnn	0 = disabled
	1 = enabled



Attribute Name	Suggested Value
mtasCcnrlvrPlayInvPromptVideoAnn	0 = disabled
	1 = enabled
mtasCcnrlInvokePromptAudioAnn	230
mtasCcnrlInvokePromptVideoAnn	231
mtasCcnrlInvokePromptAVAudioAnn	232
mtasCcnrlInvokePromptAVVideoAnn	233
mtasCcnrlvrInvPromptAudioAnn	234
mtasCcnrlvrInvPromptVideoAnn	235
mtasCcnrlvrInvPromptAVAudioAnn	236
mtasCcnrlvrInvPromptAVVideoAnn	237

3.6 Communication Diversion

The announcement attributes in the Communication Diversion (CDIV) service are listed in Table 14. The CDIV service is represented by the *MtasCDiv* MO.

Table 14 CDIV Announcement Attributes

Attribute Name	Suggested Value
mtasCDivPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtasCDivPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtasCDivAudioAnnounceCode	120
mtasCDivVideoAnnounceCode	121
mtasCDivAVAudioAnnounceCode	122
mtasCDivAVVideoAnnounceCode	123

3.7 Communication Waiting

The announcement attributes in the Communication Waiting (CW) service are listed in Table 15. The CW service is represented by the *MtasCw* MO.



Table 15 CW Announcement Attributes

Attribute Name	Suggested Value
mtasCwPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtasCwPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtasCwAudioAnnounceCode	100
mtasCwVideoAnnounceCode	101
mtasCwAVVideoCode	102
mtasCwAVAudioCode	103

3.8 Flexible Communication Distribution

The announcement attributes in the Flexible Communication Distribution (FCD) service are listed in Table 16. The FCD service is represented by the *MtasFcd* MO.

Table 16 FCD Announcement Attributes

Attribute Name	Suggested Value
mtasFcdPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtasFcdPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtasFcdNegPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtasFcdNegPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtasFcdAudioAnnounceCode	160
mtasFcdVideoAnnounceCode	161
mtasFcdAVAudioAnnounceCode	162
mtasFcdAVVideoAnnounceCode	163
mtasFcdNegAudioAnnounceCode	164
mtasFcdNegVideoAnnounceCode	165
mtasFcdNegAVAudioAnnounceCode	166



Attribute Name	Suggested Value
mtasFcdNegAVVideoAnnounceCode	167
mtasFcdAutoAnswerAvoidance	AutoAnswerAvoidance ⁽¹⁾

(1) See Section 3.9.8 Flexible Communication Distribution Auto-Answer Avoidance on page 19 for more details on the suggested value.

3.9 Generic Announcement

The Generic Announcement (GA) service allows the operator to associate a set of announcement parameters with a name, then use that name in other services.

For information on GA service, refer to *MTAS Generic Announcement Management Guide*.

The GA service is represented by the *MtasGa* MO, which includes the child *MtasGaAnn*. Some example instances of *MtasGaAnn* are listed in the following tables.

3.9.1 National Toll Restriction

This section presents the GA Announcement Attributes for the National Toll Restriction service. These attributes are listed in Table 17.

Table 17 GA Announcement Attributes for National Toll Restriction

Attribute Name	Suggested Value
MtasGaAnn	"NationalToll"
mtasGaAnnPlayAudioAnnouncement ["NationalToll"]	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement ["NationalToll"]	0 = disabled
	1 = enabled
mtasGaAnnAudioCode ["NationalToll"]	1500
mtasGaAnnVideoCode ["NationalToll"]	1501
mtasGaAnnAVAudioCode ["NationalToll"]	1502
mtasGaAnnAVVideoCode ["NationalToll"]	1503
mtasGaAnnCauseValue ["NationalToll"]	21



3.9.2 International Toll Restriction

This section presents the GA Announcement Attributes for the International Toll Restriction service. These attributes are listed in Table 18.

