ETSI TS 124 484 V15.7.0 (2020-10)

LTE;
Mission Critical Services (MCS) configuration management;
Protocol specification
(3GPP TS 24.484 version 15.7.0 Release 15)

Reference
RTS/TSGC-0124484vf70

Keywords
LTE

ETSI

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Foreword

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1 Scope

The present document specifies the configuration management documents and protocols needed to support Mission critical service online configuration over the CSC-4 and CSC-5 reference points and the procedures to support Mission critical service offline configuration over the CSC-11and CSC-12 reference points.

Mission critical services include:

- Mission Critical Push To Talk (MCPTT);
- Mission Critical Video (MCVideo); and
- Mission Critical Data (MCData).

Configuration management documents defined in the present document includes:

- MC UE initial configuration document;
- MCPTT UE configuration document;
- MCPTT user profile configuration document;
- MCPTT service configuration document;
- MCVideo UE configuration document;
- MCVideo user profile configuration document;
- MCVideo service configuration document;
- MCData UE configuration document;
- MCData user profile configuration document; and
- MCData service configuration document.

Mission critical services are services that require preferential handling compared to normal telecommunication services, e.g. in support of police or fire brigade.

The Mission critical services can be used for public safety applications and also for general commercial applications (e.g., utility companies and railways).

The present document is applicable to an MC UE supporting the configuration management client functionality, to application servers supporting the configuration management server functionality, and to application servers supporting the:

- MCPTT server functionality;
- MCVideo server functionality; or
- MCData server functionality.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies. In the case of a reference to a 3GPP document (including a GSM document), a non-specific reference implicitly refers to the latest version of that document *in the same Release as the present document*.

[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

[2] OMA OMA-TS-XDM_Core-V2_1-20120403-A: "XML Document Management (XDM) Specification".

[3] 3GPP TS 22.179: "Mission Critical Push to Talk (MCPTT) over LTE; Stage 1".

[4] 3GPP TS 24.483: "Mission Critical Services (MCS) Management Object (MO)".

[5] 3GPP TS 24.481: "Mission Critical Services (MCS) group management Protocol specification".

[6] 3GPP TS 24.482: "Mission Critical Services (MCS) identity management Protocol specification".

[7] 3GPP TS 29.283: "Diameter Data Management Applications".

[8] 3GPP TS 23.379: "Functional architecture and information flows to support mission critical push to talk (MCPTT); Stage 2".

[8A] 3GPP TS 23.280: " Common functional architecture to support mission critical services; Stage 2".

[9] 3GPP TS 24.379: "Mission Critical Push to Talk (MCPTT) call control Protocol specification".

[10] 3GPP TS 24.380: "Mission Critical Push to Talk (MCPTT) media plane control Protocol specification".

[11] IETF RFC 5875: "An Extensible Markup Language (XML) Configuration Access Protocol (XCAP) Diff Event Package".

[12] 3GPP TS 24.333: "Proximity-services (ProSe) Management Objects (MO)".

[13] IETF RFC 4745: "Common Policy: A Document Format for Expressing Privacy Preferences".

[14] IETF RFC 4825: "The Extensible Markup Language (XML) Configuration Access Protocol (XCAP)".

[15] Void.

[16] 3GPP TS 23.003: "Numbering, addressing and identification".[17] OMA OMA-TS-XDM_Group-V1_1-20120403-A: "Group XDM Specification".

[18] 3GPP TS 23.303: "Proximity-based Services (ProSe); Stage 25".

[19] 3GPP TS 4.334: "Proximity-services (ProSe) User Equipment (UE) to ProSe function protocol aspects; Stage 3".

[20] IETF RFC 8101 "IANA Registration of New Session Initiation Protocol (SIP) Resource-Priority Namespace for Mission Critical Push To Talk service".

[21] IETF RFC 3986: "Uniform Resource Identifier (URI): Generic Syntax".

[22] 3GPP TS 24.229: "IP multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".

[23] IETF RFC 6050: "A Session Initiation Protocol (SIP) Extension for the Identification of Services".

[24] 3GPP TS 23.282: "Functional architecture and information flows to support Mission Critical Data (MCData); Stage 2";

[25] 3GPP TS 24.282: "Mission Critical Data (MCData) signalling control Protocol specification".

[26] 3GPP TS 24.582: "Mission Critical Data (MCData) media plane control Protocol specification".

[27] 3GPP TS 23.281: "Functional architecture and information flows to support Mission Critical Video (MCVideo); Stage 2".

[28] 3GPP TS 24.281: "Mission Critical Video (MCVideo) signalling control Protocol specification".

[29] 3GPP TS 24.581: "Mission Critical Video (MCVideo) media plane control Protocol specification".

[30] 3GPP TS 22.280: "Mission Critical Services Common Requirements (MCCoRe) Stage 1".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in 3GPP TR 21.905 [1] and the following apply. A term defined in the present document takes precedence over the definition of the same term, if any, in 3GPP TR 21.905 [1].

MCS network: A network infrastructure that supports the MCS.
Offline Configuration: Configuration of the MC UE without connectivity with any MCS network. Configuration of the MC UE is achieved using some external device (e.g. a laptop) with some kind of IP connectivity with the MC UE (e.g. over USB, WLAN, Bluetooth, etc).
Off-network operation: An MC UE operating without connectivity to an MCS network (not even via a relay).
Online Configuration: Configuration of the MC UE using the MCS network. Configuration of the MC UE is achieved using the network connectivity with the MC UE (e.g. over LTE).
On-network operation: An MC UE operating with connectivity to an MCS network including when network connectivity is achieved via a relay.

For the purposes of the present document, the following terms and definitions given in OMA OMA-TS-XDM_Core-V2_1 [2] apply:

XDMC
XDMS

For the purposes of the present document, the following terms and definitions given in 3GPP TS 22.179 [3] apply:

MCPTT administrator
MCPTT UE
MCPTT User Profile
MCPTT service
Mission Critical Push To Talk

For the purpose of the present document, the following terms and definitions given in 3GPP TS 23.179 [8] apply:

Pre-selected MCPTT user profile

3.2 Abbreviations

For the purposes of the present document, the abbreviations given in 3GPP TR 21.905 [1] and the following apply. An abbreviation defined in the present document takes precedence over the definition of the same abbreviation, if any, in 3GPP TR 21.905 [1].

AUID Application Unique IDentity
CMC Configuration Management Client
CMS Configuration Management Server
DM Device Management
E-UTRAN Evolved Universal Terrestrial Radio Access Network
FQDN Fully Qualified Domain Name
GC General Client

HTTP	HyperText Transfer Protocol
HTTPS	HyperText Transfer Protocol Secure
IANA	Internet Assigned Numbers Authority
IETF	Internet Engineering Task Force
IMEI	International Mobile Equipment Identity
IP	Internet Protocol
MC	Mission Critical
MCPTT	Mission Critical Push To Talk
MCS	Mission Critical Service
MIME	Multi-Purpose Internet Mail Extensions
MO	Management Object
OMA	Open Mobile Alliance
ProSe	Proximity Services
RFC	Request For Comments
SIP	Session Initiation Protocol
SNR	Serial Number
TAC	Type Allocation Code
UE	User Equipment
URI	Uniform Resource Identifier
URN	Uniform Resource Name
USB	Universal Serial Bus
WLAN	Wireless Local Area Network
XCAP	XML Configuration Access Protocol
XDM	XML Document Management
XDMC	XML Document Management Client
XDMS	XML Document Management Server
XML	eXtensible Markup Language
XUI	XCAP Unique Identifier

4 General

4.1 MCS service administrator configuration

4.1.1 Common configuration

An MCS service administrator can, using an MC UE configure the:

- MCS UE initial configuration document;

The format of the MCS UE initial configuration document for configuration by an MCS service administrator is defined in subclause 7.2.

To create a new configuration document on the configuration management server, the MC UE uses the procedures in subclause 6.3.2.2.

NOTE: If the MCS administrator includes a <Default-user-profile> element in the MCS UE initial configuration document as defined in subclause 7.2.2.1, at least one instance of an MCS user profile configuration document needs to first be created on the configuration management server, containing the "XUI-URI" attribute and "user-profile-index" attribute (as defined in subclause 8.3.2.1) that are included in the <Default-user-profile> element.

To update an existing configuration document on the configuration management server, the MC UE uses the procedures in subclause 6.3.4.2.

To delete an existing configuration document on the configuration management server, the MC UE uses the procedures in subclause 6.3.5.2.

To create a new MC group document on the configuration management server, the MC UE uses the procedures in 3GPP TS 24.481 [5].

To update an existing MCPTT group document on the configuration management server, the MC UE uses the procedures in 3GPP TS 24.481 [5].

To delete an existing MC group document on the configuration management server, the MC UE uses the procedures in 3GPP TS 24.481 [5].

4.1.2 MCPTT configuration

An MCPTT service administrator can, using an MCPTT UE configure the:

- MCPTT UE configuration document;
- MCPTT user profile configuration document;
- MCPTT service configuration document; and
- MCPTT group document.

The format of the MCPTT UE configuration document is defined in subclause 8.2.

The format of the MCPTT user profile configuration document is defined in subclause 8.3.

The format of the MCPTT service configuration document is defined in subclause 8.4.

The format of the MCPTT group document is defined in 3GPP TS 24.481 [5].

4.1.3 MCVideo configuration

An MCVideo service administrator can, using an MCVideo UE configure the:

- MCVideo UE configuration document;
- MCVideo user profile configuration document;
- MCVideo service configuration document; and
- MCVideo related group configuration data in the MCS group document.

The format of the MCVideo UE configuration document is defined in subclause 9.2.

The format of the MCVideo user profile configuration document is defined in subclause 9.3.

The format of the MCVideo service configuration document is defined in subclause 9.4.

The format of the MCVideo related group configuration data in the MCS group document is defined in 3GPP TS 24.481 [5].

4.1.4 MCData configuration

An MCData service administrator can, using an MCData UE configure the:

- MCData UE configuration document;
- MCData user profile configuration document;
- MCData service configuration document; and
- MCData related group configuration data in the MCS group document.

The format of the MCData UE configuration document is defined in subclause 10.2.

The format of the MCData user profile configuration document is defined in subclause 10.3.

The format of the MCData service configuration document is defined in subclause 10.4.

The format of the MCData related group configuration data in the MCS group document is defined in 3GPP TS 24.481 [5].

4.2 MC UE configuration

4.2.1 General

Upon start up the MC UE bootstraps the required information (e.g. FQDN or IP address) to locate the configuration management server for configuration of the MCS UE initial configuration management object (MO) and the default MCPTT user profile configuration management object (MO).

In order to obtain access to MC services the MC UE needs to obtain configuration data either online via the network or offline using some external device (e.g. a laptop). As part of the bootstrap process the MC UE needs to discover either:

1. the online configuration management server in the network that configures the MCS UE initial configuration MO and the default MCS user profile configuration MO(s), then the MC UE:

   a) using the URI of the configuration management server obtained from the MCS UE initial configuration MO, obtains for each MCS that is enabled:

      - the appropriateMCS UE configuration document;
      - the appropriateMCS user profile configuration document; and
      - the appropriateMCS service configuration document; and

   b) using the URI of the group management server obtained from the MCS UE initial configuration MO obtain the MCS group document; or

2. the:

   a) offline configuration management server on the external device that configures the MC UE with the:

      - MCS UE initial configuration MO;
      - appropriate MCS UE configuration MO(s);
      - appropriate MCS user profile MO(s); and
      - appropriate MCS service configuration MO(s); and

   b) offline group management server on the external device that configures the MC UE with the MCS group MO.

The mechanism to discover the online or offline configuration management server is dependent on the protocol used to manage and configure the MO and is out of scope of the present document.

4.2.2 Online configuration

4.2.2.1 General

The format of the MCS UE initial configuration MO downloaded to the MC UE during online configuration is defined in 3GPP TS 24.483 [4].

The format of the MCS group document downloaded to the MC UE during online configuration is defined in 3GPP TS 24.481 [5].

Figure 4.2.2-1 shows the MCPTT UE online configuration time sequence.

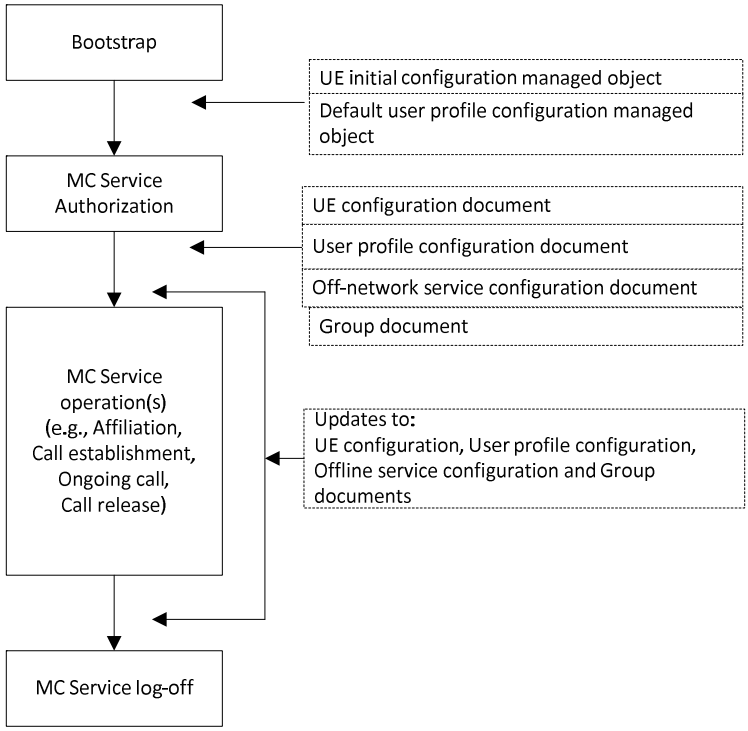

Figure 4.2.2-1 MC UE online configuration time sequence

If the MCS UE initial configuration MO has changed from the version stored in the MC UE, the updated MC UE initial configuration MO is downloaded to the MCPTT UE.

If the MCS UE initial configuration MO contains a <default-user-profile> element and the identified default MCS user profile configuration MO(s) have changed from the version stored in the MC UE, the updated default MCS user profile configuration MO(s) are downloaded to the MC UE.

NOTE 1: The default MCS user profile configuration MO(s) define the default identity(s) for the enabled mission critical service(s) and the profile of services available to the user (e.g. emergency MCPTT services) prior to user authentication.

The MC UE contacts the identity management server using the HTTPS URI stored in the MCS UE initial configuration MO and performs MC User authentication as specified in 3GPP TS 24.482 [6].

The MC UE, using the identities obtained during MC user authentication, subscribes to the MCS UE configuration document, the MCS user profile configuration document and the MCS service configuration document for each enabled MCS using the procedure for subscribing to multiple documents simultaneously using the subscription proxy function specified in subclause 6.3.13.2.2(i.e., the CMS acts as a Subscription Proxy) and subscribes to the MCS group document using the procedure specified in 3GPP TS 24.481 [5]. If these documents have been updated since the current version stored in the MC UE, then the MC UE will receive a SIP NOTIFY request with an XCAP Diff document (see IETF RFC 5875 [11]), in which case the CMC updates its local document copies . Retrieval by the MC UE using the notified HTTPS URI of the MCS group document is performed as specified in 3GPP TS 24.481 [5].

NOTE 2: The MC UE can be notified of changes to an configuration documents at any time while using the MCS.

4.2.2.2 MCPTT

The format of the MPCTT UE configuration document downloaded to the MCPTT UE during online configuration is defined in subclause 8.2.

The format of the MPCTT user profile configuration document downloaded to the MCPTT UE during online configuration is defined in subclause 8.3.

The format of the MPCTT service configuration document downloaded to the MCPTT UE during online configuration is defined in subclause 8.4.

4.2.2.3 MCVideo configuration

The format of the MCVideo UE configuration document downloaded to the MCVideo UE during online configuration is defined in subclause 9.2.

The format of the MCVideo user profile configuration document downloaded to the MCVideo UE during online configuration is defined in subclause 9.3.

The format of the MCVideo service configuration document downloaded to the MCVideo UE during online configuration is defined in subclause 9.4.

4.2.2.4 MCData configuration

The format of the MCData UE configuration document downloaded to the MCData UE during online configuration is defined in subclause 10.2.

The format of the MCData user profile configuration document downloaded to the MCData UE during online configuration is defined in subclause 10.3.

The format of the MCData service configuration document downloaded to the MCData UE during online configuration is defined in subclause 10.4.

4.2.3 Offline configuration

4.2.3.1 General

When configuring an MC UE offline the offline configuration management server will need to support the MCS administrator providing the identity(s) of the MC user for whom the MC UE is being configured so that the correct configuration data for that MCPTT user can be configured in the MOs.

The format of the MCS UE initial configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

The format of the MCS group document MO to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

NOTE: If the MCPTT service administrator includes a "DefaultUserProfile" element in the MCS UE initial configuration MO as defined in 3GPP TS 24.483 [4], at least one instance of an MCS user profile configuration MO needs to first be created on the offline configuration management server, containing the "MCPTTUserID" element and "UserProfileIndex" element (as defined in 3GPP TS 24.483 [4]) that are included in the "DefaultUserProfile" element.

Editor's Note: [C1-170137, MCImp-eMCPTT-CT] Addressing the identities element is FFS.

4.2.3.2 MCPTT

The format of the MPCTT UE configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

The format of the MPCTT user profile configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

The format of the MPCTT service configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

4.2.3.3 MCVideo configuration

The format of the MCVideo UE configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

The format of the MCVideo user profile configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

The format of the MCVideo service configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

4.2.3.4 MCData configuration

The format of the MCData UE configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

The format of the MCData user profile configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

The format of the MCData service configuration MO downloaded to the MCPTT UE during offline configuration is defined in 3GPP TS 24.483 [4].

4.3 MCS server

4.3.1 General

The MCS server obtains the appropriate MCS service configuration document that contains the mission critical organisation configured parameters that defined the behaviour of the MCS from the configuration management server.

The MCS server obtains the MCS service configuration document that contains the mission critical organisation configured parameters that defined the behaviour of the MCS from the configuration management server.

The MCS server subscribes to the MCS service configuration document for each mission critical organisation that is provisioned that is supported by the MCS server using the procedure specified in subclause 6.3.13.2.3. How the MCS server is provisioned with the identities of the mission critical organisations is out of scope of the present document.

If the MCS service configuration document has been updated since the current version stored at the MCS server, then the MCS server will receive a SIP NOTIFY request containing an HTTPS URI of the MCS service configuration document. Retrieval by the MCS server, using the notified HTTPS URI, of the MCS service configuration document is performed as specified in subclause 6.3.3.2.3.

NOTE: The MCS server can be notified of changes to the MCS service management configuration document at any time while operating the MCS.

4.3.2 MCPTT Server

The format of the MCPTT service configuration document downloaded to the MCPTT server is defined in subclause 8.4.

4.3.3 MCVideo Server

The format of the MCData service configuration document downloaded to the MCData server is defined in subclause 9.4.

4.3.4 MCData Server

The format of the MCData service configuration document downloaded to the MCData server is defined in subclause 10.4.

4.4 Configuration management server

The following applies to the configuration management server used for online configuration.

The configuration management server needs to convert the MCS UE initial configuration document received from a MCS administrator into an appropriate format for configuration of the MCS UE initial configuration MO.

If the MCS UE initial configuration MO contains a <default-user-profile> element that identifies a MCS user profile configuration document, the configuration management server needs to convert the identified MCS user profile configuration document received from a MCS administrator into an appropriate format for configuration of the MCS user profile configuration MO.

Once an MCS User Profile configuration document has been created or updated by the MC UE, the configuration management server uses the procedures specified in 3GPP TS 29.283 [7] to store MCST user profile configuration document as the user profile in the MC service user database.

In order to download the MCS user profile configuration document to an MC UE or to support an MC UE updating the MCS user profile configuration document, the configuration management server uses the procedures specified in 3GPP TS 29.283 [7] to obtain the MCS user profile from the MC service user database.

In order to be notified of changes to an MCS user profile configuration document(s) that have been subscribed to by an MC UE, the configuration management server uses the procedures specified in 3GPP TS 29.283 [7] to be notified of changes to the MCS user profile stored in the MC service user database.

In order to delete the MCS user profile when requested by an MC UE, the configuration management server uses the procedures specified in 3GPP TS 29.283 [7] to delete the MCS user profile from the MC service user database.

NOTE: The configuration management server and group management server functionality for offline configuration is out of scope of the present document.

5 Functional entities

5.1 Configuration management client (CMC)

To be compliant with the procedures in the present document the CMC shall:

- shall support the role of XCAP client as specified in IETF RFC 4825 [14];
- support the role of XDMC as specified in OMA OMA-TS-XDM_Core-V2_1 [2];
- support the procedures in subclause 6.3.1.1;
- support the procedures in subclause 6.3.2.2;
- support the procedures in subclause 6.3.3.2.2;
- support the procedures in subclause 6.3.8.2.2;
- support the procedures in subclause 6.3.11.2.2; and
- support the procedures in subclause 6.3.13.2.

The CMC may:

- support the procedures in subclause 6.2.2;
- support the procedures in subclause 6.3.4.2;
- support the procedures in subclause 6.3.5.2;
- support the procedures in subclause 6.3.6.2.2;
- support the procedures in subclause 6.3.7.2.2;
- support the procedures in subclause 6.3.9.2.2;
- support the procedures in subclause 6.3.10.2.2; and
- support the procedures in subclause 6.3.12.2.2.

5.2 Configuration management server (CMS)

To be compliant with the procedures in the present document the CMS shall:

- shall support the role of XCAP server as specified in IETF RFC 4825 [14];
- support the role of XDMS as specified in OMA OMA-TS-XDM_Core-V2_1 [2];
- support the procedures in subclause 6.2.4;
- support the procedures in subclause 6.3.1.2;
- support the procedures in subclause 6.3.2.3;
- support the procedures in subclause 6.3.3.3;
- support the procedures in subclause 6.3.4.3;
- support the procedures in subclause 6.3.5.3;
- support the procedures in subclause 6.3.6.3;
- support the procedures in subclause 6.3.7.3;
- support the procedures in subclause 6.3.8.3;
- support the procedures in subclause 6.3.9.3;
- support the procedures in subclause 6.3.10.3;
- support the procedures in subclause 6.3.11.3;
- support the procedures in subclause 6.3.12.3; and
- support the procedures in subclause 6.3.13.3.

5.3 MCS server

To be compliant with the procedures in the present document, the MCS server:

- shall support the role of XCAP client as specified in IETF RFC 4825 [14];
- shall support the role of XDMC as specified in OMA OMA-TS-XDM_Core-V2_1 [2];
- shall support the procedure in subclause 6.2.3;
- shall support the procedure in subclause 6.3.3.2.3;
- shall support the procedure in subclause 6.3.8.2.3;
- shall support the procedure in subclause 6.3.11.2.3;
- shall support the procedure in subclause 6.3.12.2.3; and
- shall support the procedure in subclause 6.3.13.2.3.

6 Procedures

6.1 Introduction

This clause specifies procedures enabling a configuration management client (CMC) and an MCS server to have the MCS configuration managed using the configuration management server (CMS).

The following procedures are defined for management of configuration management documents:

- configuration management document creation procedure;
- configuration management document retrieval procedure;
- configuration management document update procedure;
- configuration management document deletion procedure;
- configuration management document element creation or replacement procedure;
- configuration management document element deletion procedure;
- configuration management document element fetching procedure;
- configuration management document attribute creation or replacement procedure;
- configuration management document attribute deletion procedure;
- configuration management document attribute fetching procedure;
- configuration management document namespace binding fetching procedure; and
- configuration management document subscription and notification procedure.

6.2 Common procedures

6.2.1 General

This subclause contains common procedures applied on HTTP signalling specified in this document.

6.2.2 Client procedures

The CMC shall send the HTTP request over TLS connection as specified for the HTTP client in the UE in annex A of 3GPP TS 24.482 [6].

6.2.3 MCS server procedures

The MCS server shall send the HTTP request as specified for the HTTP client in the network entity in annex A of 3GPP TS 24.482 [6].

6.2.4 Configuration management server procedures

6.2.4.1 General

The CMS shall handle the HTTP request as specified for the HTTP server in annex A of 3GPP TS 24.482 [6].

The CMS shall be configured with an authorized MCS server list, containing public service identities of MCS servers of the MCS provider of the CMS.

When handling an HTTP request, the CMS shall determine the identity of the sender of the HTTP request as specified in 3GPP TS 24.482 [6], and shall use the identity of the sender of the HTTP request as an authenticated identity when performing the authorization.

The CMS shall handle SIP requests and SIP responses as specified in 3GPP TS 24.229 [22].

6.2.4.2 SIP failure case

When initiating a SIP failure response to any received SIP request, depending on operator policy, the CMS may insert a SIP Response-Source header field in accordance with the procedures in subclause 5.7.1.0 of 3GPP TS 24.229 [22], where the "role" header field parameter is set to "cms".

6.3 Configuration management procedures

6.3.1 General

6.3.1.1 Client procedures

A CMC shall support subclause 6.1.1 "*Document Management*" of OMA OMA-TS-XDM_Core-V2_1 [2] and subclause 6.3.13.2.2 for subscribing to configuration management documents.