Table 18 GA Announcement Attributes for International Toll Restriction

Attribute Name	Suggested Value
MtasGaAnn	"InternationalToll"
mtasGaAnnPlayAudioAnnouncement ["InternationalToll"]	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement ["InternationalToll"]	0 = disabled
	1 = enabled
mtasGaAnnAudioCode ["InternationalToll"]	1504
mtasGaAnnVideoCode ["InternationalToll"]	1505
mtasGaAnnAVAudioCode ["InternationalToll"]	1506
mtasGaAnnAVVideoCode ["InternationalToll"]	1507
mtasGaAnnCauseValue ["InternationalToll"]	21

3.9.3 Safety Service Barring

This section presents the GA Announcement Attributes for the Safety Service Barring service. These attributes are listed in Table 19.

Table 19 GA Announcement Attributes for Safety Service Barring

Attribute Name	Suggested Value
MtasGaAnn	"SafetyServiceBarring"
mtasGaAnnPlayAudioAnnouncement ["SafetyServiceBarring"]	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement ["SafetyServiceBarring"]	0 = disabled
	1 = enabled
mtasGaAnnAudioCode ["SafetyServiceBarring"]	1508
mtasGaAnnVideoCode ["SafetyServiceBarring"]	1509
mtasGaAnnAVAudioCode ["SafetyServiceBarring"]	1510



Attribute Name	Suggested Value
mtasGaAnnAVVideoCode ["SafetyServiceBarring"]	1511
mtasGaAnnCauseValue ["SafetyServiceBarring"]	21

3.9.4 Address Policing

Address Policing includes the Long-Distance Mobile Number Policing subservice.

3.9.4.1 Long-Distance Mobile Number Policing

The Long-Distance Mobile Number subservice is represented by the *MtasApLdmnp* MO.

The GA Announcement Attributes for the Long-Distance Mobile Number Policing subservice are listed in Table 20.

Table 20 GA Announcement Attributes for Long-Distance Mobile Number Policing

Attribute Name	Suggested Value
mtasApLdmnpAnnouncementName	"MobileNumberPolicing"
MtasGaAnn	"MobileNumberPolicing"
mtasGaAnnPlayAudioAnnouncement ["MobileNumberPolicing"]	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement ["MobileNumberPolicing"]	0 = disabled
	1 = enabled
mtasGaAnnAudioCode ["MobileNumberPolicing"]	1512
mtasGaAnnVideoCode ["MobileNumberPolicing"]	1513
mtasGaAnnAVAudioCode ["MobileNumberPolicing"]	1514
mtasGaAnnAVVideoCode ["MobileNumberPolicing"]	1515
mtasGaAnnCauseValue ["MobileNumberPolicing"]	21



3.9.5 Do Not Disturb

This section presents the GA Announcement Attributes for the Do Not Disturb service. These attributes are listed in Table 21.

Table 21 GA Announcement Attributes for Do Not Disturb

Attribute Name	Suggested Value
MtasGaAnn	"DND"
mtasGaAnnPlayAudioAnnouncement ["DND"]	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement ["DND"]	0 = disabled
	1 = enabled
mtasGaAnnAudioCode ["DND"]	1516
mtasGaAnnVideoCode ["DND"]	1517
mtasGaAnnAVAudioCode ["DND"]	1518
mtasGaAnnAVVideoCode ["DND"]	1519
mtasGaAnnCauseValue ["DND"]	21

3.9.6 Relocation

This section presents examples of the Generic Announcement Attributes and the Provisioned Segmented Announcement Attributes for the Relocation service, in a "changed number" scenario.

The examples in Table 22 suggest CM attribute settings when the language tag `en-gb` (RFC5646) is used. That is, MLS is enabled and a valid MMTel AS Voice Base license is activated.

Table 22 Example of CM Settings for the Relocation Service

Attribute Name	Suggested Value
MtasGaAnn	Relocation_OcbChangedNumber_en_gb
mtasGaAnnPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtasGaAnnAudioCode	1520
mtasGaAnnVideoCode	1521
mtasGaAnnAVAudioCode	1522



Attribute Name	Suggested Value
mtasGaAnnAVVideoCode	1523
mtasGaAnnCauseValue	21
MtasAnnouncementSegment	new_country_code
MtasAnnouncementSegment	new_area_code
MtasAnnouncementSegment	new_local_number

3.9.7 Explicit Communication Transfer

This section presents the GA Announcement Attributes for the Explicit Communication Transfer service. These attributes are listed in Table 23.