6.3.1.2 Configuration management server procedures

A CMS shall support subclause 6.2.1 "*Document Management*", and subclause 6.2.4 "*Access Permissions*" of OMA OMA-TS-XDM_Core-V2_1 [2] and subclause 6.3.13.3 for accepting subscriptions to configuration management documents.

6.3.2 Configuration management document creation procedure

6.3.2.1 General

This subclause addresses the scenario for configuration management creation by administrators as described in 3GPP TS 23.280 [8A].

6.3.2.2 Configuration management client (CMC) procedures

In order to create a configuration management document, a CMC shall create an XML document of one of the appropriate application usages, and shall send the XML document to the network according to procedures specified in IETF RFC 4825 [14] "*Create or Replace a Document*". The CMC shall set the Request-URI of the HTTP PUT request to the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] and include the "auid" as per the appropriate application usage in clause 7.

6.3.2.3 Configuration management server (CMS) procedures

A CMS shall support receiving XML documents of the application usages according to procedures specified in IETF RFC 4825 [14] "*PUT Handling*" where the Request-URI of the HTTP PUT request identifies an XML document and include the "auid" as per the appropriate application usage in clause 7.

6.3.3 Configuration management document retrieval procedure

6.3.3.1 General

This subclause describes how retrieval of a configuration management document takes place.

6.3.3.2 Client procedures

6.3.3.2.1 General client (GC) procedures

In order to retrieve a configuration management document, a GC shall send an HTTP GET request with the Request URI that references the document to be updated to the network according to procedures specified in IETF RFC 4825 [14] "*Retrieve a Document*".

6.3.3.2.2 Configuration management client (CMC) procedures

In order to retrieve a configuration management document, a CMC shall perform the procedures in subclause 6.3.3.2.1 specified for GC. The CMC shall set the Request-URI of the HTTP GET request to the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] and include the "auid" as per the appropriate application usage in clause 7.

Subclause 7.5 specifies which configuration management documents can be retrieved from the CMS over the CSC-4 reference point.

6.3.3.2.3 MCS server procedures

In order to retrieve a configuration management document via the CSC-5 reference point, an MCS Server shall perform the procedures in subclause 6.3.3.2.1 specified for GC. The MCS server shall set the Request-URI of the HTTP GET request to identify the XML document based on configuration and include the "auid" as per the appropriate application usage.

6.3.3.3 Configuration management server procedures

A CMS shall support handling an HTTP GET request from a CMC and an MCS Server according to procedures specified in IETF RFC 4825 [14]"*GET Handling*" where the Request-URI of the HTTP GET request identifies an XML document and include the "auid" as per with the "auid" parameter set to the appropriate application usage.

6.3.4 Configuration management document update procedure

6.3.4.1 General

This subclause describes the procedures for updating of a configuration management document.

6.3.4.2 Configuration management client procedures

In order to update a configuration management document, a CMC shall create an XML document of one of the appropriate application usages, and shall send the XML document to the network according to procedures specified in IETF RFC 4825 [14] "*Create or Replace a Document*". The CMC shall set the Request-URI of the HTTP PUT request to the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] and include the "auid" as per the appropriate application usage.

6.3.4.3 Configuration management server procedures

A CMS shall support receiving an XML document of the application usages according to the procedures specified in IETF RFC 4825 [14] "*PUT Handling*" where the Request-URI of the HTTP PUT request identifies an XML document and include the "auid" as per to the appropriate application usage.

6.3.5 Configuration management document deletion procedure

6.3.5.1 General

This subclause describes deletion of a configuration management document.

6.3.5.2 Configuration management Client (CMC) procedures

In order to delete a configuration management document, a CMC shall send an HTTP DELETE request with the Request-URI of the HTTP DELETE request set to the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] along with the "auid" as per the appropriate application usage for the XML document to be deleted to the network according to procedures specified in IETF RFC 4825 [14] "*Delete a Document*".

6.3.5.3 Configuration management server (CMS) procedures

A CMS shall support handling an HTTP DELETE request from a CMC according to procedures specified in IETF RFC 4825 [14] "*DELETE Handling*" where the Request-URI of the HTTP DELETE request identifies an XML document using the "auid" as per the appropriate application usage.

6.3.6 Configuration management document element creation or replacement procedure

6.3.6.1 General

This procedure enables the CMC to create or replace an element of a configuration management document from CMS.

6.3.6.2 Client procedures

6.3.6.2.1 General client procedures

In order to create or replace an element of a configuration management document, a GC shall send an HTTP PUT request with the Request URI that references the element of the document to be created or replaced to the network according to procedures specified in IETF RFC 4825 [14] "*Create or Replace an Element*".

6.3.6.2.2 Configuration management client procedures

In order to create or replace an element of a configuration management document, a CMC shall perform the procedures in subclause 6.3.6.2.1 specified for GC. The CMC shall construct the Request-URI of the HTTP PUT request using the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] as the root of the relative path along with the "auid" as per the appropriate application usage.

6.3.6.3 Configuration management server procedures

A CMS shall support handling an HTTP PUT request from a CMC according to procedures specified in IETF RFC 4825 [14] "*PUT Handling*" where the Request-URI of the HTTP PUT request identifies an element of XML document using the "auid" as per the appropriate application usage.

6.3.7 Configuration management document element deletion procedure

6.3.7.1 General

This procedure enables the CMC to delete an element of a configuration management document from CMS.

6.3.7.2 Client procedures

6.3.7.2.1 General client procedures

In order to delete an element of a configuration management document, a GC shall send an HTTP DELETE request with the Request URI that references the element of the document to be deleted to the network according to procedures specified in IETF RFC 4825 [14] "*Delete an Element*".

6.3.7.2.2 Configuration management client procedures

In order to delete an element of a configuration management document, a CMC shall perform the procedures in subclause 6.3.7.2.1 specified for GC. The CMC shall construct the Request-URI of the HTTP DELETE request using the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] as the root of the relative path and include the "auid" as per the appropriate application usage.

6.3.7.3 Configuration management server procedures

A CMS shall support handling an HTTP DELETE request from a CMC according to procedures specified in IETF RFC 4825 [14] "*DELETE Handling*" where the Request-URI of the HTTP DELETE request identifies an element of XML document along with the "auid" as per the appropriate application usage.

6.3.8 Configuration management document element fetching procedure

6.3.8.1 General

This procedure enables the CMC or the MCS server to fetch an element of a configuration management document from the CMS.

6.3.8.2 Client procedures

6.3.8.2.1 General client procedures

In order to fetch an element of a configuration management document, a GC shall send an HTTP GET request with the Request URI that references the element of the document to be fetched to the network according to procedures specified in IETF RFC 4825 [14] "*Fetch an Element*".

6.3.8.2.2 Configuration management client procedures

In order to fetch an element of a configuration management document, a CMC shall perform the procedures in subclause 6.3.8.2.1 specified for GC. The CMC shall construct the Request-URI of the HTTP GET request using the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] as the root of the relative path along with the "auid" as per the appropriate application usage.

6.3.8.2.3 MCS server procedures

In order to fetch an element of a configuration management document, an MCS server shall perform the procedures in subclause 6.3.8.2.1 specified for GC. The MCPTT sserver shall set the Request-URI of the HTTP GET request to identify the XML document based on configuration with the "auid" as per the appropriate application usage.

6.3.8.3 Configuration management server procedures

A CMS shall support handling an HTTP GET request from CMC according to procedures specified in IETF RFC 4825 [14]"*GET Handling*" where the Request-URI of the HTTP GET request identifies an element of XML document with the "auid" as per the appropriate application usage.

6.3.9 Configuration management document attribute creation or replacement procedure

6.3.9.1 General

This procedure enables the CMC to create or replace an attribute of a configuration management document from CMS.

6.3.9.2 Client procedures

6.3.9.2.1 General client procedures

In order to create or replace an attribute of a configuration management document, a GC shall send an HTTP PUT request with the Request URI that references the element of the document to be created or replaced to the network according to procedures specified in IETF RFC 4825 [14] "*Create or Replace an Attribute*".

6.3.9.2.2 Configuration management client procedures

In order to create or replace an attribute of a configuration management document, a CMC shall perform the procedures in subclause 6.3.9.2.1 specified for GC. The CMC shall construct the Request-URI of the HTTP PUT request using the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] as the root of the relative path along with the "auid" per the appropriate application usage.

6.3.9.3 Configuration management server procedures

A CMS shall support handling an HTTP PUT request from a CMC according to procedures specified in IETF RFC 4825 [14] "*PUT Handling*" where the Request-URI of the HTTP PUT request identifies an attribute of XML document with the "auid" per the appropriate application usage in clause 7.

6.3.10 Configuration management document attribute deletion procedure

6.3.10.1 General

This procedure enables the CMC to delete an attribute of a configuration management document from the CMS.

6.3.10.2 Client procedures

6.3.10.2.1 General client procedures

In order to delete an attribute of a configuration management document, a GC shall send an HTTP DELETE request with the Request URI that references the attribute of the document to be deleted to the network according to procedures specified in IETF RFC 4825 [14] "*Delete an Attribute*".

6.3.10.2.2 Configuration management client procedures

In order to delete an attribute of a configuration management document, a CMC shall perform the procedures in subclause 6.3.10.2.1 specified for GC. The CMC shall construct the Request-URI of the HTTP DELETE request using the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] as the root of the relative path along with the "auid" per the appropriate application usage.

6.3.10.3 Configuration management server procedures

A CMS shall support handling an HTTP DELETE request from CMC according to procedures specified in IETF RFC 4825 [14] "*DELETE Handling*" where the Request-URI of the HTTP DELETE request identifies an attribute of XML document along with the "auid" perthe appropriate application usage in clause 7.

6.3.11 Configuration management document attribute fetching procedure

6.3.11.1 General

This procedure enables the CMC or the MCS server to fetch an attribute of a configuration management document from the CMS.

6.3.11.2 Client procedures

6.3.11.2.1 General client procedures

In order to fetch an attribute of a configuration management document, a GC shall send an HTTP GET request with the Request URI that references the attribute of the document to be fetched to the network according to procedures specified in IETF RFC 4825 [14] "*Fetch an Attribute*".

6.3.11.2.2 Configuration management client procedures

In order to fetch an attribute of a configuration management document, a CMC shall perform the procedures in subclause 6.3.11.2.1 specified for GC. The CMC shall construct the Request-URI of the HTTP GET request using the "CMSXCAPRootURI" configured as per 3GPP TS 24.483 [4] as the root of the relative path along with the "auid" per the appropriate application usage .

6.3.11.2.3 MCS server procedures

In order to fetch an attribute of a configuration management document, an MCS server shall perform the procedures in subclause 6.3.11.2.1 specified for GC. The MCS sserver shall set the Request-URI of the HTTP GET request to identify the XML document based on configuration with the "auid" per the appropriate application usage.

6.3.11.3 Configuration management server procedures

A CMS shall support handling an HTTP GET request from a CMC according to procedures specified in IETF RFC 4825 [14] "*GET Handling*" where the Request-URI of the HTTP GET request identifies an attribute of XML document with the "auid" per the appropriate application usagein clause 7.

6.3.12 Configuration management document namespace binding fetching procedure

6.3.12.1 General

This procedure enables the CMC or the MCS server to fetch a namespace binding of a configuration management document from the CMS.

6.3.12.2 Client procedures

6.3.12.2.1 General client procedures

In order to fetch a namespace binding of a configuration management document, a GC shall send an HTTP GET request according to procedures specified in IETF RFC 4825 [14] "*Fetch Namespace Bindings*".

6.3.12.2.2 Configuration management client procedures

In order to fetch a namespace binding of a configuration management document, a CMC shall perform the procedures in subclause 6.3.12.2.1 specified for GC. The CMC shall construct the Request-URI of the HTTP GET request to identify a namespace binding of the XML document along with the "auid" per the appropriate application usage .

6.3.12.2.3 MCS server procedures

In order to fetch a namespace binding of a configuration management document, an MCS server shall perform the procedures in subclause 6.3.12.2.1 specified for GC. The MCS sserver shall set the Request-URI of the HTTP GET request to identify a namespace binding of the XML document with the "auid" per the appropriate application usage.

6.3.12.3 Configuration management server procedures

A CMS shall support handling an HTTP GET request from a CMC according to procedures specified in IETF RFC 4825 [14] "*GET Handling*" where the Request-URI of the HTTP GET request identifies a namespace binding of XML document of the appropriate application usage.

6.3.13 Configuration management subscription and notification procedure

6.3.13.1 General

This subclause describes subscription to a configuration management document.

6.3.13.2 Client procedures

6.3.13.2.1 General client (GC) procedures

This procedure enables the CMC to subscribe to notification of changes of one or more configuration management documents defined.

This procedure enables the MCS server to subscribe to notification of changes of the MCPTT service configuration document.

6.3.13.2.2 Configuration management client procedures

In order to subscribe to Configuration management document, a CMC shall send an initial SIP SUBSCRIBE request to the network according to the UE originating procedures specified in 3GPP TS 24.229 [22] and IETF RFC 5875 [11]. In the initial SIP SUBSCRIBE request, the CMC:

a) if direct subscription is used, shall set the Request URI to a SIP URI containing:

   1) the base URI being equal to the "CMSXCAPRootURI" configured in the CMC as per 3GPP TS 24.483 [4]; and

   2) the "auid" parameter set to the appropriate application usage identifying a configuration management document;

b) if subscription to multiple documents simultaneously using the subscription proxy function is used:

   1) shall include an application/resource-lists+xml MIME body. In the application/resource-lists+xml MIME body, the CMC shall include one <entry> element for each document or element to be subscribed to, such that the "uri" attribute of the <entry> element contains a relative path reference to document in the format specified by IETF RFC 5875 [11].

   2) shall set the Request-URI to the configured public service identity for performing subscription proxy function of the CMS;

c) shall include an application/vnd.3gpp.mcptt-info+xml MIME body with the <mcptt-access-token> element set to the value of the access token received during authentication procedure as described in 3GPP TS 24.482 [6];

d) if identity hiding is required:

   1) shall perform the confidentiality protection procedures and integrity protection procedures defined in 3GPP TS 24.379 [9] for MCPTT client on the application/vnd.3gpp.mcptt-info+xml MIME body and on the application/resource-lists+xml MIME body; and

   2) shall include an application/mikey MIME body with the CSK as specified in 3GPP TS 24.379 [9];

e) shall include the ICSI value "urn:urn-7:3gpp-service.ims.icsi.mcptt" (coded as specified in 3GPP TS 24.229 [22]), in a P-Preferred-Service header field according to IETF RFC 6050 [23]; and

f) shall include the g.3gpp.icsi-ref media feature tag containing the value of "urn:urn-7:3gpp-service.ims.icsi.mcptt" in the Contact header field.

Upon receiving a SIP NOTIFY request associated with a subscription created as result of the sent initial SIP SUBSCRIBE request:

1) if identity hiding is required, the CMC shall perform the confidentiality protection procedures and integrity protection procedures defined in 3GPP TS 24.379 [9] for MC client; and

2) shall handle the SIP NOTIFY request according to IETF RFC 5875 [11].

In order to re-subscribe to notification of changes of a modified list of one or more configuration management documents; a CMC shall send a SIP re-SUBSCRIBE request to the network according to the UE originating procedures specified in 3GPP TS 24.229 [22] and IETF RFC 5875 [11]. In the SIP re-SUBSCRIBE request, the CMC:

a) if direct subscription is used, shall set the Request URI to a SIP URI containing:

1) the base URI being equal to the "CMSXCAPRootURI" configured in the CMC as per 3GPP TS 24.483 [4]; and

2) the "auid" parameter set to the appropriate application usage identifying a configuration management document as described in clause 7;

b) if subscription to multiple documents simultaneously using the subscription proxy function is used:

1) shall include an application/resource-lists+xml MIME body. In the application/resource-lists+xml MIME body, the CMC shall include one <entry> element for each document or element to be subscribed to, such that the "uri" attribute of the <entry> element contains a relative path reference to document in the format specified by IETF RFC 5875 [11].

c) if identity hiding is required, shall perform the confidentiality protection procedures and integrity protection procedures defined in 3GPP TS 24.379 [9] for MC client on the application/vnd.3gpp.mcptt-info+xml MIME body and on the application/resource-lists+xml MIME body using the CSK included in the initial SIP SUBSCRIBE request; and

d) shall include the g.3gpp.icsi-ref media feature tag containing the value of "urn:urn-7:3gpp-service.ims.icsi.mcptt" in the Contact header field.

6.3.13.2.3 MCS server procedures

In order to subscribe to an MCS service configuration document, an MCS server shall send an initial SIP SUBSCRIBE request to the network according to the originating AS procedures specified in 3GPP TS 24.229 [22] and IETF RFC 5875 [11]. In the initial SIP SUBSCRIBE request, MCS server:

a) shall set the Request URI to a SIP URI containing:

1) the base URI being equal to the public service identity of the CMS configured in the MCS server; and

2) the "auid" parameter set to the application usage identifying th MCS service configuration document;

b) shall include a P-Asserted-Identity header field containing the public service identity of the MCS server;

c) shall include the ICSI value "urn:urn-7:3gpp-service.ims.icsi.mcptt" (coded as specified in 3GPP TS 24.229 [22]), in a P-Asserted-Service header field according to IETF RFC 6050 [23]; and

d) shall include the g.3gpp.icsi-ref media feature tag containing the value of "urn:urn-7:3gpp-service.ims.icsi.mcptt" in the Contact header field.

Upon receiving a SIP NOTIFY request associated with a subscription created as result of the sent initial SIP SUBSCRIBE request, the MCS server shall handle the SIP NOTIFY request according to IETF RFC 5875 [11].

In order to re-subscribe to notification of changes to an MCS service configuration document, an MCS server shall send a SIP re-SUBSCRIBE request to the network according to the originating AS procedures specified in 3GPP TS 24.229 [22] and IETF RFC 5875 [11]. In the SIP re-SUBSCRIBE request, MCS server:

a) shall set the Request URI to a SIP URI containing:

1) the base URI being equal to the public service identity of the CMS configured in the MCS server; and

2) the "auid" parameter set to the application usage identifying an MCS service configuration document; and

b) shall include the g.3gpp.icsi-ref media feature tag containing the value of "urn:urn-7:3gpp-service.ims.icsi.mcptt" in the Contact header field.

6.3.13.3 Configuration management server procedures

6.3.13.3.1 General

The CMS procedures consist of:

a) procedures for CMS performing the subscription proxy function; and

b) procedures for CMS storing configuration management documents.

The CMS shall be configured with own public service identity for performing subscription proxy function of the CMS.

The CMS shall be configured with own public service identity for accessing documents.

6.3.13.3.2 Procedures for CMS performing the subscription function

6.3.13.3.2.1 General

The procedures for the CMS performing the subscription function.

6.3.13.3.2.2 CMC originated subscription proxy procedure

Upon reception of an initial SIP SUBSCRIBE request:

a) with the Event header field set to xcap-diff;

b) with the Request-URI set to own public service identity for performing subscription proxy function of the CMS;

c) with a P-Asserted-Identity header field not containing an identity listed in the authorized MCS server list specified in subclause 6.2.4;

d) with an application/vnd.3gpp.mcptt-info+xml MIME body containing the <mcptt-access-token> element;

e) with an application/resource-lists+xml MIME body; and

f) with the ICSI value "urn:urn-7:3gpp-service.ims.icsi.mcptt" (coded as specified in 3GPP TS 24 229 [12]), in a P-Asserted-Service header field according to IETF RFC 6050 [23];

the CMS:

a) if an <EncryptedData> XML tag is included in the application/vnd.3gpp.mcptt-info+xml MIME body and the CSK is received in an application/mikey MIME body of the initial SIP SUBSCRIBE request, shall decrypt the application/vnd.3gpp.mcptt-info+xml MIME body;

b) if an <EncryptedData> XML tag is included in the application/resource-lists+xml MIME body and the CSK is received in an application/mikey MIME body of the initial SIP SUBSCRIBE request, shall decrypt the application/resource-lists+xml MIME body;

c) shall identify the originating MCPTT ID from <mcptt-access-token> element received in the application/vnd.3gpp.mcpttinfo+xml MIME body and shall use the originating MCPTT ID as an authenticated identity when performing the authorization;

d) if the authenticated identity is not authorized to subscribe to notification of changes of any resource in the application/resource-lists+xml MIME body, shall reject the request with a SIP 403 (Forbidden) response and shall not continue with rest of the steps;

e) act as a notifier according to IETF RFC 5875 [11]. Additionally, if an XCAP URI in the "uri" attribute of the <entry> element of the application/resource-lists+xml MIME body of the initial SIP SUBSCRIBE request contains an "auid" parameter set to an application usage identifying a configuration management document as described in clause 7;

shall return the XCAP URI identifying the configuration management document in SIP NOTIFY requests associated with a subscription created as result of the received initial SIP SUBSCRIBE request.

Upon sending a SIP NOTIFY request associated with a subscription created as result of the received initial SIP SUBSCRIBE request, if the CSK is received in an application/mikey MIME body of the initial SIP SUBSCRIBE request, the CMS shall perform the confidentiality protection procedures and integrity protection procedures defined in 3GPP TS 24.379 [9] for MCPTT server.

Upon reception of a SIP re-SUBSCRIBE request:

a) with the Event header field set to xcap-diff; and

b) with an application/resource-lists+xml MIME body;

the CMS:

a) if an <EncryptedData> XML tag is included in the application/resource-lists+xml MIME body of the received SIP re-SUBSCRIBE request and the CSK was received in an application/mikey MIME body of the initial SIP SUBSCRIBE request, shall decrypt the application/resource-lists+xml MIME body; and

b) act as a notifier according to IETF RFC 5875 [11]. Additionally, if an XCAP URI in the "uri" attribute of the <entry> element of the application/resource-lists+xml MIME body of the SIP re-SUBSCRIBE request contains an "auid" parameter set to an application usage identifying a configuration management document:

and for which there is no related subscription established according to the subclause 6.3.13.3.2.3, shall return the XCAP URI identifying the configuration management document in SIP NOTIFY requests associated with a subscription created as result of the received initial SIP SUBSCRIBE request.

6.3.13.3.2.3 CMC originated subscription procedure

Upon reception of an initial SIP SUBSCRIBE request:

a) with the Event header field set to xcap-diff;

b) with the Request-URI having the base URI equal to the XCAP root URI of the CMS;

c) with a P-Asserted-Identity header field containing an identity listed in the authorized MCS server list specified in subclause 6.2.4; and

d) with the ICSI value "urn:urn-7:3gpp-service.ims.icsi.mcptt" (coded as specified in 3GPP TS 24 229 [12]), in a P-Asserted-Service header field according to IETF RFC 6050 [23];

the CMS shall act as a notifier according to IETF RFC 5875 [11].

Upon reception of a SIP re-SUBSCRIBE request with the Event header field set to xcap-diff, the CMS:

a) if the <mcptt-calling-user-id> element is included in the application/vnd.3gpp.mcptt-info+xml MIME body:

1) shall use the <mcptt-calling-user-id> element value as an authenticated identity when performing the authorization; and

2) if the authenticated identity is not authorized to subscribe to notification of changes of any document, shall reject the request with a SIP 403 (Forbidden) response and shall not continue with rest of the steps;

b) if the authenticated identity is not authorized to subscribe to notification of changes of any document, shall reject the request with a SIP 403 (Forbidden) response and shall not continue with rest of the steps; and

c) shall act as a notifier according to IETF RFC 5875 [11].

6.3.13.3.2.4 MCS server originated subscription procedure

Upon reception of an initial SIP SUBSCRIBE request:

a) with the Event header field set to xcap-diff;

b) with the Request-URI having the base URI equal to the public service identity of the CMS;

c) with a P-Asserted-Identity header field containing an identity listed in the authorized MCS server list specified in subclause 6.2.4; and

d) with the ICSI value "urn:urn-7:3gpp-service.ims.icsi.mcptt" (coded as specified in 3GPP TS 24 229 [12]), in a P-Asserted-Service header field according to IETF RFC 6050 [23];

the CMS shall act as a notifier according to IETF RFC 5875 [11].

Upon reception of a SIP re-SUBSCRIBE request:

a) with the Event header field set to xcap-diff; and

b) with an application/resource-lists+xml MIME body;

the CMS:

a) shall use URI of the P-Asserted-Identity header field as an authenticated identity when performing the authorization;

b) if the authenticated identity is not authorized to subscribe to notification of changes of any document or element in the application/resource-lists+xml MIME body, shall reject the request with a SIP 403 (Forbidden) response and shall not continue with rest of the steps; and

c) shall act as a notifier according to IETF RFC 5875 [11].

7 Common configuration management documents

7.1 Introduction

This subclause defines the structure, default document namespace, AUID, XML schema, MIME type, validation constraints and data semantics of the MCS UE initial configuration document;

7.2 MCS UE initial configuration document

7.2.1 General

The MCS UE initial configuration document is specified in this subclause. The MCS UE initial configuration document content is based on requirements of Annex A.6 of 3GPP TS 23.280 [8A], and structure and procedures of OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCS UE initial configuration in an MCS is described in 3GPP TS 24.379 [9] and 3GPP TS 24.380 [10]. The schema definition is provided in subclause 7.2.2.3.