Table 23 ECT Announcement Attributes

Attribute Name	Suggested Value
mtasEctTermAnnName	"ExplicitCommunicationTransfer"
MtasGaAnn	"ExplicitCommunicationTransfer"
mtasGaAnnPlayAudioAnnouncement ["ExplicitCommunicationTransfer"]	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement ["ExplicitCommunicationTransfer"]	0 = disabled
	1 = enabled
mtasGaAnnAudioCode ["ExplicitCommunicationTransfer"]	1524
mtasGaAnnVideoCode ["ExplicitCommunicationTransfer"]	1525
mtasGaAnnAVAudioCode ["ExplicitCommunicationTransfer"]	1526
mtasGaAnnAVVideoCode ["ExplicitCommunicationTransfer"]	1527
mtasGaAnnCauseValue ["ExplicitCommunicationTransfer"]	21

3.9.8 Flexible Communication Distribution Auto-Answer Avoidance

This section presents the GA Announcement Attributes for the Auto-Answer Avoidance feature. These attributes are listed in Table 24.

*Table 24 GA Announcement Attributes for Auto-Answer-Avoidance*

Attribute Name	Suggested Value
MtasGaAnn["AutoAnswerAvoidance"]	"AutoAnswerAvoidance"
mtasGaAnnPlayAudioAnnouncement["AutoAnswerAvoidance"]	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement["AutoAnswerAvoidance"]	0 = disabled
	1 = enabled
mtasGaAnnAudioCode["AutoAnswerAvoidance"]	1660
mtasGaAnnVideoCode["AutoAnswerAvoidance"]	1661
mtasGaAnnAVAudioCode["AutoAnswerAvoidance"]	1662
mtasGaAnnAVVideoCode["AutoAnswerAvoidance"]	1663
mtasGaAnnCauseValue["AutoAnswerAvoidance"]	0

3.9.9 Network-Provided Ring Back Tone

This section presents the GA Announcement Attributes for the Network Provided Ring Back Tone service. These attributes are listed in Table 25.

Table 25 Example of CM Settings of "sit" and "rt" Tones for Network-Provided Ring Back Tone Service

Attribute Name	Suggested Value
MtasGaAnn["RingBackTone1"]	"RingBackTone1"
mtasGaAnnPlayAudioAnnouncement["RingBackTone1"]	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement["RingBackTone1"]	0 = disabled
	1 = enabled
mtasGaAnnAudioCode["RingBackTone1"]	0
mtasGaAnnVideoCode["RingBackTone1"]	0
mtasGaAnnAVAudioCode["RingBackTone1"]	0



Attribute Name	Suggested Value
mtasGaAnnAVVideoCode["RingBackTone1"]	0
mtasGaAnnCauseValue["RingBackTone1"]	0
mtasGaAnnTone["RingBackTone1"]	sit
MtasGaAnn["RingBackTone2"]	"RingBackTone2"
mtasGaAnnPlayAudioAnnouncement["RingBackTone2"]	0 = disabled
	1 = enabled
mtasGaAnnPlayVideoAnnouncement["RingBackTone2"]	0 = disabled
	1 = enabled
mtasGaAnnAudioCode["RingBackTone2"]	0
mtasGaAnnVideoCode["RingBackTone2"]	0
mtasGaAnnAVAudioCode["RingBackTone2"]	0
mtasGaAnnAVVideoCode["RingBackTone2"]	0
mtasGaAnnCauseValue["RingBackTone2"]	0
mtasGaAnnTone["RingBackTone2"]	rt

3.9.10

Generic Announcement for CDIV Related SSC Codes

This section describes the GA announcement attributes for the CDIV-related SSC services.

The attributes in Table 26 make it possible to refer to predefined segmented announcement to be played if there is call diversion activation to new forward-to number through SSC and a specific announcement for the error case when the user tries to activate call diversion to own number.



Table 26 SSC CDIV-Related Generic Announcement Attributes

MOC	Attribute Name	Attribute Description
MtasSscCfb	mtasSscCfbPosActGenAnn	Pointer to the playable MtasGaAnn generic announcement instance ⁽¹⁾ when Busy case call diversion activation through SSC is successful.
MtasSscCfCond	mtasSscCfCondPosActGenAnn	Pointer to the playable MtasGaAnn generic announcement instance ⁽¹⁾ when Conditional case call diversion activation through SSC is successful.
MtasSscCfni	mtasSscCfniPosActGenAnn	Pointer to the playable MtasGaAnn generic announcement instance ⁽¹⁾ when Not-Logged-in case call diversion activation through SSC is successful.
MtasSscCfnr	mtasSscCfnrPosActGenAnn	Pointer to the playable MtasGaAnn generic announcement instance ⁽¹⁾ when No-Reply case call diversion activation through SSC is successful.
MtasSscCfnrc	mtasSscCfnrcPosActGenAnn	Pointer to the playable MtasGaAnn generic announcement instance ⁽¹⁾ when Not-Reachable case call diversion activation through SSC is successful.



Table 26 *SSC CDIV-Related Generic Announcement Attributes*

MOC	Attribute Name	Attribute Description
MtasSscCfu	mtasSscCfuPosActGenAnn	Pointer to the playable MtasGaAnn generic announcement instance ⁽¹⁾ when Unconditional case call diversion activation through SSC is successful.
MtasSsc	mtasSscCfNegActOwnGenAnn	Pointer to the playable MtasGaAnn generic announcement instance ⁽¹⁾ when call diversion activation to own number through SSC performed.

(1) These attribute values refer to an MtasGaAnn instance. The MtasGaAnn instance referred can describe either: (i) a fixed announcement, or (ii) a segmented announcement which contains exactly one variable segment. The name of the variable segment must be "ForwardedToNumber" and the type of the variable segment must be "T_digits". The instance must be created in advance when the GenAnn pointer attribute is set.

Example 1 describes how to configure a segmented announcement for call forwarding services:



```
objectClass: MtasBuiltInVariableType
MtasBuiltInVariableType: T_digits
mtasBuiltInVariableTypeTypeString: digits

objectClass: MtasAnnouncementVariable
MtasAnnouncementVariable: ForwardedToNumber
mtasAnnouncementVariableType: T_digits
#Variable Announcement - variable part

objectClass: MtasAnnouncementSegment
MtasAnnouncementSegment: ForwardedToNumber
mtasAnnouncementSegmentType: 1
#Variable Announcement - fixed part

objectClass: MtasAnnouncementSegment
MtasAnnouncementSegment: 1014
mtasAnnouncementSegmentType: 0

objectClass: MtasSegmentVector
MtasSegmentVector: CFActVector1
mtasSegmentVectorLanguages: undefined
mtasSegmentVectorLanguages: en
mtasSegmentVectorSegments: 1014
mtasSegmentVectorSegments: ForwardedToNumber

objectClass: MtasGaAnn
MtasGaAnn: CFSscActivationDynamicAnn
mtasGaAnnPlayVideoAnnouncement: 0
mtasGaAnnAVAudioCode: 0
mtasGaAnnPlayAudioAnnouncement: 1
mtasGaAnnAVVideoCode: 0
mtasGaAnnCauseValue: 0
mtasGaAnnAudioCode: 0
mtasGaAnnSegmentVectors: CFActVector1
mtasGaAnnVideoCode: 0
```

3.10 Hold Communication

The announcement attributes in the Hold Communication (Hold) service are listed in Table 27. The Hold service is represented by the *MtasHold* MO.

The announcements for the Hold service are cyclically repeated during a call.

Table 27 Hold Announcement Attributes

Attribute Name	Suggested Value
mtasHoldAudioAnnouncement	0 = disabled
	1 = enabled



Attribute Name	Suggested Value
mtasHoldVideoAnnouncement	0 = disabled
	1 = enabled
mtasHoldAudioCode	130
mtasHoldVideoOnlyCode	131
mtasHoldAVAudioCode	132
mtasHoldAVVideoCode	133

3.11 Multimedia Telephony

The announcement attributes in the Multimedia Telephony (MMTel) service are listed in Table 28. The MMTel service is represented by the *MtasMmt* MO.

Table 28 MMTel Announcement Attributes

Attribute Name	Suggested Value
mtasMmtAudioAnnouncement	0 = disabled
	1 = enabled
mtasMmtVideoAnnouncement	0 = disabled
	1 = enabled
mtasMmtAudioAnnounceCode	110
mtasMmtVideoOnlyCode	111
mtasMmtAVAudioCode	112
mtasMmtAVVideoCode	113

3.12 Network Announcement

The Network Announcement (NA) service is represented by the *MtasNa* MO which includes the children *MtasNaAnn* for the originating MTAS, and *MtasNaAnnT* for the terminating MTAS. For each created *MtasNaAnn* and *MtasNaAnnT* MO, a new response code is created. There can be up to 300 instances of the *MtasNaAnn* MO and 300 instances of the *MtasNaAnnT* MO.