A MCS UE initial configuration document may apply to all MC UEs of a mission critical organization or apply to specific MC UEs identified by the optional <mcptt-UE-id> element. If there is no <mcptt-UE-id> element then by default the MC UE initial configuration document applies to all MC UEs of the mission critical organization. If the MC UE is to be configured with a specific MCS UE initial configuration document that document is identified by comparing the instance ID of the MC UE with the criteria in the <mcptt-UE-id> element.

The MCS UE initial configuration document acts as a template for the device management server coresident in the CMS to generate the MCS UE initial configuration managed object. The MCS UE initial configuration document that acts as a template is referred to as a "master MCS UE initial configuration document".

The master MCS UE initial configuration document name is assigned by an MCS administrator when the document is created and is stored in the user directory of that MCS administrator. The master MCS UE initial configuration document does not directly apply to a specific MC UE, but instead acts as template that the CMS uses to generate MCS UE initial configuration managed objects of MC UEs identified by elements of the <MCPTT-UE-id> element. For MCS UE initial configuration documents that correspond to a specific MC UE, the name of the MCS UE initial configuration document is created from a value defined by the corresponding element that identifies the MCS UE within the <MCPTT-UE-id> element. For a master MCS UE initial configuration documents that does not contain a <MCPTT-UE-id> element, the name of the MCS UE initial configuration document is "DEFAULT-MCPTT-INITIAL-UE.xml".

NOTE: For historical reasons, some of the elements in the MCS UE initial configuration document uses the terminology "MCPTT", however this document is common to all MCS with some MCPTT specific elements. Not all elements that contain the terminology "MCPTT" are just MCPTT specific.

7.2.2 Coding

7.2.2.1 Structure

The MCS UE initial configuration document structure is specified in this subclause.

The <mcptt-UE- initial-configuration> document:

1) shall include a "domain" attribute;
2) may include a <mcptt-UE-id> element;
3) may include a <name> element;
4) may include a <Default-user-profile> element;
5) may include an <on-network> element;
6) may include an <off-network> element; and
7) may include any other attribute for the purposes of extensibility.

The <Default-user-profile> element shall contain:

1) a "User-ID" attribute; and
2) a "user-profile-index" attribute.

The <on-network> element:

1) shall contain a <Timers> element containing:
   a) a <T100> element;
   b) a <T101> element;
   c) a <T103> element;
   d) a <T104> element;
   e) a <T132> element; and
   f) may include any other element for the purposes of extensibility;
2) shall contain an <HPLMN> element containing:
   a) a "PLMN" attribute;
   b) a <service> element; and
   c) a list of <VPLMN> elements;
3) shall contain an <App-Server-Info> element containing:
   a) an <idms-auth-endpoint> element;
   b) an <idms-token-endpoint> element;
   c) a <http-proxy> element;
   d) a <gms> element;
   e) a <cms> element;
   f) a <kms> element; and
   g) a <tls-tunnel-auth-method> element containing:
      i) a <mutual-authentication> element;
      ii) optionally a <x509> element; and
      iii) optionally a <key> element; and
   h) may include any other element for the purposes of extensibility

4) shall contain a <GMS-URI> element;
5) shall contain a <group-creation-XUI> element;
6) shall contain a <GMS-XCAP-root-URI> element;
7) shall contain a <CMS-XCAP-root-URI> element;
8) shall contain an <integrity-protection-enabled> element; and
9) shall contain a <confidentiality-protection-enabled> element; and
10) may include any other element for the purposes of extensibility.

The <off-network> element:

1) shall contain a <Timers> element containing:
   a) a <TFG1> element;
   b) a <TFG2> element;
   c) a <TFG3> element;
   d) a <TFG4> element;
   e) a <TFG5> element.
   f) a <TFG11> element;
   g) a <TFG12> element;
   h) a <TFG13> element;
   i) a <TFG14> element;
   j) a <TFP1> element;
   k) a <TFP2> element;
   l) a <TFP3> element;
   m) a <TFP4> element;
   n) a <TFP5> element;
   o) a <TFP6> element;
   p) a <TFP7> element;
   q) a <TFB1> element;
   r) a <TFB2> element;
   s) a <TFB3> element;
   t) a <T201> element;
   u) a <T203> element;
   v) a <T204> element;
   w) a <T205> element;
   x) a <T230> element;
   y) a <T233> element;
   z) a <TFE1> element;

za) a <TFE2> element; and

zb) may include any other element for the purposes of extensibility;

2) shall contain a <Counters> element containing:

a) a <CFP1> element;

b) a <CFP3> element;

c) a <CFP4> element;

d) a <CFP6> element;

e) a <CFG11> element.

f) a <CFG12> element;

g) a <C201> element;

h) a <C204> element;

i) a <C205> element; and

j) may include any other element for the purposes of extensibility; and

3) may include any other element for the purposes of extensibility.

The <VPLMN> element shall contain:

1) a "PLMN" attribute; and

2) a <service> element.

The <service> element of the <HPLMN> element and the <VPLMN> element shall contain:

1) an <MCPTT-to-con-ref> element;

2) an <MC-common-core-to-con-ref> element; and

3) an <MC-ID-to-con-ref> element.

The <mcptt-UE-id> element:

1) may contain a list of <Instance-ID-URN> elements; and

2) may contain a list of <IMEI-range> elements.

The <IMEI-range> element:

1) shall contain a <TAC> element;

2) may contain a list of <SNR> elements; and

3) may contain <SNR-range> element.

The <SNR-range> element:

1) shall contain a <Low-SNR> element; and

2) shall contain a <High-SNR> element.

7.2.2.2 Application Unique ID

The AUID shall be set to "org.3gpp.mcptt.ue-init-config".

7.2.2.3 XML Schema

```
<?xml version="1.0" encoding="UTF-8"?>

<xs:schema xmlns:mcpttiup="urn:3gpp:mcptt:mcpttUEinitConfig:1.0"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:3gpp:mcptt:mcpttUEinitConfig:1.0"
  elementFormDefault="qualified" attributeFormDefault="unqualified">

<xs:import namespace="http://www.w3.org/XML/1998/namespace"
  schemaLocation="http://www.w3.org/2001/xml.xsd"/>

  <xs:element name="mcptt-UE-initial-configuration">
    <xs:complexType>
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="mcptt-UE-id" type="mcpttiup:MCPTTUEIDType"/>
        <xs:element name="name" type="mcpttiup:NameType"/>
        <xs:element name="Default-user-profile" type="mcpttiup:UserProfileType"/>
        <xs:element name="on-network" type="mcpttiup:On-networkType"/>
        <xs:element name="off-network" type="mcpttiup:Off-networkType"/>
        <xs:element name="anyExt" type="mcpttiup:anyExtType"/>
        <xs:any namespace="##other" processContents="lax"/>
      </xs:choice>
      <xs:attribute name="domain" type="xs:anyURI" use="required"/>
      <xs:attribute name="XUI-URI" type="xs:anyURI"/>
      <xs:attribute name="Instance-ID-URN" type="xs:anyURI"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="NameType">
    <xs:simpleContent>
      <xs:extension base="xs:token">
        <xs:attribute ref="xml:lang"/>
        <xs:attributeGroup ref="mcpttiup:IndexType"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>

  <xs:complexType name="MCPTTUEIDType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="Instance-ID-URN" type="xs:anyURI"/>
      <xs:element name="IMEI-range" type="mcpttiup:IMEI-rangeType"/>
      <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax"/>
    </xs:choice>
    <xs:attributeGroup ref="mcpttiup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="IMEI-rangeType">
    <xs:sequence>
      <xs:element name="TAC" type="mcpttiup:tacType"/>
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="SNR" type="mcpttiup:snrType"/>
        <xs:element name="SNR-range" type="mcpttiup:SNR-rangeType"/>
      </xs:choice>
      <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcpttiup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="SNR-rangeType">
    <xs:sequence>
      <xs:element name="Low-SNR" type="mcpttiup:snrType"/>
      <xs:element name="High-SNR" type="mcpttiup:snrType"/>
      <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcpttiup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:simpleType name="tac-baseType">
      <xs:restriction base="xs:decimal">
        <xs:totalDigits value="8"/>
```

```
    </xs:restriction>
</xs:simpleType>

<xs:complexType name="tacType">
  <xs:simpleContent>
    <xs:extension base="mcpttiup:tac-baseType">
      <xs:attributeGroup ref="mcpttiup:IndexType"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:simpleType name="snr-baseType">
  <xs:restriction base="xs:decimal">
    <xs:totalDigits value="6"/>
  </xs:restriction>
</xs:simpleType>

<xs:complexType name="snrType">
  <xs:simpleContent>
    <xs:extension base="mcpttiup:snr-baseType">
      <xs:attributeGroup ref="mcpttiup:IndexType"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:complexType name="UserProfileType">
    <xs:attribute name="User-ID" type="xs:anyURI" use="required"/>
    <xs:attribute name="user-profile-index" type="xs:unsignedByte" use="required"/>
    <xs:attributeGroup ref="mcpttiup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="VPLMNType">
  <xs:sequence>
    <xs:element name="service" type="mcpttiup:ServiceType"/>
  </xs:sequence>
  <xs:attribute name="PLMN" type="xs:string" use="required"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="ServiceType">
  <xs:sequence>
    <xs:element name="MCPTT-to-con-ref" type="xs:string"/>
    <xs:element name="MC-common-core-to-con-ref" type="xs:string"/>
    <xs:element name="MC-ID-to-con-ref" type="xs:string"/>
    <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="AuthMethodType">
  <xs:sequence>
    <xs:element name="mutual-authentication" type="xs:boolean"/>
    <xs:element name="x509" type="xs:string" minOccurs="0"/>
    <xs:element name="key" type="xs:string" minOccurs="0"/>
    <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
</xs:complexType>

<xs:complexType name="On-networkType">
  <xs:sequence>
    <xs:element name="Timers">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="T100" type="xs:unsignedByte"/>
          <xs:element name="T101" type="xs:unsignedByte"/>
          <xs:element name="T103" type="xs:unsignedByte"/>
          <xs:element name="T104" type="xs:unsignedByte"/>
          <xs:element name="T132" type="xs:unsignedByte"/>
          <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
          <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="HPLMN">
```

```
      <xs:complexType>
        <xs:sequence>
          <xs:element name="service" type="mcpttiup:ServiceType"/>
          <xs:element name="VPLMN" type="mcpttiup:VPLMNType" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
        <xs:attribute name="PLMN" type="xs:string" use="required"/>
      </xs:complexType>
    </xs:element>
    <xs:element name="App-Server-Info">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="idms-auth-endpoint" type="xs:anyURI"/>
          <xs:element name="idms-token-endpoint" type="xs:anyURI"/>
          <xs:element name="http-proxy" type="xs:anyURI"/>
          <xs:element name="gms" type="xs:anyURI"/>
          <xs:element name="cms" type="xs:anyURI"/>
          <xs:element name="kms" type="xs:anyURI"/>
          <xs:element name="tls-tunnel-auth-method" type="mcpttiup:AuthMethodType"/>
          <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
          <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="GMS-URI" type="xs:anyURI"/>
    <xs:element name="group-creation-XUI" type="xs:anyURI"/>
    <xs:element name="GMS-XCAP-root-URI" type="xs:anyURI"/>
    <xs:element name="CMS-XCAP-root-URI" type="xs:anyURI"/>
    <xs:element name="integrity-protection-enabled" type="xs:boolean"/>
    <xs:element name="confidentiality-protection-enabled" type="xs:boolean"/>
    <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attributeGroup ref="mcpttiup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="Off-networkType">
  <xs:sequence>
    <xs:element name="Timers">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="TFG1" type="xs:unsignedShort"/>
          <xs:element name="TFG2" type="xs:unsignedShort"/>
          <xs:element name="TFG3" type="xs:unsignedShort"/>
          <xs:element name="TFG4" type="xs:unsignedByte"/>
          <xs:element name="TFG5" type="xs:unsignedByte"/>
          <xs:element name="TFG11" type="xs:unsignedShort"/>
          <xs:element name="TFG12" type="xs:unsignedShort"/>
          <xs:element name="TFG13" type="xs:unsignedByte"/>
          <xs:element name="TFG14" type="xs:unsignedByte"/>
          <xs:element name="TFP1" type="xs:unsignedShort"/>
          <xs:element name="TFP2" type="xs:unsignedByte"/>
          <xs:element name="TFP3" type="xs:unsignedShort"/>
          <xs:element name="TFP4" type="xs:unsignedShort"/>
          <xs:element name="TFP5" type="xs:unsignedShort"/>
          <xs:element name="TFP6" type="xs:unsignedShort"/>
          <xs:element name="TFP7" type="xs:unsignedByte"/>
          <xs:element name="TFB1" type="xs:unsignedShort"/>
          <xs:element name="TFB2" type="xs:unsignedByte"/>
          <xs:element name="TFB3" type="xs:unsignedByte"/>
          <xs:element name="T201" type="xs:unsignedShort"/>
          <xs:element name="T203" type="xs:unsignedByte"/>
          <xs:element name="T204" type="xs:unsignedByte"/>
          <xs:element name="T205" type="xs:unsignedByte"/>
          <xs:element name="T230" type="xs:unsignedByte"/>
          <xs:element name="T233" type="xs:unsignedByte"/>
          <xs:element name="TFE1" type="xs:unsignedShort"/>
          <xs:element name="TFE2" type="xs:unsignedByte"/>
          <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
          <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="Counters">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="CFP1" type="xs:unsignedByte"/>
          <xs:element name="CFP3" type="xs:unsignedByte"/>
```

```
            <xs:element name="CFP4" type="xs:unsignedByte"/>
            <xs:element name="CFP6" type="xs:unsignedByte"/>
            <xs:element name="CFG11" type="xs:unsignedByte"/>
            <xs:element name="CFG12" type="xs:unsignedByte"/>
            <xs:element name="C201" type="xs:unsignedByte"/>
            <xs:element name="C204" type="xs:unsignedByte"/>
            <xs:element name="C205" type="xs:unsignedByte"/>
            <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
            <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="anyExt" type="mcpttiup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcpttiup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:attributeGroup name="IndexType">
    <xs:attribute name="index" type="xs:token"/>
  </xs:attributeGroup>

  <xs:complexType name="anyExtType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

7.2.2.4 Default Document Namespace

The default document namespace used in evaluating URIs shall be "urn:3gpp:ns:mcpttUEinitConfig:1.0".

7.2.2.5 MIME type

The MIME type for the service configuration document shall be "vnd.3gpp.mcptt-ue-init-config+xml".

7.2.2.6 Validation Constraints

If the AUID value of the document URI or node URI in the Request-URI is other than that specified in subclause 7.2.2.2, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid application id used".

If the XUI value of the document URI or node URI in the Request-URI does not match the XUI of the MCPTT UE initial configuration document URI, the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid XUI".

The MCS UE initial configuration document shall conform to the XML Schema described in subclause 7.2.2.3.

The <mcptt-UE-initial-configuration> element is the root element of the XML document. The <mcptt-UE-initial-configuration> element can contain sub-elements.

The <mcptt-UE-initial-configuration> element shall contain one <on-network> element and one <off-network> element.

If the <mcptt-UE-initial-configuration> element does not conform to one of the three choices above, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the "domain" attribute does not contain a syntactically correct domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect domain name".

If the "domain" attribute contains an unknown domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "unknown domain name".

If an <Instance-ID-URN> element of the <mcptt-UE-id> element does not conform to a valid Instance ID as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Instance ID URN" and contain the non-conformant <Instance-ID-URN> element.

If the <TAC> element of an <IMEI-range> element does not conform to a valid 8 digit Type Allocation Code as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Type Allocation Code" and contain the non-conformant <TAC> element.

If a <SNR> element of an <IMEI--range> element does not conform to a valid 6 digit Serial Number as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Serial Number" and contain the non-conformant <SNR> element.

If a <Low-SNR> element or a <High-SNR> element of a <SNR-range> element does not conform to a valid 6 digit Serial Number as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Serial Number range" and contain the non-conformant <Low-SNR> or <High-SNR> element.

If the "User-ID" attribute of the <Default-user-profile> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect User ID URI".

If the "User-ID" attribute of the <Default-user-profile> element does not contain an "XUI-URI" attribute of a MCS user profile configuration document, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "No MCS User Profile configuration document exists for the user identified by the User ID URI".

If the "user-profile-index" attribute of the <Default-user-profile> element does not contain an "user-profile-index" attribute of a MCPTT user profile configuration document, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "The user profile index does not identify a MCS User Profile configuration document identified of the user identified by the User ID URI ".

NOTE: If the MCS administrator includes a <Default-user-profile> element in the MCS UE initial configuration document, at least one instance of a MCS user profile configuration document needs to first be created on the configuration management server, containing the "XUI-URI" attribute and "user-profile-index" attribute that are included in the <Default-user-profile> element.

If any of the following elements of the <Timers> element of the <on-network> element do not conform to the range of values specified below:

a) the <T100> element contains an integer value between 0 and 255;

b) the <T101> element contains an integer value between 0 and 255;

c) the <T103> element contains an integer value between 0 and 255;

d) the <T104> element contains an integer value between 0 and 255;

e) the <T132> element contains an integer value between 0 and 255,

then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect timer value" and also contain the identity of the non-conformant timer (e.g. "T101").

If the <idms-auth-endpoint> element of the <AppServerInfo> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response

including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect identity management server URI".

If the <idms-token-endpoint> element of the <AppServerInfo> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect identity management server URI".

If the <gms> element of the <AppServerInfo> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect group management server URI".

If the <tls-tunnel-auth-method> element of the <mutual-authentication-element> of the <AppServerInfo> element is set to "true" and neither the <x509> element nor the <key> element of the <mutual-authentication-element> of the <AppServerInfo> element are present, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "mutual authentication enabled without a X.509 certificate or pre-shared key".

If the <tls-tunnel-auth-method> element of the <mutual-authentication-element> of the <AppServerInfo> element is set to "true" and both the <x509> element and the <key> element of the <mutual-authentication-element> of the <AppServerInfo> element are present, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "mutual authentication enabled with both a X.509 certificate and a pre-shared key".

If the <cms> element of the <AppServerInfo> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect configuration management server URI".

If the <kms> element of the <AppServerInfo> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect key management server URI".

If the <GMS-URI> element of the <on-network> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect GMS-URI".

If the <group-creation-XUI> element of the <on-network> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect group creation XUI".

If the <GMS-XCAP-root-URI> element of the <on-network> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect GMS XCAP root URI".

If the <CMS-XCAP-root-URI> element of the <on-network> element does not conform to a valid URI as specified in IETF RFC 3986 [21], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect CMS XCAP root URI".

If the "PLMN" attribute of the <HPLMN> element does not conform to the syntax of a valid PLMN code as defined in 3GPP TS 23.003 [16] then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect HPLMN value".

If the "PLMN" attribute of a <VPLMN> element does not conform to the syntax of a valid PLMN code as defined in 3GPP TS 23.003 [16] then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect VPLMN value" and also contain the contents of the non-conformant "PLMN" attribute.

If any of the following elements of the <Timers> element of the <off-network> element do not conform to the range of values specified below:

a) the <TFG1> element contains an integer value between 0 and 65535;

b) the <TFG2> element contains an integer value between 0 and 65535;

c) the <TFG3> element contains an integer value between 0 and 65535;

d) the <TFG4> element contains an integer value between 0 and 60;

e) the <TFG5> element contains an integer value between 0 and 255;

f) the <TFG11> element contains an integer value between 0 and 65535;

g) the <TFG12> element contains an integer value between 0 and 65535;

h) the <TFG13> element contains an integer value between 0 and 255;

i) the <TFG14> element contains an integer value between 0 and 255;

j) the <TFP1> element contains an integer value between 0 and 65535;

k) the <TFP2> element contains an integer value between 0 and 60;

l) the <TFP3> element contains an integer value between 0 and 65535;

m) the <TFP4> element contains an integer value between 0 and 65535;

n) the <TFP5> element contains an integer value between 0 and 600;

o) the <TFP6> element contains an integer value between 0 and 65535;

p) the <TFP7> element contains an integer value between 0 and 255;

q) the <TFB1> element contains an integer value between 0 and 600;

r) the <TFB2> element contains an integer value between 0 and 10;

s) the <TFB3> element contains an integer value between 0 and 60;

t) the <T201> element contains an integer value between 0 and 65535;

u) the <T203> element contains an integer value between 0 and 255;

v) the <T204> element contains an integer value between 0 and 255;

w) the <T205> element contains an integer value between 0 and 255;

x) the <T230> element contains an integer value between 0 and 255;

y) the <T233> element contains an integer value between 0 and 255;

z) the <TFE1> element contains an integer value between 0 and 65535;

za) the <TFE2> element contains an integer value between 0 and 10,

then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect timer value" and also contain the identity of the non-conformant timer (e.g. "TFG1").

If any of the following elements of the <Counters> element of the <off-network> element do not conform to the range of values specified below:

a) the <CFP1> element contains an integer value between 0 and 255;

b) the <CFP3> element contains an integer value between 0 and 255;

c) the <CFP4> element contains an integer value between 0 and 255;

d) the <CFP6> element contains an integer value between 0 and 255;

e) the <CFP11> element contains an integer value between 0 and 255;

f) the <CFP12> element contains an integer value between 0 and 255;

g) the <C201> element contains an integer value between 0 and 255;

h) the <C204> element contains an integer value between 0 and 255;

i) the <C205> element contains an integer value between 0 and 255,

then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect counter value" and also contain the identity of the non-conformant counter (e.g. "CFP1").

7.2.2.7 Data Semantics

The "domain" attribute of the <mcptt-UE-initial-configuration> element contains the domain name of the mission critical organization.

The creator of the MCS UE initial configuration document may include an <mcptt-UE-id> element in the version of the MCS UE initial configuration document that is uploaded to the CMS and may also appear in the MCS UE initial configuration document when downloaded by the MCS administrator. The <mcptt-UE-id> element does not appear in the MCS UE initial configuration managed object specified in 3GPP TS 24.483 [4] that is configured to the MC UE.. If an <mcptt-UE-id> element is included then the MCS UE initial configuration document and corresponding MCS UE initial configuration management object applies only to the MC UE(s) identified by the <mcptt-UE-id> element. If no <mcptt-UE-id> element is included then the MCS UE initial configuration document and corresponding MCS UE initial configuration management object applies to all the MC UEs of the domain.

If one or more optional <Instance-ID-URN> elements is included in the <mcptt-UE-id> element then the MCS UE initial configuration document applies to the MC UE with an instance ID equal to the instance ID contained in the <Instance-ID-URN> element.

The <TAC> element of the <IMEI-range> element contains the Type Allocation Code of the MC UE.

The optional <SNR> element of the <IMEI-range> element contains the individual serial number uniquely identifying MC UE within the Type Allocation Code contained in the <TAC> element that the MCS UE initial configuration document applies to.

If an optional <SNR-range> element is included within the <IMEI-range> element then the MCS UE initial configuration document applies to all MC UEs within the Type Allocation Code contained in the <TAC> element with the serial number equal or greater than the serial number contained in the <Low-SNR> element and less than or equal to the serial number contained in the <High-SNR> element.

If no <SNR> element nor <SNR-range> element is included within the <IMEI-range> element then the MCS UE initial configuration document applies to all the MC UE(s) with the Type Allocation Code contained within the <TAC> element of the <IMEI-range> element.

If no <mcptt-UE-id> element is included then the MCS UE initial configuration document applies to all MC UEs of the mission critical organization identified in the "domain" attribute.

The <name> element of the <mcptt-UE-initial-configuration> element contains the user displayable name of the MCS UE initial configuration document and corresponds to the "Name" element of subclause 8.2.3 in 3GPP TS 24.483 [4].

The "User-ID" attribute of the <Default-user-profile> element contains the XUI contained in the "XUI-URI" attribute of the MCPTT user profile that is intended to be used as default MCS user profile and corresponds to the "UserID" element of subclause 8.2.6 in 3GPP TS 24.483 [4].

The "user-profile-index" attribute of the <Default-user-profile> element contains an indicator for a particular MCS user profile document when multiple MCS user profiles are defined for that MC user and is of type "unsignedByte" and matches a value in a "user-profile-index" attribute of the MC user profile that is intended to be used as default MCS user profile. and corresponds to the "UserProfileIndex" element of subclause 8.2.7 in 3GPP TS 24.483 [4]

The <on-network> element contains MCS UE initial configuration data for on-network operation only.

The <off-network> element contains MC UE initial configuration data for off-network operation only.

In the <on-network> element:

1) the <Timers> element;

   a) the <T100> element contains the timer value in seconds for floor release as specified in 3GPP TS 24.380 [10] and corresponds to the "T100" element of subclause 8.2.11 in 3GPP TS 24.483 [4];

   b) the <T101> element contains the timer value in seconds for floor request as specified in 3GPP TS 24.380 [10] and corresponds to the "T101" element of subclause 8.2.12 in 3GPP TS 24.483 [4];

   c) the <T103> element contains the timer value in seconds for end of RTP media as specified in 3GPP TS 24.380 [10] and corresponds to the "T103" element of subclause 8.2.13 in 3GPP TS 24.483 [4];

   d) the <T104> element contains the timer value in seconds for floor queue position request as specified in 3GPP TS 24.380 [10] and corresponds to the "T104" element of subclause 8.2.14 in 3GPP TS 24.483 [4]; and

   e) the <T132> element contains the timer value in seconds for queued request granted MCPTT user action as specified in 3GPP TS 24.380 [10] and corresponds to the "T132" element of subclause 8.2.15 in 3GPP TS 24.483 [4].

2) the "PLMN" attribute of the <HPLMN> element contains the PLMN code of the HPLMN as defined in 3GPP TS 23.003 [16] and corresponds to the "PLMN" element of subclause 8.2.18 in 3GPP TS 24.483 [4];

3) the "PLMN" attribute of the <VPLMN> element contains the PLMN code of a VPLMN as defined in 3GPP TS 23.003 [16] and corresponds to the "PLMN element of subclause 8.2.30 in 3GPP TS 24.483 [4];

4) the <AppServerInfo> element:

   a) the <idms-auth-endpoint> element contains the URI used to contact the identity management server and corresponds to the "IDMSAuthEndpoint" element of subclause 8.2.41 in 3GPP TS 24.483 [4];

   b) the <idms-token-endpoint> element contains the URI used to contact the identity management server and corresponds to the "IDMSTokenEndpoint" element of subclause 8.2.41A in 3GPP TS 24.483 [4];

   c) the <http-proxy> element contains the URI used to contact the HTTP proxy and corresponds to the "HTTPProxy" element of subclause 8.2.41B in 3GPP TS 24.383 [4];

   d) the <gms> element contains the URI used to contact the group management server and corresponds to the "GMS" element of subclause 8.2.42 in 3GPP TS 24.483 [4];

   e) the <cms> element contains the URI used to contact the configuration management server and corresponds to the "CMS" element of subclause 8.2.43 in 3GPP TS 24.483 [4];

   f) the <kms> element contains the URI used to contact the key management server and corresponds to the "KMS" element of subclause 8.2.44 in 3GPP TS 24.483 [4]; and

   g) the <tls-tunnel-auth-method> element that contains the<mutual-authentication-element> that corresponds to the "Mutual" element of subclause 8.2.44B in 3GPP TS 24.383 [4] and when set to "true" indicates that mutual authentication is used for the TLS tunnel authentication. The <x509> element when present contains the X.509 certificate for mutual authentication for the TLS tunnel authentication and corresponds to the "X509" element of subclause 8.2.44C in 3GPP TS 24.383 [4]. The <key> element when present contains the pre-shared key for mutual authentication for the TLS tunnel authentication and corresponds to the "X509" element of subclause 8.2.44D in 3GPP TS 24.383 [4].

5) the <GMS-URI> element contains the group management service URI information to enable hiding of MCS identities, the group management service URI information contains the public service identity for performing subscription proxy function of the GMS and corresponds to the "GMSURI" element of subclause 8.2.9 in 3GPP TS 24.483 [4];

6) the <group-creation-XUI> element contains the group management server XCAP Root URI information and corresponds to the "GroupCreationXUI" element of subclause 8.2.9A in 3GPP TS 24.483 [4];

7) the <GMS-XCAP-root-URI> element contains the group management server XCAP Root URI and corresponds to the "GMSXCAPRootURI" element of subclause 8.2.9B in 3GPP TS 24.483 [4];

8) the < CMS-XCAP-root-URI> element contains the configuration management server XCAP Root URI and corresponds to the "CMSXCAPRootURI" element of subclause 8.2.9C in 3GPP TS 24.483 [4];

9) the <integrity-protection-enabled> element indicates whether integrity protection is enabled and corresponds to the "IntegrityProtection" element of subclause 8.2.44E in 3GPP TS 24.383 [4]; and

10) the <confidentiality-protection-enabled> element indicates whether integrity protection is enabled and corresponds to the "ConfidentialityProtection" element of subclause 8.2.44F in 3GPP TS 24.383 [4].

In the <off-network> element:

1) the <Timers> element:

   a) the <TFG1> element contains the timer value in milliseconds for wait for call announcement as specified in 3GPP TS 24.379 [9] and corresponds to the "TFG1" element of subclause 8.2.47 in 3GPP TS 24.483 [4];

   b) the <TFG2> element contains the timer value in milliseconds for call announcement as specified in 3GPP TS 24.379 [9] and corresponds to the "TFG2" element of subclause 8.2.48 in 3GPP TS 24.483 [4];

   c) the <TFG3> element contains the timer value in milliseconds for call probe retransmission as specified in 3GPP TS 24.379 [9]; and corresponds to the "TFG3" element of subclause 8.2.49 in 3GPP TS 24.483 [4]

   d) the <TFG4> element contains the timer value in seconds for waiting for the MCPTT user as specified in 3GPP TS 24.379 [9] and corresponds to the "TFG4" element of subclause 8.2.50 in 3GPP TS 24.483 [4];

   e) the <TFG5> element contains the timer value in seconds for not present incoming call announcements as specified in 3GPP TS 24.379 [9] and corresponds to the "TFG5" element of subclause 8.2.51 in 3GPP TS 24.483 [4];

   f) the <TFG11> element contains the timer value in milliseconds for MCPTT emergency end retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "TFG11" element of subclause 8.2.52 in 3GPP TS 24.483 [4];

   g) the <TFG12> element contains the timer value in milliseconds for MCPTT imminent peril end retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "TFG12" element of subclause 8.2.53 in 3GPP TS 24.483 [4];

   h) the <TFG13> element contains the timer value in seconds for timer for implicit priority downgrade (emergency) as specified in 3GPP TS 24.379 [9] and corresponds to the "TFG13" element of subclause 8.2.54 in 3GPP TS 24.483 [4];

   i) the <TFG14> element contains the timer value in seconds for timer for implicit priority downgrade (imminent peril) as specified in 3GPP TS 24.379 [9] and corresponds to the "TFG14" element of subclause 8.2.54A in 3GPP TS 24.483 [4];

   j) the <TFP1> element contains the timer value in milliseconds for private call request retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "TFP1" element of subclause 8.2.55 in 3GPP TS 24.483 [4];

   k) the <TFP2> element contains the timer value in seconds for waiting for call response message as specified in 3GPP TS 24.379 [9] and corresponds to the "TFP2" element of subclause 8.2.56 in 3GPP TS 24.483 [4];

   l) the <TFP3> element contains the timer value in milliseconds for private call release retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "TFP3" element of subclause 8.2.57 in 3GPP TS 24.483 [4];

   m) the <TFP4> element contains the timer value in milliseconds for private call accept retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "TFP4" element of subclause 8.2.58 in 3GPP TS 24.483 [4];

   n) the <TFP5> element contains the timer value in seconds for call release as specified in 3GPP TS 24.379 [9] and corresponds to the "TFP5" element of subclause 8.2.59 in 3GPP TS 24.483 [4];

   o) the <TFP6> element contains the timer value in milliseconds for MCPTT emergency private call cancel retransmission as specified as specified in 3GPP TS 24.379 [9] and corresponds to the "TFP6" element of subclause 8.2.60 in 3GPP TS 24.483 [4];

p) the <TFP7> element contains the timer value in seconds for waiting for any message with same call identifier as specified in 3GPP TS 24.379 [9] and corresponds to the "TFP7" element of subclause 8.2.61 in 3GPP TS 24.483 [4];

q) the <TFB1> element contains the timer value in seconds for max duration as specified in 3GPP TS 24.379 [9] and corresponds to the "TFB1" element of subclause 8.2.62 in 3GPP TS 24.483 [4];

r) the <TFB2> element contains the timer value in seconds for broadcast retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "TFB2" element of subclause 8.2.63 in 3GPP TS 24.483 [4];

s) the <TFB3> element contains the timer value in seconds for waiting for the MCPTT user as specified in 3GPP TS 24.379 [9] and corresponds to the "TFB3" element of subclause 8.2.64 in 3GPP TS 24.483 [4];

t) the <T201> element contains the timer value in milliseconds for floor request as specified in 3GPP TS 24.380 [10] and corresponds to the "T201" element of subclause 8.2.65 in 3GPP TS 24.483 [4];

u) the <T203> element contains the timer value in seconds for end of RTP media as specified in 3GPP TS 24.380 [10] and corresponds to the "T203" element of subclause 8.2.66 in 3GPP TS 24.483 [4];

v) the <T204> element contains the timer value in seconds for floor queue position request as specified in 3GPP TS 24.380 [10] and corresponds to the "T204" element of subclause 8.2.67 in 3GPP TS 24.483 [4];

w) the <T205> element contains the timer value in seconds for floor granted request as specified in 3GPP TS 24.380 [10] and corresponds to the "T205" element of subclause 8.2.68 in 3GPP TS 24.483 [4];

x) the <T230> element contains the timer value in seconds for during silence as specified in 3GPP TS 24.380 [10] and corresponds to the "T230" element of subclause 8.2.69 in 3GPP TS 24.483 [4];

y) the <T233> element contains the timer value in seconds for pending user action as specified in 3GPP TS 24.380 [10] and corresponds to the "T233" element of subclause 8.2.70 in 3GPP TS 24.483 [4];

z) the <TFE1> element contains the timer value in seconds for MCPTT emergency alert as specified in 3GPP TS 24.380 [10] and corresponds to the "TFE1" element of subclause 8.2.71 in 3GPP TS 24.483 [4]; and

za) the <TFE2> element contains the timer value in seconds for MCPTT emergency alert retransmission as specified in 3GPP TS 24.380 [10] and corresponds to the "TFE2" element of subclause 8.2.72 in 3GPP TS 24.483 [4]; and

2) the <Counters> element.

a) the <CFP1> element contains the counter value for private call request retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "CFP1" element of subclause 8.2.74 in 3GPP TS 24.483 [4];

b) the <CFP3> element contains the counter value for private call release retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "CFP3" element of subclause 8.2.75 in 3GPP TS 24.483 [4];

c) the <CFP4> element contains the counter value for private call accept retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "CFP4" element of subclause 8.2.76 in 3GPP TS 24.483 [4];

d) the <CFP6> element contains the counter value for private call accept retransmission t as specified in 3GPP TS 24.379 [9] and corresponds to the "CFP6" element of subclause 8.2.77 in 3GPP TS 24.483 [4];

e) the <CFP11> element contains the counter value for MCPTT group call emergency end retransmission ia as specified in 3GPP TS 24.379 [9] and corresponds to the "CFP11" element of subclause 8.2.78 in 3GPP TS 24.483 [4];

f) the <CFP12> element contains the counter value for MCPTT imminent peril call emergency end retransmission as specified in 3GPP TS 24.379 [9] and corresponds to the "CFP12" element of subclause 8.2.79 in 3GPP TS 24.483 [4];

g) the <C201> element contains the counter value for floor request as specified in 3GPP TS 24.380 [10] and corresponds to the "C201" element of subclause 8.2.80 in 3GPP TS 24.483 [4];

h) the <C204> element contains the counter value for floor queue position request as specified in 3GPP TS 24.380 [10] and corresponds to the "C204" element of subclause 8.2.81 in 3GPP TS 24.483 [4]; and

i) the <C205> element contains the counter valuefor floor granted request as specified in 3GPP TS 24.380 [10] and corresponds to the "C205" element of subclause 8.2.82 in 3GPP TS 24.483 [4].

7.2.2.8 Naming Conventions

The present document defines no naming conventions.

7.2.2.9 Global documents

The present document requires no global documents.

7.2.2.10 Resource interdependencies

There are no resource interdependencies.

7.2.2.11 Authorization Policies

The authorization policies for manipulating an MCS UE initial configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*".

7.2.2.12 Subscription to Changes

The MCS UE initial configuration document application usage shall support subscription to changes as specified in subclause 6.3.13.3 .

MCS UE initial configuration documents are kept as XDM collections. Therefore, it is possible to subscribe to all MCST UE initial configuration documents of a MC user according to XCAP URI construction convention of a trailing '/', as specified in IETF RFC 5875 [11].

8 MCPTT configuration management documents

8.1 Introduction

This subclause defines the structure, default document namespace, AUID, XML schema, MIME type, validation constraints and data semantics following documents;

MCPTT UE configuration document;

MCPTT user profile configuration document; and

MCPTT service configuration document.

8.2 MCPTT UE configuration document

8.2.1 General

The MCPTT UE configuration document is specified in this subclause. The MCPTT UE configuration document content is based on requirements of Annex A.2 of 3GPP TS 23.379 [8], in accordance with OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCPTT UE configuration document in the MCPTT service is described in 3GPP TS 24.379 [9] and 3GPP TS 24.380 [10]. The schema definition is provided in subclause 8.2.2.3. An MCPTT UE configuration document may apply to all MCPTT UEs of a mission critical organization or apply to specific MCPTT UEs identified in the <mcptt-UE-id> element. If there is no <mcptt-UE-id> element in the MCPTT UE configuration document, then by default the MCPTT UE configuration document applies to all MCPTT UEs of the

mission critical organization that are not specifically identified in the <mcptt-UE-id> element of another MCPTT UE initial configuration document of the mission critical organization. Each MCPTT UE of a mission critical organization is configured with an MCPTT UE configuration document that is identified by the instance ID of the MCPTT UE.

MCPTT UE configuration documents of a MCPTT user are contained as "XDM collections" in the user's directory of the "Users Tree", in accordance with OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. A MCPTT UE configuration document corresponding to a specific MCPTT UE the MCPTT user has used to authenticate and is authorised to use the MCPTT service with is placed in the user directory of the MCPTT user.

The MCPTT UE configuration document acts as a template for the CMS to generate UE configuration documents that are downloaded to specific MCPTT UEs. The MCPTT UE configuration document that acts as a template is referred to as a "master MCPTT UE configuration document". The master MCPTT UE configuration document name is assigned by an MCPTT system administrator when the document is created and is stored in the users tree of that MCPTT system administrator. The master MCPTT UE configuration document does not directly apply to a specific MCPTT UE, but instead acts as template that the CMS uses to populate the MCPTT UE configuration documents of MCPTT UEs identified by elements of the <MCPTT-UE-id> element. For MCPTT UE configuration documents that correspond to a specific MCPTT UE, the name of the MCPTT UE configuration document is created from a value defined by the corresponding element that identifies the MCPTT UE within the <MCPTT-UE-id> element. For a master MCPTT UE configuration documents that does not contain a <MCPTT-UE-id> element, the name of the MCPTT UE configuration document stored in the user directory is "DEFAULT-MCPTT-UE.xml".

8.2.2 Coding

8.2.2.1 Structure

The MCPTT UE configuration document structure is specified in this subclause.

The <mcptt-UE-configuration> document:

1) shall include a "domain" attribute;
2) may include a <mcptt-UE-id> element;
3) may include a <name> element;
4) shall include a <common> element;
5) shall include an <on-network> element; and
6) may include any other attribute for the purposes of extensibility.

The <common> element:

1) shall contain a <private-call> element containing:
   a) a <Max-Simul-Call-N10> element; and
2) shall contain an <MCPTT-Group-Call> element containing:
   a) a <Max-Simul-Call-N4> element;
   b) a <Max-Simul-Trans-N5> element; and
   c) a <Prioritized-MCPTT-Group> element containing:
      i) a list of <MCPTT-Group-Priority> elements containing:
         1) an <MCPTT-Group-ID> element; and
         2) a <group-priority-hierarchy> element.

The <on-network> element:

1) shall contain a <IPv6Preferred> element;

2) shall contain a <Relay-Service> element; and

3) may contain a list of <Relayed-MCPTT-Group> elements containing:

   a) a <MCPTT-Group-ID> element; and

   b) a <Relay-Service-Code> element.

NOTE: When the <Relay-Service> element is set to "false" a list of <Relayed-MCPTT-Group> elements is not needed.

The <mcptt-UE-id> element:

1) may contain a list of <Instance-ID-URN> elements; and

2) may contain a list of <IMEI-range> elements.

The <IMEI-range> element:

1) shall contain a <TAC> element;

2) may contain a list of <SNR> elements; and

3) may contain <SNR-range> element.

The <SNR-range> element:

1) shall contain a <Low-SNR> element; and

2) shall contain a <High-SNR> element.

8.2.2.2 Application Unique ID

The AUID shall be set to "org.3gpp.mcptt.ue-config".

8.2.2.3 XML Schema

```
<?xml version="1.0" encoding="UTF-8"?>

<xs:schema xmlns:mcpttuep="urn:3gpp:mcptt:mcpttUEConfig:1.0"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:3gpp:mcptt:mcpttUEConfig:1.0"
  elementFormDefault="qualified" attributeFormDefault="unqualified">

  <xs:import namespace="http://www.w3.org/XML/1998/namespace"
    schemaLocation="http://www.w3.org/2001/xml.xsd"/>

  <xs:element name="mcptt-UE-configuration">
    <xs:complexType>
      <xs:sequence>
        <xs:choice minOccurs="0" maxOccurs="unbounded">
          <xs:element name="mcptt-UE-id" type="mcpttuep:MCPTTUEIDType"/>
          <xs:element name="name" type="mcpttuep:NameType"/>
        </xs:choice>
        <xs:element name="common" type="mcpttuep:CommonType"/>
        <xs:element name="on-network" type="mcpttuep:On-networkType"/>
        <xs:element name="anyExt" type="mcpttuep:anyExtType" minOccurs="0"/>
        <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
      </xs:sequence>
      <xs:attribute name="domain" type="xs:anyURI" use="required"/>
      <xs:attribute name="XUI-URI" type="xs:anyURI"/>
      <xs:attribute name="Instance-ID-URN" type="xs:anyURI"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="NameType">
    <xs:simpleContent>
      <xs:extension base="xs:token">
        <xs:attribute ref="xml:lang"/>
        <xs:attributeGroup ref="mcpttuep:IndexType"/>
      </xs:extension>
```

```
  </xs:simpleContent>
</xs:complexType>

<xs:complexType name="MCPTTUEIDType">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="Instance-ID-URN" type="xs:anyURI"/>
    <xs:element name="IMEI-range" type="mcpttuep:IMEI-rangeType"/>
    <xs:element name="anyExt" type="mcpttuep:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax"/>
  </xs:choice>
  <xs:attributeGroup ref="mcpttuep:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="IMEI-rangeType">
  <xs:sequence>
    <xs:element name="TAC" type="mcpttuep:tacType"/>
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="SNR" type="mcpttuep:snrType"/>
      <xs:element name="SNR-range" type="mcpttuep:SNR-rangeType"/>
    </xs:choice>
    <xs:element name="anyExt" type="mcpttuep:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attributeGroup ref="mcpttuep:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="SNR-rangeType">
  <xs:sequence>
    <xs:element name="Low-SNR" type="mcpttuep:snrType"/>
    <xs:element name="High-SNR" type="mcpttuep:snrType"/>
    <xs:element name="anyExt" type="mcpttuep:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attributeGroup ref="mcpttuep:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:simpleType name="tac-baseType">
    <xs:restriction base="xs:decimal">
      <xs:totalDigits value="8"/>
    </xs:restriction>
</xs:simpleType>

<xs:complexType name="tacType">
  <xs:simpleContent>
    <xs:extension base="mcpttuep:tac-baseType">
      <xs:attributeGroup ref="mcpttuep:IndexType"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:simpleType name="snr-baseType">
  <xs:restriction base="xs:decimal">
    <xs:totalDigits value="6"/>
  </xs:restriction>
</xs:simpleType>

<xs:complexType name="snrType">
  <xs:simpleContent>
    <xs:extension base="mcpttuep:snr-baseType">
      <xs:attributeGroup ref="mcpttuep:IndexType"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:complexType name="CommonType">
  <xs:sequence>
    <xs:element name="private-call">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="Max-Simul-Call-N10" type="xs:positiveInteger"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
```

```
      <xs:element name="MCPTT-Group-Call">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Max-Simul-Call-N4" type="xs:positiveInteger"/>
            <xs:element name="Max-Simul-Trans-N5" type="xs:positiveInteger"/>
            <xs:element name="Prioritized-MCPTT-Group">
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="MCPTT-Group-Priority" maxOccurs="unbounded">
                    <xs:complexType>
                      <xs:sequence>
                        <xs:element name="MCPTT-Group-ID" type="xs:anyURI"/>
                        <xs:element name="group-priority-hierarchy" type="xs:nonNegativeInteger"/>
                      </xs:sequence>
                      <xs:attributeGroup ref="mcpttuep:IndexType"/>
                      <xs:anyAttribute namespace="##any" processContents="lax"/>
                    </xs:complexType>
                  </xs:element>
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="anyExt" type="mcpttuep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcpttuep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="On-networkType">
    <xs:sequence>
      <xs:element name="IPv6Preferred" type="xs:boolean"/>
      <xs:element name="Relay-Service" type="xs:boolean"/>
      <xs:element name="Relayed-MCPTT-Group" type="mcpttuep:Relayed-MCPTT-GroupType" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="anyExt" type="mcpttuep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcpttuep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="Relayed-MCPTT-GroupType">
    <xs:sequence>
      <xs:element name="MCPTT-Group-ID" type="xs:anyURI"/>
      <xs:element name="Relay-Service-Code" type="xs:string"/>
      <xs:element name="anyExt" type="mcpttuep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcpttuep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:attributeGroup name="IndexType">
    <xs:attribute name="index" type="xs:token"/>
  </xs:attributeGroup>

  <xs:complexType name="anyExtType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

8.2.2.4 Default Document Namespace

The default document namespace used in evaluating URIs shall be "urn:3gpp:ns:mcpttUEConfig:1.0".

8.2.2.5 MIME type

The MIME type for the service configuration document shall be "vnd.3gpp.mcptt-ue-config+xml".

8.2.2.6 Validation Constraints

If the AUID value of the document URI or node URI in the Request-URI is other than that specified in subclause 8.2.2.2, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid application id used".

If the XUI value of the document URI or node URI in the Request-URI does not match the XUI of the service configuration document URI, the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid XUI".

The MCPTT UE configuration document shall conform to the XML Schema described in subclause 8.2.2.3.

The <mcptt-UE-configuration> element is the root element of the XML document. The <mcptt-UE-configuration> element can contain sub-elements.

The <mcptt-UE-configuration> element shall contain one <common> element and one <on-network> element.

If the <mcptt-UE-configuration> element does not conform to one of the three choices above, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the "domain" attribute does not contain a syntactically correct domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect domain name".

If the "domain" attribute contains an unknown domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "unknown domain name".

If an <Instance-ID-URN> element of the <mcptt-UE-id> element does not conform to a valid Instance ID as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Instance ID URN" and contain the non-conformant <Instance-ID-URN> element.

If the <TAC> element of an <IMEI-range> element does not conform to a valid 8 digit Type Allocation Code as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Type Allocation Code" and contain the non-conformant <TAC> element.

If a <SNR> element of an <IMEI-range> element does not conform to a valid 6 digit Serial Number as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Serial Number" and contain the non-conformant <SNR> element.

If a <Low-SNR> element or a <High-SNR> element of a <SNR-range> element does not conform to a valid 6 digit Serial Number as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Serial Number range" and contain the non-conformant <Low-SNR> or <High-SNR> element.

If the <Max-Simul-Call-N10> element of the <private-call> element contains a value less than 1 and greater than 4, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <Max-Simul-Call-N4> element, or <Max-Simul-Trans-N5> element of the <MCPTT-Group-Call> element contains a value less than 1, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <MCPTT-Group-ID> element of the <MCPTT-group-priority> element or <Relayed-MCPTT-Group> element does not conform to the syntax of a "uri" attribute specified in OMA OMA-TS-XDM_Group-V1_1[17], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the <group-priority-hierarchy> element of the <MCPTT-group-priority> element contains a value less than 8 and greater than or equal to 0, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <Relay-Service> element of the <On-Network> element does not contain a value of "true" or "false", then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <Relay-Service-Code> element of the <Relayed-MCPTT-Group> element does not conform to the syntax of a valid Relay service code as defined in 3GPP TS 24.333 [12], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the <IPv6-Preferred> element of the <On-Network> element does not contain a value of "true" or "false, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

8.2.2.7 Data Semantics

The "domain" attribute of the <mcptt-UE-configuration> element contains the domain name of the mission critical organization.

The <name> element of the <mcptt-UE- configuration> element contains the user displayable name of the MCPTT UE configuration document and corresponds to the "Name" element of subclause 4.2.3 in 3GPP TS 24.483 [4].

The creator of the MCPTT UE configuration document may include an <mcptt-UE-id> element in the version of the MCPTT UE configuration document that is uploaded to the CMS and may also appear in the MCPTT UE configuration document when downloaded by the MCPTT system administrator. The <mcptt-UE-id> element does not appear in the MCPTT UE configuration document that is configured to the MCPTT UE. If an <mcptt-UE-id> element is included then the MCPTT UE configuration document applies only to the MCPTT UE(s) identified by the <mcptt-UE-id> element. If no <mcptt-UE-id> element is included then the MCPTT UE configuration document t applies to all the MCPTT UEs of the domain.