MRF dimensioning issues must be considered before activating NA on SIP responses that can cause mass signaling to MRF resources. For instance, SIP 500 and 503 responses that are received in network overload conditions. The attributes for *MtasNaAnn* and *MtasNaAnnT* are listed in Table 29.



Table 29 NA Announcement Attributes

Originating or Terminating	Attribute Name	Suggested Value
Originating MTAS	mtasNaAnnPlayAudioAnnouncement	0 = disabled
		1 = enabled
	mtasNaAnnPlayVideoAnnouncement	0 = disabled
		1 = enabled
	mtasNaAnnAudioCode	20400, 20401, 20402, and so on, up to 20699
	mtasNaAnnVideoOnlyCode	21400, 21401, 21402, and so on, up to 21699
	mtasNaAnnAVAudioCode	22400, 22401, 22402, and so on, up to 22699
Terminating MTAS	mtasNaAnnTPlayAudioAnnouncement	0 = disabled
		1 = enabled
	mtasNaAnnTPlayVideoAnnouncement	0 = disabled
		1 = enabled
	mtasNaAnnTAudioCode	30400, 30401, 30402, and so on, up to 30699
	mtasNaAnnTVideoOnlyCode	31400, 31401, 31402, and so on, up to 31699
	mtasNaAnnTAVAudioCode	32400, 32401, 32402, and so on, up to 32699
	mtasNaAnnTAVVideoCode	33400, 33401, 33402, and so on, up to 33699

Examples of announcement attribute values for three network failure scenarios are listed in Table 30.

Table 30 Example Announcement Attribute Values

Attribute Name	SIP Response Code 400	SIP Response Code 401	SIP Response Code 699
	Value for MtasNaAnn = 400 and MtasNaAnnT = 400	Value for MtasNaAnn = 401 and MtasNaAnnT = 401	Value for MtasNaAnn = 699 and MtasNaAnnT = 699
mtasNaAnnAudioCode	20400	20401	20699



Table 30 Example Announcement Attribute Values

Attribute Name	SIP Response Code 400	SIP Response Code 401	SIP Response Code 699
	Value for MtasNaAnn = 400 and MtasNaAnnT = 400	Value for MtasNaAnn = 401 and MtasNaAnnT = 401	Value for MtasNaAnn = 699 and MtasNaAnnT = 699
mtasNaAnnVideoOnlyCode	21400	21401	21699
mtasNaAnnAVAudioCode	22400	22401	22699
mtasNaAnnAVVideoCode	23400	23401	23699
mtasNaAnnTAudioCode	30400	30401	30699
mtasNaAnnTVideoOnlyCode	31400	31401	31699
mtasNaAnnTAVAudioCode	32400	32401	32699
mtasNaAnnTAVVideoCode	33400	33401	33699

3.13 Parlay X

The announcement attributes in the Parlay X service are listed in Table 31. The Parlay X service is represented by the *MtasParlayX* MO.

Table 31 Parlay X Announcement Attributes

Attribute Name	Suggested Value
mtasParlayX3pccPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtasParlayX3pccPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtasParlayX3pccSetupAudioAnnounceCode	270
mtasParlayX3pccSetupVideoAnnounceCode	271
mtasParlayX3pccSetupAVAudioAnnounceCode	272
mtasParlayX3pccSetupAVVideoAnnounceCode	273
mtasParlayX3pccRingToneAudioAnnounceCode	274
mtasParlayX3pccRingToneVideoAnnounceCode	275
mtasParlayX3pccRingToneAVAudioAnnounceCode	276
mtasParlayX3pccRingToneAVVideoAnnounceCode	277



Attribute Name	Suggested Value
mtasParlayX3pccSetupFailureAudioAnnounceCode	278
mtasParlayX3pccSetupFailureVideoAnnounceCode	279
mtasParlayX3pccSetupFailureAVAudioAnnounceCode	280
mtasParlayX3pccSetupFailureAVVideoAnnounceCode	281

3.14 Short Number Dialing

The announcement attributes in the Short Number Dialing (SND) service are listed in Table 32. The SND service is represented by the *MtasSnd* MO.

Table 32 *SND Announcement Attributes*

Attribute Name	Suggested Value
mtasSndPlayAudioAnnouncement	0 = disabled
	1 = enabled
mtasSndPlayVideoAnnouncement	0 = disabled
	1 = enabled
mtasSndAudioCode	260
mtasSndVideoCode	261
mtasSndAVAudioCode	262
mtasSndAVVideoCode	263

3.15 Supplementary Service Codes

The announcement attributes in the SSC service are listed in Table 33. The SSC service is represented by the *MtasSsc* MO.

Table 33 *SSC Announcement Attributes*

Supplementary Service	Attribute Name	Suggested Value
Used for all services	mtasSscIntComplexActiv	1000
	mtasSscIntComplexDeactiv	1001
	mtasSscMrfpAnnouncements	0 = disabled
		1 = enabled
	mtasSscNegAnnCode	1003



Table 33 SSC Announcement Attributes

Supplementary Service	Attribute Name	Suggested Value
Communication Forwarding Unconditional (CFU)	mtasSscCfuPosActAnn	1010
	mtasSscCfuPosDeactAnn	1011
	mtasSscCfuPosIntAnnAct	1012
	mtasSscCfuPosIntAnnDeact	1013
	mtasSscCfuPosVerAnnAct	1014
	mtasSscCfuPosVerAnnDeact	1015
Communication Forwarding Conditional (CFCOND)	mtasSscCfCondPosActAnn	1016
	mtasSscCfCondPosDeactAnn	1017
Communication Forwarding on Busy (CFB)	mtasSscCfbPosActAnn	1020
	mtasSscCfbPosDeactAnn	1021
	mtasSscCfbPosIntAnnAct	1022
	mtasSscCfbPosIntAnnDeact	1023
	mtasSscCfbPosVerAnnAct	1024
	mtasSscCfbPosVerAnnDeact	1025
Communication Forwarding on No Reply (CFNR)	mtasSscCfnrPosActAnn	1030
	mtasSscCfnrPosDeactAnn	1031
	mtasSscCfnrPosIntAnnAct	1032
	mtasSscCfnrPosIntAnnDeact	1033
	mtasSscCfnrPosVerAnnAct	1034
	mtasSscCfnrPosVerAnnDeact	1035
OCB	mtasSscOcbPosActAnn	1040
	mtasSscOcbPosDeactAnn	1041
	mtasSscOcbPosIntAnnAct	1042
	mtasSscOcbPosIntAnnDeact	1043
ACR	mtasSscAcrPosActAnn	1050
	mtasSscAcrPosDeactAnn	1051
	mtasSscAcrPosIntAnnAct	1052
	mtasSscAcrPosIntAnnDeact	1053



Table 33 SSC Announcement Attributes

Supplementary Service	Attribute Name	Suggested Value
Communication Forwarding Not Reachable (CFNRc)	mtasSscCfnrcPosActAnn	1060
	mtasSscCfnrcPosDeactAnn	1061
	mtasSscCfnrcPosIntAnnAct	1062
	mtasSscCfnrcPosIntAnnDeact	1063
	mtasSscCfnrcPosVerAnnAct	1064
	mtasSscCfnrcPosVerAnnDeact	1065
CDIVAll	mtasSscCDivAllPosIntAnnNone	1070
	mtasSscCDivAllPosIntAnnPre	1071
	mtasSscCDivAllPosIntAnnCfu	1072
	mtasSscCDivAllPosIntAnnCfb	1073
	mtasSscCDivAllPosIntAnnCfnr	1074
	mtasSscCDivAllPosIntAnnElse	1075
	mtasSscCDivAllPosDeactAnn	1076
Originating Identification Presentation (OIP)	mtasSscOipPosActAnn	1080
	mtasSscOipPosDeactAnn	1081
	mtasSscOipPosIntAnnAct	1082
	mtasSscOipPosIntAnnNotAct	1083
Originating Identification Restriction (OIR)	mtasSscOirPosActAnn	1090
	mtasSscOirPosDeactAnn	1091
	mtasSscOirPosIntAnnPerm	1092
	mtasSscOirPosIntAnnNotAct	1093
	mtasSscOirPosIntAnnNRestrict	1094
	mtasSscOirPosIntAnnRestrict	1095
Terminating Identification Presentation (TIP)	mtasSscTipPosActAnn	1100
	mtasSscTipPosDeactAnn	1101
	mtasSscTipPosIntAnnAct	1102
	mtasSscTipPosIntAnnNotAct	1103