If one or more optional <Instance-ID-URN> elements is included in the <mcptt-UE-id> element then the MCPTT UE configuration document applies to the MCPTT UE with an instance ID equal to the instance ID contained in the <Instance-ID-URN> element.

The <TAC> element of the <IMEI-range> element contains the Type Allocation Code of the MCPTT UE.

The optional <SNR> element of the <IMEI-range> element contains the individual serial number uniquely identifying MCPTT UE within the Type Allocation Code contained in the <TAC> element that the MCPTT UE initial configuration document applies to.

If an optional <SNR-range> element is included within the <IMEI-range> element then the MCPTT UE configuration document applies to all MCPTT UEs within the Type Allocation Code contained in the <TAC> element with the serial number equal or greater than the serial number contained in the <Low-SNR> element and less than or equal to the serial number contained in the <High-SNR> element.

If no <SNR> element nor <SNR-range> element is included within the <IMEI-range> element then the MCPTT UE configuration document applies to all the MCPTT UE(s) with the Type Allocation Code contained within the <TAC> element of the <IMEI-range> element.

If no <mcptt-UE-id> element is included then the MCPTT UE configuration document applies to all MCPTT UEs of the mission critical organization identified in the "domain" attribute.

The <common> element contains MCPTT UE configuration data common to both on and off network operation.

The <on-network> element contains MCPTT UE configuration data for on-network operation only.

In the <common> element:

1) the <Max-Simul-Call-N10> element of the <private-call> element contains an integer indicating the maximum number of simultaneous calls (N10) allowed for an on-network or off-network private call with floor control and corresponds to the "MaxCallN10" element of subclause 4.2.7 in 3GPP TS 24.483 [4];

2) the <Max-Simul-Call-N4> element of the <MCPTT-Group-Call> element contains an integer indicating the number of simultaneous calls (N4) allowed for an on-network or off-network group call and corresponds to the "MaxCallN4" element of subclause 4.2.9 in 3GPP TS 24.483 [4];

3) the <Max-Simul-Trans-N5> element of the <MCPTT-Group-Call> element contains an integer indicating the maximum number of allowed simultaneous transmissions for an on-network or off-network group call and corresponds to the "MaxTransmissionN5" element of subclause 4.2.10 in 3GPP TS 24.483 [4]; and

4) the <Prioritized-MCPTT-Group> element of the <MCPTT-Group-Call> element corresponds to the "PrioritizedMCPTTGroup" element of subclause 4.2.11 in 3GPP TS 24.483 [4] contains a list of <MCPTT-Group-Priority> elements that contains:

   a) <MCPTT-Group-ID> element identifying an MCPTT group that corresponds to the "MCPTTGroupID" element of subclause 4.2.13 in 3GPP TS 24.483 [4]; and

   b) a <group-priority-hierarchy> element that contains an integer that identifies the relative priority level of that MCPTT group with 0 being the lowest priority and 7 being the highest priority and corresponds to the "MCPTTGroupPriorityHierarchy" element of subclause 4.2.14 in 3GPP TS 24.483 [4].

In the <on-network> element:

1) if the <Relay-Service> element is set to "true" the MCPTT UE is allowed to offer a relay service, and if set to "false" the MCPTT UE is not allowed to offer relay service. This attribute corresponds to the "RelayService" element of subclause 4.2.16 in 3GPP TS 24.483 [4];

2) an <IPv6Preferred> element which corresponds to the "IPv6Preferred" element of subclause 4.2.17 in 3GPP TS 24.483 [4],

   a) if the UE has both IPv4 and IPv6 host configuration::

      i) if IPv6Preferred is set to true then the UE shall use IPv6 for all on-network signalling and media; otherwise

      ii) if IPv6Preferred is set to false then the UE shall use IPv4 for all on-network signalling and media;

   b) if the UE has only IPv4 host configuration then the UE shall use IPv4 for all on-network signalling and media; and

   c) if the UE has only IPv6 host configuration then the UE shall use IPv6 for all on-network signalling and media; and

3) the <Relayed-MCPTT-Groups> element of the <Relay-Service> element which corresponds to the "RelayedMCPTTGroup" element of subclause 4.2.18 in 3GPP TS 24.483 [4] contains:

   a) a list of <Relay-MCPTT-Group-ID> elements that contains:

      i) "MCPTT-Group-ID" attribute identifying an MCPTT group that is allowed to be used via a relay and corresponds to the "MCPTTGroupID" element of subclause 4.2.20 in 3GPP TS 24.483 [4]; and

      ii) a <Relay-Service-Code> element as specified in 3GPP TS 24.333 [12] which corresponds to the "RelayServiceCode" element of subclause 4.2.21 in 3GPP TS 24.483 [4].

8.2.2.8 Naming Conventions

The present document defines no naming conventions.

8.2.2.9 Global documents

The present document requires no global documents.

8.2.2.10 Resource interdependencies

There are no resource interdependencies.

8.2.2.11 Authorization Policies

The authorization policies for manipulating an MCPTT UE configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*".

8.2.2.12 Subscription to Changes

The MCPTT UE configuration document application usage shall support subscription to changes as specified in] subclause 6.3.13.3.

MCPTT UE configuration documents are kept as XDM collections. Therefore, it is possible to subscribe to all MCPTT UE configuration documents of a MCPTT user according to XCAP URI construction convention of a trailing '/', as specified in IETF RFC 5875 [11].

8.3 MCPTT user profile configuration document

8.3.1 General

The MCPTT user profile configuration document is specified in this subclause. The MCPTT user profile configuration document content is based on requirements of Annex A.3 of 3GPP TS 23.379 [8], and structure and procedures of OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCPTT user profile in the MCPTT service is described in 3GPP TS 24.379 [9]. The schema definition is provided in subclause 8.3.2.

MCPTT user profile documents are "XDM collections" in the user's directory in the "Users Tree", in accordance with OMA OMA-TS-XDM_Core-V2_1-20120403-A [2].

The name of the MCPTT user profile document matches the value of the <ProfileName> element in the MCPTT user profile document.

8.3.2 Coding

8.3.2.1 Structure

The MCPTT user profile configuration document structure is specified in this subclause.

The <mcptt-user-profile> document:

1) shall include an "XUI-URI" attribute;
2) may include a <Name> element;
3) shall include one <Status> element;
4) shall include a "user-profile-index" attribute;
5) may include any other attribute for the purposes of extensibility;
6) may include one <ProfileName> element;
7) may include a <Pre-selected-indication> element;
8) shall include one or more <Common> elements, each of which:
   a) shall have an "index" attribute;
   b) shall include one <UserAlias> element containing one or more <alias-entry> elements;
   c) shall include one <MCPTTUserID> element that contains an <entry> element;
   d) shall include one <PrivateCall> element. The <PrivateCall> element contains:
      i) a <PrivateCallList> element that contains:

A) a <PrivateCallURI> element that contains one or more <entry> elements;

B) a <PrivateCallProSeUser> element that contains one or more <ProSeUserID-entry> elements; and

C) an <anyExt> element which may contain:

I) a <PrivateCallKMSURI> element that contains one or more entry> elements; and

ii) one <EmergencyCall> element containing one <MCPTTPrivateRecipient> element that contains:

A) an <entry> element; and

B) a <ProSeUserID-entry> element;

e) shall contain one <MCPTT-group-call> element containing:

i) one <MaxSimultaneousCallsN6> element;

ii) one <EmergencyCall> element containing one <MCPTTGroupInitiation>element that contains an <entry> element;

iii) one <ImminentPerilCall> element containing one <MCPTTGroupInitiation> element that contains an <entry> element;

iv) one <EmergencyAlert> element containing an <entry> element; and

v) one <Priority> element;

f) may contain one <ParticipantType> element; and

g) shall contain one <MissionCriticalOrganization> element indicating the name of the mission critical organization the MCPTT User belongs to;

9) shall include zero or more <OffNetwork> elements each of which:

a) shall contain an "index" attribute;

b) shall include one or more <MCPTTGroupInfo> elements, each containing one or more <entry> elements;

c) an <anyExt> element which may contain:

i) one or more <OffNetworkGroupServerInfo> elements each of which:

A) shall include one or more <GMS-Serv-Id> elements, each containing one or more <entry> elements;

B) shall include one or more <IDMS-token-endpoint> elements, each containing one or more <entry> elements;

C) shall include one or more <KMS-URI> elements, each containing one or more <entry> elements; and

D) may include an <anyExt> element which may contain:

a) zero or one <RelativePresentationPriority> element, each containing one or more <Priority> elements;

10) shall include zero or more <OnNetwork> elements each of which:

a) shall have an "index" attribute;

b) shall include one or more <MCPTTGroupInfo> elements, each containing one or more <entry> elements;

c) shall include one <MaxAffiliationsN2>element;

d) may include one or more <ImplicitAffiliations> elements, each containing one or more <entry> elements;

e) shall include one <MaxSimultaneousTransmissionsN7> element;

f) shall include one <PrivateEmergencyAlert> element containing an <entry> element; and

g) an <anyExt> element which may contain:

i) one <RemoteGroupSelectionURIList> element which contains one or more <entry> elements;

ii) one or more <GroupServerInfo> elements each of which:

A) shall include one or more <GMS-Serv-Id> elements, each containing one or more <entry> elements;

B) shall include one or more <IDMS-token-endpoint> elements, each containing one or more <entry> elements;

C) shall include one or more <KMS-URI> elements, each containing one or more <entry> elements; and

D) may include an <anyExt> element which may contain:

a) zero or one <RelativePresentationPriority> element, each containing one or more <Priority> elements; and

iii) one <FunctionalAliasList> element which contains one or more <entry> elements;

11) a <ruleset> element conforming to IETF RFC 4745 [13] containing a sequence of zero or more <rule> elements:

a) the <conditions> of a <rule> element may include the <identity> element as described in IETF RFC 4745 [13];

b) the <actions> child element of any <rule> element may contain:

i) an <allow-presence-status> element;

ii) an <allow-request-presence> element;

iii) an <allow-query-availability-for-private-calls> element;

iv) an <allow-enable-disable-user> element;

v) an <allow-enable-disable-UE> element;

vi) an <allow-create-delete-user-alias> element;

vii) an <allow-private-call> element;

viii) an <allow-manual-commencement> element;

ix) an <allow-automatic-commencement> element;

x) an <allow-force-auto-answer> element;

xi) an <allow-failure-restriction> element;

xii) an <allow-emergency-group-call> element;

xiii) an <allow-emergency-private-call> element;

xiv) an <allow-cancel-group-emergency> element;

xv) an <allow-cancel-private-emergency-call> element;

xvi) an <allow-imminent-peril-call> element;

xvii) an <allow-cancel-imminent-peril> element;

xviii) an <allow-activate-emergency-alert> element;

xix) an <allow-cancel-emergency-alert> element;

xx) an <allow-offnetwork> element;

xxi) an <allow-imminent-peril-change> element;

xxii) an <allow-private-call-media-protection> element;

xxiii) an <allow-private-call-floor-control-protection> element;

xxiv) an <allow-request-affiliated-groups> element;

xxv) an <allow-request-to-affiliate-other-users> element;

xxvi) an <allow-recommend-to-affiliate-other-users> element;

xxvii) an <allow-private-call-to-any-user> element;

xxviii) an <allow-regroup> element;

xxix) an <allow-private-call-participation> element;

xxx) an <allow-override-of-transmission> element;

xxxi) an <allow-manual-off-network-switch> element;

xxxii) an <allow-listen-both-overriding-and-overridden> element;

xxxiii) an <allow-transmit-during-override> element;

xxxiv) an <allow-off-network-group-call-change-to-emergency> element;

xxxv) an<allow-revoke-transmit> element;

xxxvi) an <allow-create-group-broadcast- group> element;

xxxvii) an <allow-create-user-broadcast-group> element; and

xxxviii) an <anyExt> element which may contain:

A) an <allow-request-private-call-call-back> element;

B) an <allow-cancel-private-call-call-back> element;

C) an <allow-request-remote-initiated-ambient-listening> element;

D) an <allow-request-locally-initiated-ambient -listening> element;

E) an <allow-request-first-to-answer-call> element;

F) an <allow-request-remote-init-private-call> element;

G) an <allow-request-remote-init-group-call> element;

H) an <allow-query-functional-alias-other-user> element;

I) an <allow-takeover-functional-alias-other-user> element; and

J) an <allow-location-info-when-talking> element; and

12) may include any other element for the purposes of extensibility.

The <entry> elements:

1) shall contain a <uri-entry> element;

2) shall contain an"index" attribute;

3) may contain a <display-name> element; and

4) may contain an "entry-info" attribute.

The <ProSeUserID-entry> elements:

1) shall contain a <DiscoveryGroupID> element;

2) shall contain an <User-Info-ID> element; and

3) shall contain an "index" attribute.

8.3.2.2 Application Unique ID

The AUID shall be "org.3gpp.mcptt.user-profile".

8.3.2.3 XML Schema

The MCPTT user profile configuration document shall be composed according to the following XML schema:

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
  xmlns:mcpttup="urn:3gpp:mcptt:user-profile:1.0"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:3gpp:mcptt:user-profile:1.0"
  elementFormDefault="qualified" attributeFormDefault="unqualified">
  <xs:import namespace="http://www.w3.org/XML/1998/namespace"
  schemaLocation="http://www.w3.org/2001/xml.xsd"/>
  <!-- This import brings in common policy namespace from RFC 4745 -->
  <xs:import namespace="urn:ietf:params:xml:ns:common-policy"
  schemaLocation="http://www.iana.org/assignments/xml-registry/schema/common-policy.xsd"/>

  <xs:element name="mcptt-user-profile">
    <xs:complexType>
      <xs:choice minOccurs="1" maxOccurs="unbounded">
        <xs:element name="Name" type="mcpttup:NameType"/>
        <xs:element name="Status" type="xs:boolean"/>
        <xs:element name="ProfileName" type="mcpttup:NameType"/>
        <xs:element name="Pre-selected-indication" type="mcpttup:emptyType"/>
        <xs:element name="Common" type="mcpttup:CommonType"/>
        <xs:element name="OffNetwork" type="mcpttup:OffNetworkType"/>
        <xs:element name="OnNetwork" type="mcpttup:OnNetworkType"/>
        <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
        <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
      </xs:choice>
      <xs:attribute name="XUI-URI" type="xs:anyURI" use="required"/>
      <xs:attribute name="user-profile-index" type="xs:unsignedByte" use="required"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="NameType">
    <xs:simpleContent>
      <xs:extension base="xs:token">
        <xs:attribute ref="xml:lang"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>

  <xs:complexType name="CommonType">
    <xs:choice minOccurs="1" maxOccurs="unbounded">
      <xs:element name="UserAlias" type="mcpttup:UserAliasType"/>
      <xs:element name="MCPTTUserID" type="mcpttup:EntryType"/>
      <xs:element name="PrivateCall" type="mcpttup:MCPTTPrivateCallType"/>
      <xs:element name="MCPTT-group-call" type="mcpttup:MCPTTGroupCallType"/>
      <xs:element name="MissionCriticalOrganization" type="xs:string"/>
      <xs:element name="ParticipantType" type="xs:string"/>
      <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcpttup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="MCPTTPrivateCallType">
    <xs:sequence>
      <xs:element name="PrivateCallList" type="mcpttup:PrivateCallListEntryType"/>
      <xs:element name="EmergencyCall" type="mcpttup:EmergencyCallType" minOccurs="0"/>
      <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
```

```
</xs:complexType>

<xs:complexType name="PrivateCallListEntryType">
  <xs:choice minOccurs="1" maxOccurs="unbounded">
    <xs:element name="PrivateCallURI" type="mcpttup:EntryType"/>
    <xs:element name="PrivateCallProSeUser" type="mcpttup:ProSeUserEntryType"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:attributeGroup ref="mcpttup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="UserAliasType">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="alias-entry" type="mcpttup:AliasEntryType"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="AliasEntryType">
  <xs:simpleContent>
    <xs:extension base="xs:token">
      <xs:attributeGroup ref="mcpttup:IndexType"/>
      <xs:attribute ref="xml:lang"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:complexType name="ListEntryType">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="entry" type="mcpttup:EntryType"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:attribute ref="xml:lang"/>
  <xs:attributeGroup ref="mcpttup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="EntryType">
  <xs:sequence>
    <xs:element name="uri-entry" type="xs:anyURI"/>
    <xs:element name="display-name" type="mcpttup:DisplayNameElementType" minOccurs="0"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attribute name="entry-info" type="mcpttup:EntryInfoTypeList"/>
  <xs:attributeGroup ref="mcpttup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="ProSeUserEntryType">
  <xs:sequence>
    <xs:element name="DiscoveryGroupID" type="xs:hexBinary" minOccurs="0"/>
    <xs:element name="User-Info-ID" type="xs:hexBinary"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attributeGroup ref="mcpttup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:simpleType name="EntryInfoTypeList">
  <xs:restriction base="xs:normalizedString">
    <xs:enumeration value="UseCurrentlySelectedGroup"/>
    <xs:enumeration value="DedicatedGroup"/>
    <xs:enumeration value="UsePreConfigured"/>
    <xs:enumeration value="LocallyDetermined"/>
  </xs:restriction>
</xs:simpleType>

<xs:complexType name="DisplayNameElementType">
  <xs:simpleContent>
    <xs:extension base="xs:string">
      <xs:attribute ref="xml:lang"/>
```

```
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:complexType name="MCPTTGroupCallType">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="MaxSimultaneousCallsN6" type="xs:positiveInteger"/>
    <xs:element name="EmergencyCall" type="mcpttup:EmergencyCallType"/>
    <xs:element name="ImminentPerilCall" type="mcpttup:ImminentPerilCallType"/>
    <xs:element name="EmergencyAlert" type="mcpttup:EmergencyAlertType"/>
    <xs:element name="Priority" type="xs:unsignedShort"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="EmergencyCallType">
  <xs:sequence>
    <xs:choice>
      <xs:element name="MCPTTGroupInitiation" type="mcpttup:MCPTTGroupInitiationEntryType"/>
      <xs:element name="MCPTTPrivateRecipient" type="mcpttup:MCPTTPrivateRecipientEntryType"/>
      <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
  </xs:sequence>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="ImminentPerilCallType">
  <xs:sequence>
    <xs:element name="MCPTTGroupInitiation" type="mcpttup:MCPTTGroupInitiationEntryType"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="EmergencyAlertType">
  <xs:sequence>
    <xs:element name="entry" type="mcpttup:EntryType"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="MCPTTGroupInitiationEntryType">
  <xs:choice>
    <xs:element name="entry" type="mcpttup:EntryType"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="MCPTTPrivateRecipientEntryType">
  <xs:sequence>
    <xs:element name="entry" type="mcpttup:EntryType"/>
    <xs:element name="ProSeUserID-entry" type="mcpttup:ProSeUserEntryType"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="OffNetworkType">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="MCPTTGroupInfo" type="mcpttup:ListEntryType"/>
    <xs:element name="User-Info-ID" type="xs:hexBinary"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:attributeGroup ref="mcpttup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>
```

```
<xs:complexType name="OnNetworkType">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="MCPTTGroupInfo" type="mcpttup:ListEntryType"/>
    <xs:element name="MaxAffiliationsN2" type="xs:nonNegativeInteger"/>
    <xs:element name="MaxSimultaneousTransmissionsN7" type="xs:nonNegativeInteger"/>
    <xs:element name="ImplicitAffiliations" type="mcpttup:ListEntryType"/>
    <xs:element name="PrivateEmergencyAlert" type="mcpttup:EmergencyAlertType"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:attributeGroup ref="mcpttup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:element name="allow-presence-status" type="xs:boolean"/>
<xs:element name="allow-request-presence" type="xs:boolean"/>
<xs:element name="allow-query-availability-for-private-calls" type="xs:boolean"/>
<xs:element name="allow-enable-disable-user" type="xs:boolean"/>
<xs:element name="allow-enable-disable-UE" type="xs:boolean"/>
<xs:element name="allow-create-delete-user-alias" type="xs:boolean"/>
<xs:element name="allow-private-call" type="xs:boolean"/>
<xs:element name="allow-manual-commencement" type="xs:boolean"/>
<xs:element name="allow-automatic-commencement" type="xs:boolean"/>
<xs:element name="allow-force-auto-answer" type="xs:boolean"/>
<xs:element name="allow-failure-restriction" type="xs:boolean"/>
<xs:element name="allow-emergency-group-call" type="xs:boolean"/>
<xs:element name="allow-emergency-private-call" type="xs:boolean"/>
<xs:element name="allow-cancel-group-emergency" type="xs:boolean"/>
<xs:element name="allow-cancel-private-emergency-call" type="xs:boolean"/>
<xs:element name="allow-imminent-peril-call" type="xs:boolean"/>
<xs:element name="allow-cancel-imminent-peril" type="xs:boolean"/>
<xs:element name="allow-activate-emergency-alert" type="xs:boolean"/>
<xs:element name="allow-cancel-emergency-alert" type="xs:boolean"/>
<xs:element name="allow-offnetwork" type="xs:boolean"/>
<xs:element name="allow-imminent-peril-change" type="xs:boolean"/>
<xs:element name="allow-private-call-media-protection" type="xs:boolean"/>
<xs:element name="allow-private-call-floor-control-protection" type="xs:boolean"/>
<xs:element name="allow-request-affiliated-groups" type="xs:boolean"/>
<xs:element name="allow-request-to-affiliate-other-users" type="xs:boolean"/>
<xs:element name="allow-recommend-to-affiliate-other-users" type="xs:boolean"/>
<xs:element name="allow-private-call-to-any-user" type="xs:boolean"/>
<xs:element name="allow-regroup" type="xs:boolean"/>
<xs:element name="allow-private-call-participation" type="xs:boolean"/>
<xs:element name="allow-override-of-transmission" type="xs:boolean"/>
<xs:element name="allow-manual-off-network-switch" type="xs:boolean"/>
<xs:element name="allow-listen-both-overriding-and-overridden" type="xs:boolean"/>
<xs:element name="allow-transmit-during-override" type="xs:boolean"/>
<xs:element name="allow-off-network-group-call-change-to-emergency" type="xs:boolean"/>
<xs:element name="allow-revoke-transmit" type="xs:boolean"/>
<xs:element name="allow-create-group-broadcast-group" type="xs:boolean"/>
<xs:element name="allow-create-user-broadcast-group" type="xs:boolean"/>
<xs:element name="anyExt" type="mcpttup:anyExtType"/>

<xs:element name="allow-request-private-call-call-back" type="xs:boolean"/>
<xs:element name="allow-cancel-private-call-call-back" type="xs:boolean"/>
<xs:element name="allow-request-remote-initiated-ambient-listening" type="xs:boolean"/>
<xs:element name="allow-request-locally-initiated-ambient-listening" type="xs:boolean"/>
<xs:element name="allow-request-first-to-answer-call" type="xs:boolean"/>
<xs:element name="allow-request-remote-init-private-call" type="xs:boolean"/>
<xs:element name="allow-request-remote-init-group-call" type="xs:boolean"/>
<xs:element name="allow-query-functional-alias-other-user" type="xs:boolean"/>
<xs:element name="allow-takeover-functional-alias-other-user" type="xs:boolean"/>
<xs:element name="allow-location-info-when-talking" type="xs:boolean"/>

<xs:element name="RemoteGroupSelectionURIList" type="mcpttup:ListEntryType"/>

<xs:element name="GroupServerInfo" type="mcpttup:GroupServerInfoType"/>

<xs:element name="FunctionalAliasList" type="mcpttup:ListEntryType"/>

<xs:element name="OffNetworkGroupServerInfo" type="mcpttup:GroupServerInfoType"/>

<xs:complexType name="GroupServerInfoType">
  <xs:sequence>
    <xs:element name="GMS-Serv-Id" type="mcpttup:ListEntryType"/>
    <xs:element name="IDMS-token-endpoint" type="mcpttup:ListEntryType"/>
    <xs:element name="KMS-URI" type="mcpttup:ListEntryType"/>
    <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
```

```
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:element name="PrivateCallKMSURI" type="mcpttup:PrivateCallKMSURIEntryType"/>

  <xs:complexType name="PrivateCallKMSURIEntryType">
    <xs:sequence>
      <xs:element name="PrivateCallKMSURI" type="mcpttup:EntryType"/>
      <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

<xs:element name="RelativePresentationPriority" type="mcpttup:PriorityListEntryType"/>

  <xs:complexType name="PriorityListEntryType">
    <xs:sequence>
      <xs:element name="Priority" type=" mcpttup:PriorityType" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="anyExt" type="mcpttup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

  <xs:simpleType name="PriorityType">
    <xs:restriction base="xs:nonNegativeInteger">
      <xs:minInclusive value="0"/>
     <xs:maxInclusive value="255"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:attributeGroup name="IndexType">
    <xs:attribute name="index" type="xs:token"/>
  </xs:attributeGroup>

  <!-- empty complex type -->
  <xs:complexType name="emptyType"/>

  <xs:complexType name="anyExtType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

8.3.2.4 Default Document Namespace

The default document namespace used in evaluating .URIs shall be "urn:3gpp:mcptt:user-profile:1.0".