Table 33 SSC Announcement Attributes

Supplementary Service	Attribute Name	Suggested Value
Terminating Identification Restriction (TIR)	mtasSscTirPosActAnn	1110
	mtasSscTirPosDeactAnn	1111
	mtasSscTirPosIntAnnPerm	1112
	mtasSscTirPosIntAnnNotAct	1113
	mtasSscTirPosIntAnnNRestrict	1114
	mtasSscTirPosIntAnnRestrict	1115
Calling Name Identity Presentation (CNIP)	mtasSscCnipPosActAnn	1120
	mtasSscCnipPosDeactAnn	1121
	mtasSscCnipPosIntAnnAct	1122
	mtasSscCnipPosIntAnnDeact	1123
Multi-Subscriber Number (MSN)	mtasSscIdPresNegInvAnnMsnSel	1124
Communication Forwarding Unconditional to Voice Mail (CFUVM)	mtasSscCfuPosActAnnVm	1130
	mtasSscCfuPosDeactAnnVm	1131
	mtasSscCfuPosIntAnnActVm	1132
	mtasSscCfuPosIntAnnDeactVm	1133
	mtasSscCDivAllPosIntAnnCfuVm	1134
Communication Forwarding on Busy to Voice Mail (CFBVM)	mtasSscCfbPosActAnnVm	1140
	mtasSscCfbPosDeactAnnVm	1141
	mtasSscCfbPosIntAnnActVm	1142
	mtasSscCfbPosIntAnnDeactVm	1143
	mtasSscCDivAllPosIntAnnCfbVm	1144
Communication Forwarding on Busy and No Reply to Voice Mail (CFBNRVM)	mtasSscCfbnrPosActAnnVm	1145
	mtasSscCfbnrPosDeactAnnVm	1146
	mtasSscCfbnrPosIntAnnActVm	1147
	mtasSscCfbnrPosIntAnnDeactVm	1148
Communication Forwarding on No Reply to Voice Mail (CFNRVM)	mtasSscCfnrPosActAnnVm	1150
	mtasSscCfnrPosDeactAnnVm	1151
	mtasSscCfnrPosIntAnnActVm	1152
	mtasSscCfnrPosIntAnnDeactVm	1153
	mtasSscCDivAllPosIntAnnCfnrVm	1154



Table 33 SSC Announcement Attributes

Supplementary Service	Attribute Name	Suggested Value
Communication Waiting (CW)	mtasSscCwPosActAnn	1160
	mtasSscCwPosDeactAnn	1161
	mtasSscCwPosIntAnnAct	1162
	mtasSscCwPosIntAnnDeact	1163
Malicious Communication Identification (MCID)	mtasSscMcidPosInvAnn	1170
	mtasSscMcidNegInvAnn	1171
Communication Completion Busy Subscriber (CCBS)	mtasSscCcbsPosIntAnnQEmpty	1180
	mtasSscCcbsPosIntAnnQNtEmpty	1181
	mtasSscCcbsPosRevokeAnnQ	1182
Communication Completion No Reply (CCNR)	mtasSscCcnrPosIntAnnQNtEmpty	1190
	mtasSscCcnrPosIntAnnQEmpty	1191
	mtasSscCcnrPosRevokeAnnQ	1192
Dynamic Black List	mtasSscDbIPosInvAnn	1200
	mtasSscDbINegInvAnnNoCall	1201
	mtasSscDbINegInvAnnMaxLen	1202
	mtasSscDbIsPosDeactAnn	1203
	mtasSscDbIPosIntAnnAct	1204
	mtasSscDbIPosIntAnnDeact	1205
Faulty PIN	mtasSscAnnFaultyPin	1210
	mtasSscAnnDefaultPinNotAllowed	1211
	mtasSscAnnPinLocked	1212
	mtasSscPosModAnnPin	1213
Malicious Communication Rejection	mtasSscMcrPosDeactAnn	1220
	mtasSscMcrPosIntAnnActMcr	1221
	mtasSscMcrPosIntAnnDeactMcr	1222
	mtasSscMcrPosInvAnnMcr	1223
	mtasSscMcrNegInvAnnMcrMaxLen	1224
	mtasSscMcrNegInvAnnMcrNoCall	1225
Do Not Disturb Communication Barring (DND CB)	mtasSscDndCbPosActAnn	1226
	mtasSscDndCbPosDeactAnn	1227
	mtasSscDndCbPosIntAnnAct	1228
	mtasSscDndCbPosIntAnnDeact	1229