8.3.2.5 MIME type

The MIME type for the MCPTT user profile configuration document shall be "application/vnd.3gpp.mcptt-user-profile+xml"

8.3.2.6 Validation Constraints

The MCPTT user profile configuration document shall conform to the XML Schema described in subclause 8.3.2.3 "*XML Schema*", with the clarifications given in this subclause.

The value of the "XUI-URI" attribute of the <mcptt-user-profile> element shall be the same as the XUI value of the Document URI for the MCPTT user profile configuration document. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Wrong User Profile URI".

The value of the <Priority> element of the <RelativePresentationPriority> element of the <GroupServerInfo> element shall be within the range of 0 to 255. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Priority value out of range".

The value of the <Priority> element of the <RelativePresentationPriority> element of the <OffNetworkGroupServerInfo> element shall be within the range of 0 to 255. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Priority value out of range".

The value of the <Priority> element of the <MCPTT-group-call> element shall be within the range of 0 to 255. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Priority value out of range".

The value of the <DiscoveryGroupID> shall be 3 octets expressed in hexadecimal format. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Invalid Discovery Group ID".

The value of the <User-Info-ID> shall be 6 octets expressed in hexadecimal format. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Invalid User Info ID".

If more than one MCPTT user profile document is specified for the MCPTT user in the "XDM collections" in the user's directory, then only one MCPTT user profile document shall contain the <Pre-selected-indication> element. If there is only one MCPTT user profile specified for the MCPTT user in the user's directory, then it is optional to include the <Pre-selected-indication> element. If a MCPTT user profile document containing the <Pre-selected-indication> element already exists for the MCPTT user in the "XDM collections" the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Pre-selected User Profile Indication already exists in:" including the contents of the <Profile-Name> element of the MCPTT user profile document that already contains the <Pre-selected-indication> element.

8.3.2.7 Data Semantics

The <Name> element is of type "token", and corresponds to the "Name" element of subclause 5.2.3 in 3GPP TS 24.483 [4].

The <alias-entry> element of the <UserAlias> element is of type "token" and indicates an alphanumeric alias of the MCPTT user, and corresponds to the leaf nodes of the "UserAlias" element of subclause 5.2.8 in 3GPP TS 24.483 [4].

The <uri-entry> element is of type "anyURI" and when it appears within:

- the <MCPTTUserID> element contains the MCPTT user identity (MCPTT ID) of the MCPTT user, and corresponds to the "MCPTTUserID" element of subclause 5.2.7 in 3GPP TS 24.483 [4];

- the <entry> element of the <MCPTTGroupInitiation> element of the <EmergencyCall> element of the <MCPTT-group-call> element, indicates the MCPTT group used on initiation of an MCPTT emergency group call and corresponds to the "GroupID" element of the "MCPTTGroupInitiation" element of subclause 5.2.34B in 3GPP TS 24.483 [4];

- the <entry> element of the <MCPTTPrivateRecipient> of the <EmergencyCall> element of the <PrivateCall> element indicates the recipient MCPTT user for an MCPTT emergency private call and corresponds to the "ID" element of subclause 5.2.29B in 3GPP TS 24.483 [4];

- the <entry> element of the <MCPTTGroupInitiation> element of the <ImminentPerilCall> element of the <MCPTT-group-call> element, indicates the MCPTT group used on initiation of an MCPTT imminent peril group call and corresponds to the "GroupID" element of subclause 5.2.39B in 3GPP TS 24.483 [4];

- the <entry> element of the <EmergencyAlert> element of the <MCPTT-group-call> element, indicates the MCPTT group recipient for an MCPTT emergency Alert and corresponds to the "ID" element of subclause 5.2.43B in 3GPP TS 24.483 [4];

- the <entry> element of the <EmergencyAlert> element of the <PrivateEmergencyAlert> element indicates the MCPTT user recipient for an on-network MCPTT emergency private alert and corresponds to the "ID" element of subclause 5.2.48J4 in 3GPP TS 24.483 [4];

- the <PrivateCallURI> of the <PrivateCall> list element indicates an MCPTT ID of an MCPTT user that the MCPTT user is authorised to initiate a private call to and corresponds to the "MCPTTID" element of subclause 5.2.17 in 3GPP TS 24.483 [4];

- the <entry> element of the <PrivateCallKMSURI> element of the <anyExt> element of the <PrivateCallList> element of the <Common> element contains the URI used to contact the KMS associated with the MCPTT ID contained in the associated PrivateCallURI element of the <PrivateCall> list element and corresponds to the "PrivateCallKMSURI" element of subclause 5.2.19B in 3GPP TS 24.483 [4]; If the entry element is empty, the kms present in the MCS initial configuration document is used;

- the <entry> element of the <ImplicitAffiliations> list element indicates an MCPTT group ID of an MCPTT group that the MCPTT user is implicitly affiliated with and corresponds to the "MCPTTGroupID" element of subclause 5.2.48C4 in 3GPP TS 24.483 [4];

- the <entry> element of the <MCPTTGroupInfo> list element of the <OnNetwork> element indicates an MCPTT group ID of an MCPTT group that the MCPTT user is authorised to affiliate with during on-network operation and corresponds to the "MCPTTGroupID" element of subclause 5.2.48B4 in 3GPP TS 24.483 [4];

- the <entry> element of the <RemoteGroupSelectionURIList> list element of the <anyExt> element of the <OnNetwork> element indicates an MCPTT ID of an MCPTT user whose selected group is authorised to be remotely changed by the MCPTT user and corresponds to the "MCPTTID" element of subclause 5.2.48U4 in 3GPP TS 24.483 [4];

- the <entry> element of the <GMS-Serv-Id> list element of the <GroupServerInfo> element of the <anyExt> element of the <OnNetwork> element contains the URI used to contact the group management server associated with the parallel entry in the <MCPTTGroupInfo> element and corresponds to the "GMSServID" element of subclause 5.2.48V5 in 3GPP TS 24.483 [4];

NOTE 1: The "parallel entry in the <MCPTTGroupInfo> element" phrasing means that the GMS server identity contained in the i'th entry of the <GMS-Serv-Id> list element corresponds to the MCPTT group ID contained in the i'th entry of the <MCPTTGroupInfo> element. The same relationship to entries in the<MCPTTGroupInfo> element is also in effect for <IDMS-token-endpoint> and <KMS-URI> entries.

- the <entry> element of the <IDMS-token-endpoint> list element of the <GroupServerInfo> element of the <anyExt> element of the <OnNetwork> element contains the URI used to contact the identity management server token endpoint associated with the parallel entry in the <MCPTTGroupInfo> element and corresponds to the "IDMSTokenID" element of subclause 5.2.48V9 in 3GPP TS 24.483 [4]. If the entry element is empty, the idms-auth-endpoint and idms-token-endpoint present in the MCS initial configuration document are used;

- the <entry> element of the <KMS-URI> list element of the <GroupServerInfo> element of the <anyExt> element of the <OnNetwork> element contains the URI used to contact the key management server associated with the parallel entry in the <MCPTTGroupInfo> element and corresponds to the "KMSURI" element of subclause 5.2.48V13 in 3GPP TS 24.483 [4]. If the entry element is empty, the kms present in the MCS initial configuration document is used;

- the <entry> element of the <FunctionalAliasList> list element of the <anyExt> element of the <OnNetwork> element contains a functional alias that the MCPTT user is authorised to activate and corresponds to the "FunctionalAlias" element of subclause 5.2.48W6 in 3GPP TS 24.483 [4];

the <entry> element of the <GMS-Serv-Id> list element of the <OffNetworkGroupServerInfo> element of the <anyExt> element of the <OffNetwork> element contains the URI used to contact the group management server associated with the parallel entry in the <MCPTTGroupInfo> element and corresponds to the "GMSServID" element of subclause 5.2.58A5 in 3GPP TS 24.483 [4];

NOTE 2: The "parallel entry in the <MCPTTGroupInfo> element" phrasing means that the GMS server identity contained in the i'th entry of the <GMS-Serv-Id> list element corresponds to the MCPTT group ID contained in the i'th entry of the <MCPTTGroupInfo> element. The same relationship to entries in the<MCPTTGroupInfo> element is also in effect for <IDMS-token-endpoint> and <KMS-URI> entries.

- the <entry> element of the <IDMS-token-endpoint> list element of the <OffNetworkGroupServerInfo> element of the <anyExt> element of the <OffNetwork> element contains the URI used to contact the key management server associated with the parallel entry in the <MCPTTGroupInfo> element and corresponds to the "IDMSTokenID" element of subclause 5.2.58A9 in 3GPP TS 24.483 [4]. If the entry element is empty, the idms-auth-endpoint and idms-token-endpoint present in the MCS initial configuration document are used; and

- the <entry> element of the <KMS-URI> list element of the <OffNetworkGroupServerInfo> element of the <anyExt> element of the <OffNetwork> element contains the URI used to contact the key management server associated with the parallel entry in the <MCPTTGroupInfo> element and corresponds to the "KMSURI"

element of subclause 5.2.58A13 in 3GPP TS 24.483 [4]. If the entry element is empty, the kms present in the MCS initial configuration document is used.

The <DiscoveryGroupID> element is of type "hexBinary" and is used as the Discovery Group ID in the ProSe discovery procedures as specified in 3GPP TS 23.303 [18] and 3GPP TS 23.334 [19]. When it appears within:

- the <MCPTTPrivateRecipient> element of the <EmergencyCall> element it identifies the Discovery Group ID that the MCPTT UE uses to initiate an off-network MCPTT emergency private call and corresponds to the "DiscoveryGroupID" element of subclause 5.2.29C in 3GPP TS 24.483 [4]; and

- the <PrivateCallProSeUser> element of the <PrivateCallList> element it identifies the Discovery Group ID that the MCPTT UE uses to initiate a private call during off-network operation and corresponds to the "DiscoveryGroupID" element of subclause 5.2.18 in 3GPP TS 24.483 [4].

The <display-name> element is of type "string", contains a human readable name and when it appears within:

- the <entry> element of the <MCPTTGroupInitiation> element of the <EmergencyCall> element of the <MCPTT-group-call> element, indicates the name of the MCPTT group used on initiation of an MCPTT emergency group call and corresponds to the "DisplayName" element of the "MCPTTGroupInitiation" element of subclause 5.2.34C in 3GPP TS 24.483 [4];

- the <entry> element of the <MCPTTPrivateRecipient> of the <EmergencyCall> element of the <PrivateCall> element indicates the name of the recipient MCPTT user for an MCPTT emergency private call and corresponds to the "DisplayName" element of subclause 5.2.29E in 3GPP TS 24.483 [4];

- the <entry> element of the <MCPTTGroupInitiation> element of the <ImminentPerilCall> element of the <MCPTT-group-call> element, indicates the name of the MCPTT group used on initiation of an MCPTT imminent peril group call and corresponds to the "DisplayName" element of subclause 5.2.39C in 3GPP TS 24.483 [4];

- the <entry> element of the <EmergencyAlert> element of the <MCPTT-group-call> element, indicates the name of the MCPTT group recipient for an MCPTT emergency Alert and corresponds to the "DisplayName" element of subclause 5.2.43D in 3GPP TS 24.483 [4];

- the <entry> element of the <EmergencyAlert> element of the <PrivateEmergencyAlert> element indicates the name of the MCPTT user recipient for an on-network MCPTT emergency private alert and corresponds to the "DisplayName" element of subclause 5.2.48J5 in 3GPP TS 24.483 [4];

- the <PrivateCallURI> of the <PrivateCallList> element indicates the name of an MCPTT ID of an MCPTT user that the MCPTT user is authorised to initiate a private call to and corresponds to the "DisplayName" element of subclause 5.2.19A in 3GPP TS 24.483 [4];

- the <MCPTTGroupInfo> list element of the <OnNetwork> element indicates the name of an MCPTT group ID of an MCPTT group that the MCPTT user is authorised to affiliate with during on-network operation and corresponds to the "DisplayName" element of subclause 5.2.48B5 in 3GPP TS 24.483 [4]; and

- the <ImplicitAffiliations> list element indicates the name of of an MCPTT group that the MCPTT user is implicitly affiliated with and corresponds to the "DisplayName" element of subclause 5.2.48C5 in 3GPP TS 24.483 [4]; and

- the <MCPTTGroupInfo> list element of the <OffNetwork> element indicates the name of an off-network MCPTT group that the MCPTT user is authorised to join during off-network operation and corresponds to the "DisplayName" element of subclause 5.2.53A in 3GPP TS 24.483 [4].

The "index" attribute is of type "token" and is included within some elements for uniqueness purposes, and does not appear in the user profile configuration managed object specified in 3GPP TS 24.483 [4].

The <Status> element is of type "Boolean" and indicates whether this particular MCPTT user profile is enabled or disabled and corresponds to the "Status" element of subclause 5.2.59 in 3GPP TS 24.483 [4]. When set to "true" this MCPTT user profile is enabled. When set to "false" this MCPTT user profile is disabled.

The "user-profile-index" is of type "unsignedByte" and indicates the particular MCPTT user profile configuration document in the collection and corresponds to the "MCPTTUserProfileIndex" element of subclause 5.2.7A in 3GPP TS 24.483 [4].

The <ProfileName> element is of type "token" and specifies the name of the MCPTT user profile configuration document in the MCPTT user profile XDM collection and corresponds to the "MCPTTUserProfileName" element of subclause 5.2.7B in 3GPP TS 24.483 [4].

The <Pre-selected-indication> element is of type "mcpttup:emptyType". Presence of the <Pre-selected-indication> element indicates that this particular MCPTT user profile is designated to be the pre-selected MCPTT user profile as defined in 3GPP TS 23.379 [8], and corresponds to the "PreSelectedIndication" element of subclause 5.2.7C in 3GPP TS 24.483 [4]. Absence of the <Pre-selected-indication> element indicates that this MCPTT user profile is not designated as the pre-selected MCPTT user profile within the collection of MCPTT user profiles for the MCPTT user or is the only MCPTT user profile within the collection and is the pre-selected MCPTT user profile by default.

The "XUI-URI" attribute is of type "anyURI" that contains the XUI of the MCPTT user for whom this MCPTT user profile configuration document is intended and does not appear in the user profile configuration managed object specified in 3GPP TS 24.483 [4].

The <ParticipantType> element of the <Common> element is of type "token" and indicates the functional category of the MCPTT user (e.g., first responder, second responder, dispatch, dispatch supervisor). The <ParticipantType> element corresponds to the "ParticipantType" element of subclause 5.2.10 in 3GPP TS 24.483 [4].

The <Priority> element of the <RelativePresentationPriority> element of the <anyExt> element when it appears in:

- the <GroupServerInfo> element of the <anyExt> element of the <OnNetwork> element, contains an integer value between 0 and 255 indicating the presentation priority of the on-network group relative to other on-network groups and on-network users, and corresponds to the "PresentationPriority" element of subclause 5.2.48V14 in 3GPP TS 24.483 [4]; and

- the <OffnetworkGroupServerInfo> element of the <anyExt> element of the <OffNetwork> element, contains an integer value between 0 and 255 indicating the presentation priority of the off-network group relative to other off-network groups and off-network users, and corresponds to the "PresentationPriority" element of subclause 5.2.58A14 in 3GPP TS 24.483 [4].

The <MaxAffiliationsN2> element is of type "nonNegativeInteger", and indicates to the MCPTT server the maximun number of MCPTT groups that the MCPTT user is authorised to affiliate with.

The <MaxSimultaneousCallsN6> element of the <MCPTT-group-call> element is of type "positiveInteger" and indicates the maximum number of simultaneously received MCPTT group calls, and corresponds to the "MaxSimultaneouCallsN6" element of subclause 5.2.31 in 3GPP TS 24.483 [4].

The <MaxSimultaneousTransmissionsN7> element is of type "positiveInteger", and indicates to the MCPTT server the maximum number of simultaneous transmissions received in one MCPTT group call for override.

The <Priority> element of the <MCPTT-group-call> element is of a type "nonNegativeInteger", indicates the priority of the MCPTT user for initiating and receiving MCPTT calls and corresponds to the "Priority" element of subclause 5.2.44 in 3GPP TS 24.483 [4].

The <User-Info-ID> element is of type "hexBinary". When the <User-Info-ID> element appears within:

- the <ProSeUserID-entry> element of the <MCPTTPrivateRecipient> of the <EmergencyCall> element indicates the ProSe "User Info ID" as defined in 3GPP TS 23.303 [18] and 3GPP TS 24.334 [19] of the recipient MCPTT user for an MCPTT emergency private call and corresponds to the "UserInfoID" element of subclause 5.2.29D in 3GPP TS 24.483 [4];

- the <PrivateCallProSeUser> element of the <PrivateCallList> element, indicates a ProSe "User Info ID" as defined in 3GPP TS 23.303 [18] and 3GPP TS 24.334 [19] of another MCPTT user that the MCPTT user is authorised to initiate a private call to and corresponds to the "UserInfoID" element of subclause 5.2.19 in 3GPP TS 24.483 [4]; and

- the <OffNetwork> element, indicates the ProSe "User Info ID" as defined in 3GPP TS 23.303 [18] and 3GPP TS 24.334 [19] of the MCPTT UE for off-network operation and corresponds to the "UserInfoID" element of subclause 5.2.58 in 3GPP TS 24.483 [4].

The "entry-info" attribute is of type "string" and when it appears within:

- the <entry> element of the <MCPTTGroupInitiation> element of the <EmergencyCall> element of the <MCPTT-group-call> element, it corresponds to the "Usage" element of subclause 5.2.34D in 3GPP TS 24.483 [4] and indicates to use as the destination address for an emergency group call:

  a) the MCPTT user currently selected MCPTT group if the "entry-info"attribute has the value of 'UseCurrentlySelectedGroup'; or

  b) the value in the <uri-entry> element within the <entry> element of the <MCPTTGroupInitiation> element for an on-network emergency group call, if the "entry-info" attribute has the value of 'DedicatedGroup' or if the "entry-info"attribute has the value of 'UseCurrentlySelectedGroup' and the MCPTT user has no currently selected MCPTT group;

- the <entry> element of the <MCPTTPrivateRecipient> element of the <EmergencyCall> element of the <PrivateCall> element, it corresponds to the "Usage" element of subclause 5.2.29F in 3GPP TS 24.483 [4] and indicates to use as the destination address for an emergency private call:

  a) an MCPTT ID of an MCPTT user that is selected by the MCPTT user if the "entry-info"attribute has the value of 'LocallyDetermined';

  b) the value in the <uri-entry> element within the <entry> element of the <MCPTTPrivateRecipient> for an on-network emergency private call, if the "entry-info"attribute has the value of 'UsePreConfigured'; or

  c) the value in the <User-Info-ID> element within the <ProSeUserID-entry> element of the <MCPTTPrivateRecipient> for an off-network emergency private call, if the "entry-info"attribute has the value of 'UsePreConfigured';

- the <entry> element of the <MCPTTGroupInitiation> element of the <ImminentPerilCall> element of the <MCPTT-group-call> element, it corresponds to the "Usage" element of subclause 5.2.39D in 3GPP TS 24.483 [4] and indicates to use as the destination for the MCPTT imminent peril group call:

  a) the MCPTT user currently selected MCPTT group if the "entry-info" attribute has the value of 'UseCurrentlySelectedGroup'; or

  b) the value in the <uri-entry> element within the <entry> element of the <MCPTTGroupInitiation> for an on-network imminent peril call, if the "entry-info" attribute has the value of:

     i) 'DedicatedGroup'; or

     ii) 'UseCurrentlySelectedGroup' and the MCPTT user has no currently selected MCPTT group; and

- the <entry> element within the <EmergencyAlert> element, it corresponds to the "Usage" element of subclause 5.2.43E in 3GPP TS 24.483 [4] and indicates to use as the destination address for a group emergency alert:

  a) the MCPTT user currently selected MCPTT group if the "entry-info"attribute has the value of 'UseCurrentlySelectedGroup';

  b) the value in the <uri-entry> element within the <entry> element of the <EmergencyAlert> element for an on-network group emergency alert, if the "entry-info" attribute has the value of:

     i) 'DedicatedGroup'; or

     ii) 'UseCurrentlySelectedGroup' and the MCPTT user has no currently selected MCPTT group.

- the <entry> element within the <PrivateEmergencyAlert> element, it corresponds to the "Usage" element of subclause 5.2.48J6 in 3GPP TS 24.483 [4] and indicates to use as the destination address for on-network private emergency alert:

  a) the MCPTT ID of an MCPTT user that is selected by the MCPTT user if the "entry-info"attribute has the value of 'LocallyDetermined'; and

  b) the value in the <uri-entry> element within the <entry> element of the <PrivateEmergencyAlert> element, if the "entry-info" attribute has the value of:

     i) 'UsePreConfigured'; or

ii) 'LocallyDetermined' and the MCPTT user has no currently selected MCPTT user.

The <allow-presence-status> element is of type Boolean, as specified in table 8.3.2.7-1, and corresponds to the "AllowedPresenceStatus" element of subclause 5.2.48E in 3GPP TS 24.483 [4].

Table 8.3.2.7-1: Values of <allow-presence-status>

"true"	indicates to the MCPTT user that their presence on the network is available.
"false"	indicates to the MCPTT user that their presence on the network is not available

The <allow-request-presence> element is of type Boolean, as specified in table 8.3.2.7-2, and corresponds to the "AllowedPresence" element of subclause 5.2.48F in 3GPP TS 24.483 [4].

Table 8.3.2.7-2: Values of <allow-request-presence>

"true"	indicates that the MCPTT user is locally authorised to request whether a particular MCPTT User is present on the network.
"false"	indicates that the MCPTT user is not locally authorised to request whether a particular MCPTT User is present on the network.

The <allow-query-availability-for-private-calls> element is of type Boolean, as specified in table 8.3.2.7-3, and does not appear in the MCPTT user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 8.3.2.7-3: Values of <allow-query-availability-for-private-calls>

"true"	indicates that the MCPTT user is locally authorised to query the availability of other MCPTT users to participate in a private call.
"false"	indicates that the MCPTT user is not locally authorised to query the availability of other MCPTT users to participate in a private call.

The <allow-enable-disable-user> element is of type Boolean, as specified in table 8.3.2.7-4, and does not appear in the MCPTT user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 8.3.2.7-4: Values of <allow-enable-disable-user>

"true"	indicates that the MCPTT user is locally authorised to enable/disable other MCPTT users from receiving MCPTT service.
"false"	indicates that the MCPTT user is not locally authorised to enable/disable other MCPTT users from receiving MCPTT service.

The <allow-enable-disable-UE> element is of type Boolean, as specified in table 8.3.2.7-5, and does not appear in the MCPTT user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 8.3.2.7-5: Values of <allow-enable-disable-UE>

"true"	indicates that the MCPTT user is locally authorised to enable/disable other MCPTT UEs from receiving MCPTT service.
"false"	indicates that the MCPTT user is not locally authorised to enable/disable other MCPTT UEs from receiving MCPTT service.

The <allow-create-delete-user-alias> element is of type Boolean, as specified in table 8.3.2.7-6, and corresponds to the "AuthorisedAlias" element of subclause 5.2.9 in 3GPP TS 24.483 [4].

Table 8.3.2.7-6: Values of <allow-create-delete-user-alias>

"true"	indicates that the MCPTT user is locally authorised to create or delete aliases of an MCPTT user and its associated user profiles.
"false"	indicates that the MCPTT user is not locally authorised to create or delete aliases of an MCPTT user and its associated user profiles.

The <allow-private-call> element is of type Boolean, as specified in table 8.3.2.7-7, and corresponds to the "Authorised" element of subclause 5.2.13 in 3GPP TS 24.483 [4].

Table 8.3.2.7-7: Values of <allow-private-call>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a private call request using the procedures defined in 3GPP TS 24.379 [9]. The recipient must be a MCPTT user identified in a <entry> element of the <PrivateCall> element, which corresponds to leaf nodes of "UserList" in subclause 5.2.16 in 3GPP TS 24.483 [4].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, to reject private call request using the procedures defined in 3GPP TS 24.379 [9]. This shall be the default value taken in the absence of the element;

The <allow-manual-commencement> element is of type Boolean, as specified in table 8.3.2.7-8, and corresponds to the "ManualCommence" element of subclause 5.2.20 in 3GPP TS 24.483 [4].

Table 8.3.2.7-8: Values of <allow-manual-commencement>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a private call with manual commencement using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request a private call with manual commencement using the procedures defined in 3GPP TS 24.379 [9].

The <allow-automatic-commencement> element is of type Boolean, as specified in table 8.3.2.7-9, corresponds to the "AutoCommence" element of subclause 5.2.21 in 3GPP TS 24.483 [4].

Table 8.3.2.7-9: Values of <allow-automatic-commencement>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a private call with automatic commencement using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request a private call with automatic commencement using the procedures defined in 3GPP TS 24.379 [9].

The <allow-force-auto-answer> element is of type Boolean, as specified in table 8.3.2.7-10, and corresponds to the "AutoAnswer" element of subclause 5.2.22 in 3GPP TS 24.483 [4].

Table 8.3.2.7-10: Values of <allow-force-auto-answer>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a private call and force automatic commencement using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request a private call and force automatic commencement using the procedures defined in 3GPP TS 24.379 [9].

The <allow-failure-restriction> element is of type Boolean, as specified in table 8.3.2.7-11, and corresponds to the "FailRestrict" element of subclause 5.2.23 in 3GPP TS 24.483 [4].

Table 8.3.2.7-11: Values of <allow-failure-restriction>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to restrict the notification of a call failure reason for a private call (with or without floor control) using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to restrict the notification of a call failure reason for a private call (with or without floor control) using the procedures defined in 3GPP TS 24.379 [9].

The <allow-emergency-group-call> element is of type Boolean, as specified in table 8.3.2.7-12, and corresponds to the "Enabled" element of subclause 5.2.33 in 3GPP TS 24.483 [4].

Table 8.3.2.7-12: Values of <allow-emergency-group-call>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request an emergency group call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request an emergency group call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-emergency-private-call> element is of type Boolean, as specified in table 8.3.2.7-13, and corresponds to the "Authorised" element of subclause 5.2.27 in 3GPP TS 24.483 [4].

Table 8.3.2.7-13: Values of <allow-emergency-private-call>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request an emergency private call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request an emergency private call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-cancel-group-emergency> element is of type Boolean, as specified in table 8.3.2.7-14, and corresponds to the "CancelMCPTTGroup" element of subclause 5.2.35 in 3GPP TS 24.483 [4].

Table 8.3.2.7-14: Values of <allow-cancel-group-emergency>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to cancel an emergency group call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to cancel an emergency group call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-cancel-private-emergency-call> element is of type Boolean, as specified in table 8.3.2.7-15, and corresponds to the "CancelPriority" element of subclause 5.2.28 in 3GPP TS 24.483 [4].

Table 8.3.2.7-15: Values of <allow-cancel-private-emergency-call>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to cancel an emergency priority in an emergency private call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to cancel an emergency priority in an emergency private call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-imminent-peril-call> element is of type Boolean, as specified in table 8.3.2.7-16, and corresponds to the "Authorised" element of subclause 5.2.37 in 3GPP TS 24.483 [4].

Table 8.3.2.7-16: Values of <allow-imminent-peril-call>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request an imminent peril group call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request an imminent peril group call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-cancel-imminent-peril> element is of type Boolean, as specified in table 8.3.2.7-17, and corresponds to the "Cancel" element of subclause 5.2.38 in 3GPP TS 24.483 [4].

Table 8.3.2.7-17: Values of <allow-cancel-imminent-peril>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to cancel an imminent peril group call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to cancel an imminent peril group call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-activate-emergency-alert> element is of type Boolean, as specified in table 8.3.2.7-18, and corresponds to the "Authorised" element of subclause 5.2.41 in 3GPP TS 24.483 [4].

Table 8.3.2.7-18: Values of <allow-activate-emergency-alert>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to activate an emergency alert using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to activate an emergency alert using the procedures defined in 3GPP TS 24.379 [9].

The <allow-cancel-emergency-alert> element is of type Boolean, as specified in table 8.3.2.7-19, and corresponds to the "Cancel" element of subclause 5.2.42 in 3GPP TS 24.483 [4].

Table 8.3.2.7-19: Values of <allow-cancel-emergency-alert>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to cancel an emergency alert using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to cancel an emergency alert using the procedures defined in 3GPP TS 24.379 [9].

The <allow-offnetwork> element is of type Boolean, as specified in table 8.3.2.7-20, and corresponds to the "Authorised" element of subclause 5.2.50 in 3GPP TS 24.483 [4].

Table 8.3.2.7-20: Values of <allow-offnetwork>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised for off-network operation using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised for off-network operation using the procedures defined in 3GPP TS 24.379 [9].

The <allow-imminent-peril-change> element is of type Boolean, as specified in table 8.3.2.7-21, and corresponds to the "ImminentPerilCallChange" element of subclause 5.2.57 in 3GPP TS 24.483 [4].

Table 8.3.2.7-21: Values of <allow-imminent-peril-change>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to change an off-network MCPTT group call in-progress to an off-network imminent peril group call using the procedures defined in 3GPP TS 24.379 [9]. The default value for the <allow-imminent-peril-change> element is "true"
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to change an off-network MCPTT group call in-progress to an off-network imminent peril group call using the proceduresdefined in 3GPP TS 24.379 [9].

The <allow-private-call-media-protection> element is of type Boolean, as specified in table 8.3.2.7-22, and corresponds to the "AllowedMediaProtection" element of subclause 5.2.24 in 3GPP 24.483 [4];

Table 8.3.2.7-22: Values of <allow-private-call-media-protection>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to protect the confidentiality and integrity of media for on-network and off-network private calls. The default value for the <allow-private-call-media-protection> element is "true".
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to protect the confidentiality and integrity of media for on-network and off-network private calls.

The <allow-private-call-floor-control-protection> element is of type Boolean, as specified in table 8.3.2.7-23, and corresponds to the "AllowedFloorControlProtection" element of subclause 5.2.25 in 3GPP 24.483 [4];

Table 8.3.2.7-23: Values of <allow-private-call-floor-control-protection>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to protect the confidentiality and integrity of floor control signalling for both on-network and off-network private calls
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to protect the confidentiality and integrity of floor control signalling for both on-network and off-network private calls

The <allow-request-affiliated-groups> element is of type Boolean, as specified in table 8.3.2.7-24, and does not appear in the user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 8.3.2.7-24: Values of <allow-request-affiliated-groups>

"true"	Instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request the list of MCPTT groups to which a specified MCPTT user is affiliated.
"false"	Instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request the list of MCPTT groups to which the a specified MCPTT user is affiliated.

The <allow-request-to-affiliate-other-users> element is of type Boolean, as specified in table 8.3.2.7-25, and does not appear in the MCPTT user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 8.3.2.7-25: Values of <allow-request-to-affiliate-other-users>

"true"	Instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request specified MCPTT user(s) to be affiliated to/deaffiliated from specified MCPTT group(s).
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request specified MCPTT user(s) to be affiliated to/deaffiliated from specified MCPTT group(s).

The <allow-recommend-to-affiliate-other-users> element is of type Boolean, as specified in table 8.3.2.7-26, and does not appear in the MCPTT user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 8.3.2.7-26: Values of <allow-recommend-to-affiliate-other-users>

"true"	Instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to recommend to specified MCPTT user(s) to affiliate to specified MCPTT group(s).
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to recommend tospecified MCPTT user(s) to affiliate to specified MCPTT group(s).

The <allow-private-call-to-any-user> element is of type Boolean, as specified in table 8.3.2.7-27, and corresponds to the "AuthorisedAny" element of subclause 5.2.14 in 3GPP TS 24.483 [4].

Table 8.3.2.7-27: Values of <allow-private-call-to-any-user>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a private call request using the procedures defined in 3GPP TS 24.379 [9]. The recipient is not constrained to MCPTT users identified in <entry> elements of the <PrivateCall> element i.e., to any MCPTT users.
"false"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, to reject private call requests using the procedures defined in 3GPP TS 24.379 [9]. This shall be the default value taken in the absence of the element;

The <allow-regroup> element is of type Boolean, as specified in table 8.3.2.7-28, and corresponds to the "AllowedRegroup" element of subclause 5.2.48D in 3GPP TS 24.483 [4].

Table 8.3.2.7-28: Values of <allow-regroup>

"true"	instructs the MCPTT server performing the originating participating MCPTT function for the MCPTT user, that the MCPTT user is locally authorised to send a dynamic regrouping request according to the procedures defined in 3GPP TS 24.481 [5].
"false"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is not locally authorised to send a dynamic regrouping request according to the procedures defined in 3GPP TS 24.481 [5].

The <allow-private-call-participation> element is of type Boolean, as specified in table 8.3.2.7-29, and corresponds to the "EnabledParticipation" element of subclause 5.2.48G in 3GPP TS 24.483 [4].

Table 8.3.2.7-29: Values of <allow-private-call-participation>

"true"	instructs the MCPTT server performing the terminating participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to participate in private calls that they are invited to using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the terminating participating MCPTT function for the MCPTT user, that the MCPTT user to reject private call requests that they are invited to using the procedures defined in 3GPP TS 24.379 [9].

The <allow-override-of-transmission> element is of type Boolean, as specified in table 8.3.2.7-30, and corresponds to the "AllowedTransmission" element of subclause 5.2.48H in 3GPP TS 24.483 [4].

Table 8.3.2.7-30: Values of <allow-override-of-transmission>

"true"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to override transmission in a private call.
"false"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to override transmission in a private call

The <allow-manual-off-network-switch> element is of type Boolean, as specified in table 8.3.2.7-31, and corresponds to the "AllowedManualSwitch" element of subclause 5.2.48I in 3GPP TS 24.483 [4].

Table 8.3.2.7-31: Values of <allow-manual-off-network-switch>

"true"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to manually switch to off-network operation while in on-network operation using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to manually switch to off-network operation while in on-network operation using the procedures defined in 3GPP TS 24.379 [9].

The <allow-listen-both-overriding-and-overridden> element is of type Boolean, as specified in table 8.3.2.7-32, and corresponds to the "AllowedListen" element of subclause 5.2.54 in 3GPP TS 24.483 [4].

Table 8.3.2.7-32: Values of <allow-listen-both-overriding-and-overridden>

"true"	Indicates that the MCPTT user is allowed to listen both overriding and overriden transmissions during off-network operation.
"false"	Indicates that the MCPTT user is not allowed to listen both overriding and overriden transmissions during off-network operation.

The <allow-transmit-during-override> element is of type Boolean, as specified in table 8.3.2.7-33, and corresponds to the "AllowedTransmission" element of subclause 5.2.55 in 3GPP TS 24.483 [4].

Table 8.3.2.7-33: Values of <allow-transmit-during-override>

"true"	Indicates that the MCPTT user is allowed to transmit in case of override (overriding and/or overridden).during off-network operation.
"false"	Indicates that the MCPTT user is not allowed to transmit in case of override (overriding and/or overridden).during off-network operation.

The <allow-off-network-group-call-change-to-emergency> element is of type Boolean, as specified in table 8.3.2.7-34, and corresponds to the "EmergencyCallChange" element of subclause 5.2.56 in 3GPP TS 24.483 [4].

Table 8.3.2.7-34: Values of <allow-off-network-group-call-change-to-emergency>

"true"	Indicates that the MCPTT user is allowed to to change an off-network group call in-progress to an off-network MCPTT emergency group call.
"false"	Indicates that the MCPTT user is not allowed to change an off-network group call in-progress to an off-network MCPTT emergency group call.

The <allow-revoke-transmit> element is of type Boolean, as specified in table 8.3.2.7-35, and does not appear in the MCPTT user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 8.3.2.7-35: Values of <allow-revoke-transmit>

"true"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to revoke the permission to transmit of another participant.
"false"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to revoke the permission to transmit of another participant.

The <allow-create-group-broadcast-group> element is of type Boolean, as specified in table 8.3.2.7-36, and corresponds to the "Authorised" element of subclause 5.2.46 in 3GPP TS 24.483 [4].

Table 8.3.2.7-36: Values of <allow-create-group-broadcast-group>

"true"	indicates that the MCPTT user is locally authorised to send a request to create a group-broadcast group according to the procedures of 3GPP TS 24.481 [5].
"false"	Indicates that the MCPTT user is not locally authorised to send a request to create a group-broadcast group according to the procedures of 3GPP TS 24.481 [5].

The <allow-create-user-broadcast-group> element is of type Boolean, as specified in table 8.3.2.7-37, and corresponds to the "Authorised" element of subclause 5.2.48 in 3GPP TS 24.483 [4].

Table 8.3.2.7-37: Values of <allow-create-user-broadcast-group>

"true"	indicates that the MCPTT user is locally authorised to send a request to create a user-broadcast group according to the procedures of 3GPP TS 24.481 [5].
"false"	Indicates that the MCPTT user is not locally authorised to send a request to create a user-broadcast group according to the procedures of 3GPP TS 24.481 [5].

The <allow-request-private-call-call-back> element is of type Boolean, as specified in table 8.3.2.7-38, and corresponds to the "AllowedCallBackRequest" element of subclause 5.2.48P in 3GPP TS 24.483 [4].

Table 8.3.2.7-38: Values of <allow-request-private-call-call-back>

"true"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a private call call-back using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request a private call call-back using the procedures defined in 3GPP TS 24.379 [9].

The <allow-cancel-private-call-call-back > element is of type Boolean, as specified in table 8.3.2.7-39, and corresponds to the "AllowedCallBackCancelRequest" element of subclause 5.2.48Q in 3GPP TS 24.483 [4].

Table 8.3.2.7-39: Values of <allow-cancel-private-call-call-back>

"true"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is authorised to cancel a private call call-back cancel using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is not authorised to cancel a private call call-back using the procedures defined in 3GPP TS 24.379 [9].

The <allow-request-remote-initiated-ambient-listening> element is of type Boolean, as specified in table 8.3.2.7-40, and corresponds to the "AllowedRemoteInitiatedAmbientListening" element of subclause 5.2.48R in 3GPP TS 24.483 [4].

Table 8.3.2.7-40: Values of <allow-request-remote-initiated-ambient-listening>

"true"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a remote initiated ambient listening call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request a remote initiated ambient listening call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-request-locally-initiated-ambient-listening> element is of type Boolean, as specified in table 8.3.2.7-41, and corresponds to the "AllowedLocallyInitiatedAmbientListening" element of subclause 5.2.48S in 3GPP TS 24.483 [4].

Table 8.3.2.7-41: Values of <allow-request-locally-initiated-ambient-listening>

"true"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a locally initiated ambient listening call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request a locally initiated ambient listening call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-request-first-to-answer-call> element is of type Boolean, as specified in table 8.3.2.7-42, and corresponds to the "AllowedRequestFirstToAnswerCall" element of subclause 5.2.48T in 3GPP TS 24.483 [4].

Table 8.3.2.7-42: Values of <allow-request-first-to-answer-call>

"true"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a first-to-answer call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the controlling MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request a first-to-answer call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-request-remote-init-private-call> element is of type Boolean, as specified in table 8.3.2.7-43, and corresponds to the "AllowedRequestRemoteInitPrivateCall" element of subclause 5.2.48W1 in 3GPP TS 24.483 [4].

Table 8.3.2.7-43: Values of <allow-request-remote-init-private-call>

"true"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a remotely initiated private call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request a remotely initiated private call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-request-remote-init-group-call> element is of type Boolean, as specified in table 8.3.2.7-44, and corresponds to the "AllowedRequestRemoteInitGroupCall" element of subclause 5.2.48W2 in 3GPP TS 24.483 [4].

Table 8.3.2.7-44: Values of <allow-request-remote-init-group-call>

"true"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to request a remotely initiated group call using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to request a remotely initiated group call using the procedures defined in 3GPP TS 24.379 [9].

The <allow-query-functional-alias-other-user> element is of type Boolean, as specified in table 8.3.2.7-45, and corresponds to the "AllowedQueryFunctionalAliasOtherUser" element of subclause 5.2.48W8 in 3GPP TS 24.483 [4].

Table 8.3.2.7-45: Values of <allow-query-functional-alias-other-user>

"true"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to query the functional alias(es) activated by another MCPTT user using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to query the functional alias(es) activated by another MCPTT user using the procedures defined in 3GPP TS 24.379 [9].

The <allow-takeover-functional-alias-other-user> element is of type Boolean, as specified in table 8.3.2.7-46, and corresponds to the "AllowedTakeoverFunctionalAliasOtherUser" element of subclause 5.2.48W9 in 3GPP TS 24.483 [4].

Table 8.3.2.7-46: Values of <allow-takeover-functional-alias-other-user>

"true"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is authorised to take over the functional alias(es) previously activated by another MCPTT user using the procedures defined in 3GPP TS 24.379 [9].
"false"	instructs the MCPTT server performing the participating MCPTT function for the MCPTT user, that the MCPTT user is not authorised to take over the functional alias(es) previously activated by another MCPTT user using the procedures defined in 3GPP TS 24.379 [9].

The <allow-location-info-when-talking> element is of type Boolean, as specified in table 8.3.2.7-47, and corresponds to the "AllowedLocationInfoWhenTalking" element of subclause 5.2.48W10 in 3GPP TS 24.483 [4].

Table 8.3.2.7-47: Values of <allow-location-info-when-talking>

"true"	instructs the MCPTT user that it is authorised to send its location information on the signalling it uses to request the floor on a call; instructs the MCPTT server performing the participating MCPTT function for the MCPTT user that the location information for the MCPTT user is authorised to be sent to the MCPTT server performing the controlling MCPTT function for the call; instructs the MCPTT server performing the controlling MCPTT function for the call that it is authorised to send the location information for the MCPTT user, when the MCPTT user is talking, to other MCPTT users.
"false"	instructs the MCPTT user that it is not authorised to send its location information on the signalling it uses to request the floor on a call; instructs the MCPTT server performing the participating MCPTT function for the MCPTT user that the location information for the MCPTT user is not authorised to be sent to the MCPTT server performing the controlling MCPTT function for the call; instructs the MCPTT server performing the controlling MCPTT function for the call that it is not authorised to send the location information for the MCPTT user, when the MCPTT user is talking, to other MCPTT users on the call.

8.3.2.8 Naming Conventions

The name of user profile configuration document shall be in the format of a static "mcptt-user-profile"- string concatenated with the value of <user-profile-index> attribute and including ".xml" filetype. For instance, "mcptt-user-profile-9.xml" is the user profile document name for a profile with the index value of 9.

8.3.2.9 Global documents

The present document requires no global documents.

8.3.2.10 Resource interdependencies

This Application Usage is interdependent on user profile data in the MCPTT Database and the MCPTT Management Object.

8.3.2.11 Access Permissions Policies

The authorization and access policies for a user profile configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*"and subclause *5.6.7* "*Access Permissions Document*" with the following exceptions:

1) The Principal (i.e., the user) of the user profile configuration document shall have permission to create, modify, or delete <alias-entry> child elements of the <UserAlias> elements, if the rule of the Access Permissions document associated with the user profile configuration document contains the action element <allow-any-operation-own-data>, as specified in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.6.7 "*Access Permissions Document*".

8.3.2.12 Subscription to Changes

The User Access Policy Application Usage shall support subscription to changes as specified in subclause 6.3.13.3.

MCPTT user profile configuration documents are kept as XDM collections. Therefore, it is possible to subscribe to all MCPTT user profile configuration documents of a MCPTT user according to XCAP URI construction convention of a trailing '/', as specified in IETF RFC 5875 [11].

8.4 MCPTT service configuration document

8.4.1 General

The MCPTT service configuration document is specified in this subclause. The MCPTT service configuration document content is based on requirements of Annex A.5 of 3GPP TS 23.379 [8], and structure and procedures of OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCPTT service configuration in the MCPTT service is described in 3GPP TS 24.379 [9] and 3GPP TS 24.380 [10]. The schema definition is provided in subclause 8.4.2.3. Each mission critical organization is configured with an MCPTT service configuration document.

8.4.2 Coding

8.4.2.1 Structure

The service configuration document structure is specified in this subclause.

The <service configuration> document:

1) shall include a "domain" attribute;
2) may include a <common> element;
3) may include an <on-network> element;
4) may include an <off-network> element; and
5) may include any other attribute for the purposes of extensibility.

The <common> element:

1) may include a <min-length-alias> element;
2) may contain a <broadcast-group> element containing:
   a) a <num-levels-group-hierarchy> element; and
   b) a <num-levels-user-hierarchy> element;

The <on-network> element:

1) may contain a <emergency-call> element containing:
   a) a <private-cancel-timeout> element; and
   b) a <group-time-limit> element.
2) may contain a <private-call> element containing:
   a) a <hang-time> element;
   b) a <max-duration-with-floor-control> element; and
   c) a <max-duration-without-floor-control> element;
3) may contain a <num-levels-hierarchy> element;
4) may contain a <transmit-time> element containing:
   a) a <time-limit> element; and
   b) a <time-warning> element;
5) may contain a <hang-time-warning> element;
6) may contain a <floor-control-queue> element containing:

a) a <depth> element; and

b) a <max-user-request-time> element; and

7) shall contain a <fc-timers-counters> element containing:

a) a <T1-end-of-rtp-media> element;

b) a <T3-stop-talking-grace> element;

c) a <T7-floor-idle> element;

d) a <T8-floor-revoke> element;

e) a <T11-end-of-RTP-dual> element;

f) a <T12-stop-talking-dual> element;

g) a <T15-conversation> element;

h) a <T16-map-group-to-bearer> element;

i) a <T17-unmap-group-to-bearer> element;

j) a <T20-floor-granted> element;

k) a <T55-connect> element;

l) a<T56-disconnect> element;

m) a <C7-floor-idle> element;

n) a <C17-unmap-group-to-bearer> element;

o) a <C20-floor-granted> element;

p) a <C55-connect> element; and

q) a <C56-disconnect> element;

8) may contain a <signalling-protection> element containing:

a) a <confidentiality-protection> element; and

b) an <integrity-protection> element;

9) shall include one <emergency-resource-priority> element containing:

a) one <resource-priority-namespace> string element containing a namespace defined in IETF RFC 8101 [20]; and

b) one <resource-priority-priority> string element element containing a priority level in the range specified in IETF RFC 8101 [20];

10) shall include one <imminent-peril-resource-priority> element containing:

a) one <resource-priority-namespace> string element containing a namespace defined in IETF RFC 8101 [20]; and

b) one <resource-priority-priority> string element element containing a priority level in the range specified in IETF RFC 8101 [20];

11) shall include one <normal-resource-priority> element containing:

a) one <resource-priority-namespace> string element containing a namespace defined in IETF RFC 8101 [20]; and

b) one <resource-priority-priority> string element element containing a priority level in the range specified in IETF RFC 8101 [20]; and

12) may contain a <protection-between-mcptt-servers> element containing:

a) an <allow-signalling-protection> element; and

b) an <allow-floor-control-protection> element; and

13) may contain an <anyExt> element containing:

a) a <functional-alias-list> element containing:

i) a <functional-alias> element;

ii a <max-simultaneous-activations> element;

iii) an <allow-takeover> element; and

iv) mcptt-user-list.

The <off-network> element:

1) may contain a <emergency-call> element containing:

a) a <private-cancel-timeout> element; and

b) a <group-time-limit> element.

2) may contain a <private-call> element containing:

a) a <hang-time> element; and

b) a <max-duration-with-floor-control> element;

3) may contain a <num-levels-hierarchy> element;

4) may contain a <transmit-time> element containing:

a) a <time-limit> element; and

b) a <time-warning> element.

5) may contain a <hang-time-warning> element;

6) may contain a <default-prose-per-packet-priority> element; and

7) may contain a <allow-log-metadata> element.

8.4.2.2 Application Unique ID

The AUID shall be set to "org.3gpp.mcptt.service-config".