Table 33 SSC Announcement Attributes

Do Not Disturb Communication Forwarding (DNDCF)	mtasSscDndCfPosActAnn	1230
	mtasSscDndCfPosDeactAnn	1231
	mtasSscDndCfPosIntAnnAct	1232
	mtasSscDndCfPosIntAnnDeact	1233
	mtasSscCDivAllPosIntAnnDndCf	1238
	mtasSscDndCfPosVerAnnAct	1240
	mtasSscDndCfPosVerAnnDeact	1241
Do Not Disturb Communication Forwarding to Voice Mail (DNDCFVM)	mtasSscDndCfPosActAnnVm	1234
	mtasSscDndCfPosDeactAnnVm	1235
	mtasSscDndCfPosIntAnnActVm	1236
	mtasSscDndCfPosIntAnnDeactVm	1237
	mtasSscDndCfPosIntAnnVmCDivAll	1239
Flexible Communication Distribution Divert Primary (FCDDP)	mtasSscFcdDpPosActAnn	1250
	mtasSscFcdDpPosDeactAnn	1251
	mtasSscFcdDpPosIntAnnAct	1252
	mtasSscFcdDpPosIntAnnDeact	1253
	mtasSscFcdDpPosVerAnnAct	1254
	mtasSscFcdDpPosVerAnnDeact	1255
Explicit Communication Transfer (ECT)	mtasSscEctPosInvAnn	1260
	mtasSscEctPosIntAnn	1261
	mtasSscEctNegInvAnn	1262
	mtasSscEctNegIntAnn	1263
Communication Forwarding on Not Logged in (CFNL)	mtasSscCfnlPosActAnn	1270
	mtasSscCfnlPosDeactAnn	1271
	mtasSscCfnlPosIntAnnAct	1272
	mtasSscCfnlPosIntAnnDeact	1273
	mtasSscCfnlPosVerAnnAct	1274
	mtasSscCfnlPosVerAnnDeact	1275
Communication Forwarding on Not Logged in to Voice Mail (CFNLVM)	mtasSscCfnlPosActAnnVm	1280
	mtasSscCfnlPosDeactAnnVm	1281
	mtasSscCfnlPosIntAnnActVm	1282
	mtasSscCfnlPosIntAnnDeactVm	1283
	mtasSscCfnlPosVerAnnDeactVm	1284

*Table 33 SSC Announcement Attributes*

Hotline	mtasSscHotlinePosActAnn	1290
	mtasSscHotlinePosDeactAnn	1291
	mtasSscHotlinePosIntAnnAct	1292
	mtasSscHotlinePosIntAnnDeact	1293
	mtasSscHotlinePosActAnnVm	1294
	mtasSscHotlinePosDeactAnnVm	1295
	mtasSscHotlinePosIntAnnActVm	1296
	mtasSscHotlinePosIntAnnDeactVm	1297
Call Return	mtasSscCrComSyntInv	Type: String Length: 0–50
	mtasSscCrAnnComSyntInv	Type: String Length: 0–50

3.16 Number Portability Service

This section presents the GA announcement attributes for the Number Portability Service. These attributes are listed in Table 34.

Table 34 Number Portability Announcement Attributes

Attribute Name	Suggested Value
mtasGaAnn	NumPort:RN (Routing Number; if RN contains *, +, and #. These characters are to be replaced with s, p, and h, respectively.)
mtasGaAnnPlayAudioAnnouncement	1
mtasGaAnnPlayVideoAnnouncement	0
mtasGaAnnAudioCode	61090
mtasGaAnnVideoCode	0
mtasGaAnnAVAudioCode	0
mtasGaAnnAVVideoCode	0
mtasGaAnnCauseValue	0