8.4.2.3 XML Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="urn:3gpp:ns:mcpttServiceConfig:1.0"
xmlns:mcpttsc="urn:3gpp:ns:mcpttServiceConfig:1.0">
<xs:import namespace="http://www.w3.org/XML/1998/namespace"
schemaLocation="http://www.w3.org/2001/xml.xsd"/>
<!-- the root element -->
  <xs:element name="service-configuration-info" type="mcpttsc:service-configuration-info-Type"/>

<!-- the root type -->
<!-- this is refined with one or more sub-types -->
  <xs:complexType name="service-configuration-info-Type">
    <xs:sequence>
```

```
      <xs:element name="service-configuration-params" type="mcpttsc:service-configuration-params-
Type" minOccurs="0"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
     </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

<!-- definition of the service-configuration-params-Type subtype-->
  <xs:complexType name="service-configuration-params-Type">
    <xs:sequence>
      <xs:element name="common" type="mcpttsc:commonType" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="on-network" type="mcpttsc:on-networkType" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="off-network" type="mcpttsc:off-networkType" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="domain" type="xs:anyURI" use="required"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="commonType">
    <xs:sequence>
      <xs:element name="min-length-alias" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="broadcast-group" type="mcpttsc:broadcast-groupType" minOccurs="0"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="on-networkType">
    <xs:sequence>
      <xs:element name="emergency-call" type="mcpttsc:emergency-callType" minOccurs="0"/>
      <xs:element name="private-call" type="mcpttsc:private-callType" minOccurs="0"/>
      <xs:element name="num-levels-priority-hierarchy" type="mcpttsc:priorityhierarchyType"
minOccurs="0"/>
      <xs:element name="transmit-time" type="mcpttsc:transmit-timeType" minOccurs="0"/>
      <xs:element name="hang-time-warning" type="xs:duration" minOccurs="0"/>
      <xs:element name="floor-control-queue" type="mcpttsc:floor-control-queueType" minOccurs="0"/>
      <xs:element name="fc-timers-counters" type="mcpttsc:fc-timers-countersType"/>
      <xs:element name="signalling-protection" type="mcpttsc:signalling-protectionType"
minOccurs="0"/>
      <xs:element name="protection-between-mcptt-servers" type="mcpttsc:server-protectionType"
minOccurs="0"/>
      <xs:element name="emergency-resource-priority" type="mcpttsc:resource-priorityType"/>
      <xs:element name="imminent-peril-resource-priority" type="mcpttsc:resource-priorityType"/>
      <xs:element name="normal-resource-priority" type="mcpttsc:resource-priorityType"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="off-networkType">
    <xs:sequence>
      <xs:element name="emergency-call" type="mcpttsc:emergency-callType" minOccurs="0"/>
      <xs:element name="private-call" type="mcpttsc:private-callType" minOccurs="0"/>
      <xs:element name="num-levels-priority-hierarchy" type="mcpttsc:priorityhierarchyType"
minOccurs="0"/>
      <xs:element name="transmit-time" type="mcpttsc:transmit-timeType" minOccurs="0"/>
      <xs:element name="hang-time-warning" type="xs:duration" minOccurs="0"/>
      <xs:element name="default-prose-per-packet-priority" type="mcpttsc:default-prose-per-packet-
priorityType" minOccurs="0"/>
      <xs:element name="allow-log-metadata" type="xs:boolean" minOccurs="0"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="private-callType">
    <xs:sequence>
      <xs:element name="hang-time" type="xs:duration" minOccurs="0"/>
      <xs:element name="max-duration-with-floor-control" type="xs:duration" minOccurs="0"/>
      <xs:element name="max-duration-without-floor-control" type="xs:duration" minOccurs="0"/>
```

```
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="broadcast-groupType">
    <xs:sequence>
      <xs:element name="num-levels-group-hierarchy" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="num-levels-user-hierarchy" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="fc-timers-countersType">
    <xs:sequence>
      <xs:element name="T1-end-of-rtp-media" type="xs:duration"/>
      <xs:element name="T3-stop-talking-grace" type="xs:duration"/>
      <xs:element name="T7-floor-idle" type="xs:duration"/>
      <xs:element name="T8-floor-revoke" type="xs:duration"/>
      <xs:element name="T11-end-of-RTP-dual" type="xs:duration"/>
      <xs:element name="T12-stop-talking-dual" type="xs:duration"/>
      <xs:element name="T15-conversation" type="xs:duration"/>
      <xs:element name="T16-map-group-to-bearer" type="xs:duration"/>
      <xs:element name="T17-unmap-group-to-bearer" type="xs:duration"/>
      <xs:element name="T20-floor-granted" type="xs:duration"/>
      <xs:element name="T55-connect" type="xs:duration"/>
      <xs:element name="T56-disconnect" type="xs:duration"/>
      <xs:element name="C7-floor-idle" type="xs:unsignedShort"/>
      <xs:element name="C17-unmap-group-to-bearer" type="xs:unsignedShort"/>
      <xs:element name="C20-floor-granted" type="xs:unsignedShort"/>
      <xs:element name="C55-connect" type="xs:unsignedShort"/>
      <xs:element name="C56-disconnect" type="xs:unsignedShort"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="emergency-callType">
    <xs:sequence>
      <xs:element name="private-cancel-timeout" type="xs:duration" minOccurs="0"/>
      <xs:element name="group-time-limit" type="xs:duration" minOccurs="0"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="transmit-timeType">
    <xs:sequence>
      <xs:element name="time-limit" type="xs:duration" minOccurs="0"/>
      <xs:element name="time-warning" type="xs:duration" minOccurs="0"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="floor-control-queueType">
    <xs:sequence>
      <xs:element name="depth" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="max-user-request-time" type="xs:duration" minOccurs="0"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="default-prose-per-packet-priorityType">
    <xs:sequence>
      <xs:element name="mcptt-private-call-signalling" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="mcptt-private-call-media" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="mcptt-emergency-private-call-signalling" type="xs:unsignedShort"
minOccurs="0"/>
      <xs:element name="mcptt-emergency-private-call-media" type="xs:unsignedShort" minOccurs="0"/>
```

```
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="signalling-protectionType">
    <xs:sequence>
      <xs:element name="confidentiality-protection" type="xs:boolean" minOccurs="0" default="true"/>
      <xs:element name="integrity-protection" type="xs:boolean" minOccurs="0" default="true"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="server-protectionType">
    <xs:sequence>
      <xs:element name="allow-signalling-protection" type="xs:boolean" minOccurs="0"
default="true"/>
      <xs:element name="allow-floor-control-protection" type="xs:boolean" minOccurs="0"
default="true"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="resource-priorityType">
    <xs:sequence>
      <xs:element name="resource-priority-namespace" type="xs:string"/>
      <xs:element name="resource-priority-priority" type="xs:string"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <!-- simple type for priority element -->
  <xs:simpleType name="priorityhierarchyType">
    <xs:restriction base="xs:unsignedShort">
      <xs:minInclusive value="4"/>
      <xs:maxInclusive value="256"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:element name="functional-alias-list" type="mcpttsc:functional-aliasType"/>

  <xs:complexType name="functional-aliasType">
    <xs:sequence>
      <xs:element name="functional-alias" type="xs:anyURI"/>
      <xs:element name="max-simultaneous-activations" type="xs:positiveInteger"/>
      <xs:element name="allow-takeover" type="xs:boolean"/>
      <xs:element name="mcptt-user-list" type="mcpttsc:ListEntryType"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="ListEntryType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="entry" type="mcpttsc:EntryType"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attribute ref="xml:lang"/>
    <xs:attributeGroup ref="mcpttsc:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="EntryType">
    <xs:sequence>
      <xs:element name="uri-entry" type="xs:anyURI"/>
      <xs:element name="display-name" type="mcpttsc:DisplayNameElementType" minOccurs="0"/>
      <xs:element name="anyExt" type="mcpttsc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
```

```
    <xs:attributeGroup ref="mcpttsc:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:attributeGroup name="IndexType">
    <xs:attribute name="index" type="xs:token"/>
  </xs:attributeGroup>

  <xs:complexType name="DisplayNameElementType">
    <xs:simpleContent>
      <xs:extension base="xs:string">
        <xs:attribute ref="xml:lang"/>
        <xs:anyAttribute namespace="##any" processContents="lax"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>

  <xs:complexType name="anyExtType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

8.4.2.4 Default Document Namespace

The default document namespace used in evaluating URIs shall be "urn:3gpp:ns:mcpttServiceConfig:1.0".

8.4.2.5 MIME type

The MIME type for the service configuration document shall be "vnd.3gpp.mcptt-service-config+xml".

8.4.2.6 Validation Constraints

If the AUID value of the document URI or node URI in the Request-URI is other than that specified in subclause 8.4.2.2, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid application id used".

The service configuration document shall conform to the XML Schema described in subclause 8.4.2.3.

The <service-configuration-info> element is the root element of the XML document. The <service-configuration-info> element can contain sub-elements.

NOTE 1: The sub-elements of the <service-configuration-info> are validated by the <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/> particle of the <mcptt-info> element.

The <service-configuration-params> element is a subelement of the <service-configuration-info> element.

If the <service-configuration-info> element does not contain a <service-configuration-params> element, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "mandatory element is missing".

If the <service-configuration-params> element does not include a <common> element, an <on-network> element or an <off-network> element, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "mandatory element is missing".

The <service-configuration-params> element shall contain either:

1) one <common> element only;

2) one <common> element and one <on-network> element;

3) one <common> element and one <off-network> element;

4) one <on-network> element only;

5) one <off-network> element only;

6) one <on-network> element and one <off-network> element; or

7) one <common> element, one <on-network> element and one <off-network> element.

If the <service-configuration-params> element does not confirm to one of the seven choices above, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the "domain" attribute does not contain a syntactically correct domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect domain name".

If the "domain" attribute contains an unknown domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "unknown domain name".

The value of the <min-length-alias> element in the <common> element refers to variable N3 defined in Annex A of 3GPP TS 22.179 [3] and contains a value between 0 and 255.

If the <min-length-alias> element of the <common> element contains a value greater than 255, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

The value of the <num-levels-group-hierarchy> element in the <broadcast-group> element refers to variable B1 defined in Annex A of 3GPP TS 22.179 [3].

The value of the <num-levels-user-hierarchy> element in the <broadcast-group> element refers to variable B2 defined in Annex A of 3GPP TS 22.179 [3].

The value of the <min-length-alias>, the <num-levels-group-hierarchy> element, the <num-levels-user-hierarchy> element or the <depth> element do not contain a semantically valid value, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the <off-network> element contains a <private-call> element with a <max-duration-without-floor-control> element, it shall be ignored.

If any of the constituent elements of the <default-prose-per-packet-priority> element contain a value less than 1 and greater than 8, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

NOTE 2: The higher the <default-prose-per-packet-priority> value, the higher the priority given to the signalling or media.

The "resource-priority-namespace" element contained in the "emergency-resource-priority" element shall have an MCPTT namespace value as specified in IETF RFC 8101 [20].

The "resource-priority-priority" element contained in the "emergency-resource-priority" element shall have a value greater than or equal to the value of the "resource-priority-priority" element contained in the "imminent-peril-resource-priority" element and shall be a priority level specified in IETF RFC 8101 [20].

The "resource-priority-namespace" element contained in the "imminent-peril-resource-priority" element shall have an MCPTT namespace value as specified in IETF RFC 8101 [20].

The "resource-priority-priority" element contained in the "imminent-peril-resource-priority" element shall have a value greater than or equal to the value of the "resource-priority-priority" element contained in the "normal-resource-priority" element and shall be a priority level specified in IETF RFC 8101 [20].

The "resource-priority-namespace" element contained in the "normal-resource-priority" element shall have an MCPTT namespace value as specified in IETF RFC 8101 [20].

The "resource-priority-priority" element contained in the "normal-resource-priority" element shall have a value that is a priority level specified in IETF RFC 8101 [20].

The values used for the "emergency-resource-priority", "imminent-peril-resource-priority" and "normal-resource-priority" elements need to be carefully agreed to by the MCPTT operator and network operator.

The following elements conform to the "xs: duration" XML type:

1) <hang-time>;
2) <hang-time-warning>;
3) <max-duration-with-floor-control>;
4) <max-duration-without-floor-control>;
5) <private-cancel-timeout>;
6) <group-time-limit>;
7) <max-user-request-time>;
8) <time-limit>;
9) <time-warning>;
10) <T1-end-of-rtp-media>;
11) <T3-stop-talking-grace>;
12) <T7-floor-idle>;
13) <T8-floor-revoke>;
14) <T11-end-of-RTP-dual>;
15) <T12-stop-talking-dual>;
16) <T15-conversation>;
17) <T16-map-group-to-bearer>;
18) <T17-unmap-group-to-bearer>;
19) <T20-floor-granted>;
20) <T55-connect>; and
21) <T56-disconnect>.

The elements of "xs: duration" type specified above shall be represented in seconds using the element value: "PT<h>H<m>M<n>S" where <n> represents a valid value in seconds.

NOTE 3: "xs:duration" allows the use of decimal notion for seconds, e.g. 300ms is represented as <PT0.3S>.

If any of the elements of "xs: duration" type specified above contain values that do not conform to the "PT <n>S" structure then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid format for duration".

If an invalid value is received for <n>, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid value for duration".

The default value for the <confidentiality-protection> element of the <signalling-protection> element is "true" indicating that confidentiality protection is enabled.

The default value for the <integrity-protection> element of the <signalling-protection> element is "true" indicating that integrity protection is enabled.

The service configuration server ignores any unknown element and any unknown attribute.

If the configuration management server receives a duplicate element or attribute, it shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "duplicate attribute or element received".

8.4.2.7 Data Semantics

The "domain" attribute of the <service-configuration-params> element contains the domain name of the mission critical organization.

The <common> element contains service configuration data common to both on and off network service.

The <on-network> element contains service configuration data for on-network service only.

The <off-network> element contains service configuration data for off-network service only.

In the <common> element:

1) the <min-length-alias> element contains the minimum length (N3) of alphanumeric names assigned to MCPTT users by the MCPTT administrator, which corresponds to the "MinLengthAliasID" element as specified in subclause 7.2.9 of 3GPP TS 24.483 [4];

2) the <num-levels- group-hierarchy> element of the <broadcast-group> element contains an integer indicating the number levels of group hierarchy for group-broadcast groups, which corresponds to the "NumLevelGroupHierarchy" element as specified in subclause 7.2.7 of 3GPP TS 24.483 [4]; and

3) the <num-levels-user-hierarchy> element of the <broadcast-group> element contains an integer indicating the number levels of user hierarchy for user-broadcast groups, which corresponds to the "NumLevelUserHierarchy" element as specified in subclause 7.2.8 of 3GPP TS 24.483 [4];

In the <on-network> element:

1) the <private-cancel-timeout> element of the <emergency-call> element contains the timeout value for the cancellation of an in-progress on-network emergency private call;

2) the <group-time-limit> element of the <emergency-call> element contains the time limit for an in-progress on-network emergency call on an MCPTT group;

3) the <hang-time> element of the <private-call> element contains the value of the hang timer for on-network private calls;

NOTE 1: The hang time is a configurable maximum length of the inactivity (silence) period between consecutive MCPTT transmissions within the same call.

4) the <max-duration-with-floor-control> element of the <private-call> element contains the maximum duration allowed for an on-network private call with floor control;

5) the <max-duration-without-floor-control > element of the <private-call> element contains the maximum duration allowed for an on-network private call without floor control;

6) the <num-levels-priority-hierarchy> element contains a priority hierarchy for determining what participants, participant types, and urgent transmission types shall be granted a request to override an active on-network MCPTT transmission. Absence of the <num-levels-priority-hierarchy> element in the <on-network> element indicates that the lowest possible value is used according to the schema, to represent the priority hierarchy;

NOTE 2: The higher the value from the priority hierarchy assigned to a participant, the higher the priority given to override an active transmission.

7) the <time-limit> element of the <transmit-time> element contains the transmit time limit in an on-network group or private call transmission;

8) the <time-warning> element of the <transmit-time> element contains the warning time before the on-network transmit time is reached;

9) the <hang-time-warning> element contains the warning time before the on-network hang time is reached;

10) the <depth> element of the <floor-control-queue> element contains the maximum size of the floor control queue;

11) the <max-user-request-time> element of the <floor-control-queue> element contains the maximum time for a user's floor control request to be queued;

12) the <T1-end-of-rtp-media> element of the <fc-timers-counters> element contains the maximum allowed time between RTP media packets;

13) the <T3-stop-talking-grace> element of the <fc-timers-counters> element contains the maximum time the floor control server shall forward RTP media packets after that the permission to send RTP media is revoked;

14) the <T7-floor-idle> element of the <fc-timers-counters> element contains the retransmission interval of the Floor Idle message when the floor is idle. The maximum number of times the Floor Idle is retransmitted is controlled by the counter in the <C7-floor-idle> element;

15) the <T8-floor-revoke> element of the <fc-timers-counters> element contains the retransmission interval time of the Floor Revoke message until the Floor Release message is received;

16) the <T11-end-of-RTP-dual> element of the <fc-timers-counters> element contains the maximum allowed time between RTP media packets for the interrupting participant during dual floor operations;

17) the <T12-stop-talking-dual> element of the <fc-timers-counters> element contains the transmit time limit in an on-network group for the interrupting participant during dual floor operations;

18) the <T15-conversation> element of the <fc-timers-counters> element contains the maximum allowed time of silence in a group session involving an MBMS bearer before the MBMS subchannel shall be released;

19) the <T16-map-group-to-bearer> element of the <fc-timers-counters> element contains the retransmission interval of the Map Group To Bearer message;

20) the <T17-unmap-group-to-bearer> element of the <fc-timers-counters> element contains the retransmission interval of the Unmap Group To Bearer message;

21) the <T20-floor-granted> element of the <fc-timers-counters> element contains the time the floor control server shall wait before retransmitting the Floor Granted message until the Floor Request message is received. The number of times the Floor Granted message shall be sent is controlled by the counter in <C20-floor-granted> element;

22) the <T55-connect> element of the <fc-timers-counters> element contains the retransmission interval of the Connect message. The number of times the Connect message is retransmitted is controlled by the counter in <C56-disconnect> element;

23) the <T56-disconnect> element of the <fc-timers-counters> element contains the retransmission interval of the Disconnect message. The number of times the Disconnect message is retransmitted is controlled by the counter in <C55-connect> element;

24) the <C7-floor-idle> element of the <fc-timers-counters> element contains the maximum number of times the Floor Idle shall be sent;

25) the <C17-unmap-group-to-bearer> element of the <fc-timers-counters> element contains the retransmission interval of the Unmap Group To Bearer message;

26) the <C20-floor-granted> element of the <fc-timers-counters> element contains the maximum times the Floor Granted message shall be retransmitted.

27) the <C55-connect> element of the <fc-timers-counters> element contains the maximum number of times the Connect message is retransmitted;

28) the <C56-disconnect> element of the <fc-timers-counters> element contains the maximum number of times the Disconnect message is retransmitted;

29) the <confidentiality-protection> element of the <signalling-protection> element contains a boolean indicating whether confidentiality protection of MCPTT signalling is enabled or disabled between the MCPTT client and MCPTT server;

30) the <integrity-protection> element of the <signalling-protection> element contains a boolean indicating whether integrity protection of MCPTT signalling is enabled or disabled between the MCPTT client and MCPTT server;

31) The <emergency-resource-priority> element is of type "resource-priorityType" and indicates how a Resource-Priority header field is to be populated for MCPTT emergency calls;

32) The <imminent-peril-resource-priority> element is of type "resource-priorityType" and indicates how a Resource-Priority header field is to be populated for MCPTT Imminent Peril calls;

33) The <normal-resource-priority> element is of type "resource-priorityType" and indicates how a Resource-Priority header field is to be populated when downgrading to normal priority from an MCPTT emergency call or MCPTT imminent peril call;

34) the <allow-signalling-protection> element of the <protection-between-mcptt-servers> element contains a boolean indicating whether protection of MCPTT signalling is enabled between MCPTT servers; and

35) the <allow-floor-control-protection> element of the <protection-between-mcptt-servers> element contains a boolean indicating whether protection of MCPTT floor control signalling is enabled between MCPTT servers;

36) the <functional-alias> element of the <functional-alias-list> element is of type "anyURI" and contains the identity of a functional alias;

37) the <max-simultaneous-activations> element of the <functional-alias-list> element is of type "positiveInteger" and contains the allowed number of concurrent activations that are allowed for the functional alias contained in the corresponding <functional-alias> element;

38) the <allow-takeover> element of the <functional-alias-list> element is of type "boolean" and indicates whether take over by another MCPTT user is allowed for a currently activated functional alias contained in the corresponding <functional-alias> element; and

39) the <entry> element of the <mcptt-user-list> element of the <functional-alias-list> element is of type "entryType" and contains the MCPTT ID of an MCPTT user that is allowed to activate the functional alias contained in the corresponding <functional-alias> element.

NOTE 3: The default values of the <confidentiality-protection> element, the <integrity-protection> element, the <allow-signalling-protection> element and the <allow-floor-control-protection> element are "true".

In the <off-network> element:

1) the <private-cancel-timeout> element of the <emergency-call> element contains the timeout value for the cancellation of an in-progress off-network emergency private call, which corresponds to the "CancelTimeout" element as specified in subclause 7.2.14 of 3GPP TS 24.483 [4];

2) the <group-time-limit> element of the <emergency-call> element contains the time limit for an in-progress off-network emergency call on an MCPTT group, which corresponds to the "MCPTTGroupTimeout" element as specified in subclause 7.2.16 of 3GPP TS 24.483 [4];

3) the <hang-time> element of the <private-call> element contains the value of the hang timer for off-network private calls, which corresponds to the "HangTime" element as specified in subclause 7.2.13 of 3GPP TS 24.483 [4];

4) the <max-duration-with-floor-control> element of the <private-call> element contains the maximum duration allowed for an off-network private call with floor control, which and corresponds to the "MaxDuration" element as specified in subclause 7.2.12 of 3GPP TS 24.483 [4];

5) the <num-levels-priority-hierarchy> element contains a priority hierarchy for determining what participants, participant types, and urgent transmission types shall be granted a request to override an active off-network MCPTT transmission, which corresponds to the "NumLevelHierarchy" element as specified in subclause 7.2.17 of 3GPP TS 24.483 [4]. Absence of the <num-levels-priority-hierarchy> element in the <off-network> element indicates that the lowest possible value is used according to the schema to represent the priority hierarchy;

NOTE 4: The higher the value from the priority hierarchy assigned to a participant, the higher the priority given to override an active transmission;

6) the <time-limit> element of the <transmit-time> element contains the transmit time limit in an off-network group or private call transmission, which corresponds to the "TransmitTimeout" element as specified in subclause 7.2.18 of 3GPP TS 24.483 [4];

7) the <time-warning> element of the <transmit-time> element contains the warning time before the off-network transmit time is reached, which corresponds to the "TransmissionWarning" element as specified in subclause 7.2.19 of 3GPP TS 24.483 [4];

8) the <hang-time-warning> element contains the warning time before the off-network hang time is reached, which corresponds to the "HangTimeWarning" element as specified in subclause 7.2.20 of 3GPP TS 24.483 [4];

9) the <default-prose-per-packet-priority> element contains priority values for off-network calls, for each of the following constituent elements:

   a) mcptt private call signalling which corresponds to the "MCPTTPrivateCallSignalling" element as specified in subclause 7.2.22 of 3GPP TS 24.483 [4];

   b) mcptt private call media which corresponds to the "MCPTTPrivateCallMedia" element as specified in subclause 7.2.23 of 3GPP TS 24.483 [4];

   c) mcptt emergency private call signalling which corresponds to the "MCPTTEmergencyPrivateCallSignalling" element as specified in subclause 7.2.24 of 3GPP TS 24.483 [4]; and

   d) mcptt emergency private call media which corresponds to the "MCPTTEmergencyPrivateCallMedia" element as specified in subclause 7.2.25 of 3GPP TS 24.483 [4]; and

10) the <allow-log-metadata> element which corresponds to the "LogMetadata" element as specified in subclause 7.2.26 of 3GPP TS 24.483 [4] and contains one of the following values:

   a) "true" which indicates that logging of metadata for MCPTT group calls, MCPTT private calls and non-call activities from MCPTT UEs operating in off-network mode, is enabled; and

   b) "false" which indicates that logging of metadata for MCPTT group calls, MCPTT private calls and non-call activities from MCPTT UEs operating in off-network mode, is not enabled.

8.4.2.8 Naming Conventions

The service configuration document name is called service-config.xml.

8.4.2.9 Global documents

The service configuration document is a global document. This document resides under the global tree for the CMSXCAPROOT. Since there is only one document for each mission critical organization, the CMSXCAPROOT may be used to distinquish different service configuration documents. Otherwise, a subdirectory under the global tree, named by the mission critical organization name can be used to distinquish different service configuraiton documents. For example, if the CMSXCAPROOTURI respresents a single one mission critical organization, then the document URI would be:

mc-org-domain/mcorg12345/org.3gpp.mcptt.service-config/global/service-config.xml

otherwise, if it services multiple organizations then the document URI would be:

CMSXCAPROOTURI/org.3gpp.mcptt.service-config/global/mc-org-name/service-config.xml

Since the service configuration is a global document, all users will have read-only access. Read-write access is only allowed for the system administrators of the mission critical organization.

8.4.2.10 Resource interdependencies

There are no resource interdependencies.

8.4.2.11 Authorization Policies

The authorization policies for manipulating a service configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*".

8.4.2.12 Subscription to Changes

The service configuration document application usage shall support subscription to changes as specified in subclause 6.3.13.3.

9 MCVideo configuration management documents

9.1 Introduction

This subclause defines the structure, default document namespace, AUID, XML schema, MIME type, validation constraints and data semantics following documents;

MCVideo UE configuration document;

MCVideo user profile configuration document; and

MCVideo service configuration document.

9.2 MCVideo UE configuration document

9.2.1 General

The MCVideo UE configuration document is specified in this subclause. The MCVideo UE configuration document content is based on requirements of Annex A.2 of 3GPP TS 23.281 [27], in accordance with OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCVideo UE configuration document in the MCVideo service is described in 3GPP TS 24.281 [28] and 3GPP TS 24.581 [29]. The schema definition is provided in subclause 9.2.2.3. An MCVideo UE configuration document may apply to all MCVideo UEs of a mission critical organization or apply to specific MCVideo UEs identified in the <mcvideo-UE-id> element. If there is no <mcvideo-UE-id> element in the MCVideo UE configuration document, then by default the MCVideo UE configuration document applies to all MCVideo UEs of the mission critical organization that are not specifically identified in the <mcvideo-UE-id> element of another MCVideo UE initial configuration document of the mission critical organization. Each MCVideo UE of a mission critical organization is configured with an MCVideo UE configuration document that is identified by the instance ID of the MCVideo UE.

MCVideo UE configuration documents of a MCVideo user are contained as "XDM collections" in the user's directory of the "Users Tree", in accordance with OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. A MCVideo UE configuration document corresponding to a specific MCVideo UE the MCVideo user has used to authenticate and is authorised to use the MCVideo service with is placed in the user directory of the MCVideo user.

The MCVideo UE configuration document acts as a template for the CMS to generate UE configuration documents that are downloaded to specific MCVideo UEs. The MCVideo UE configuration document that acts as a template is referred to as a "master MCVideo UE configuration document". The master MCVideo UE configuration document name is assigned by an MCVideo system administrator when the document is created and is stored in the users tree of that MCVideo system administrator. The master MCVideo UE configuration document does not directly apply to a specific MCVideo UE, but instead acts as template that the CMS uses to populate the MCVideo UE configuration documents of MCVideo UEs identified by elements of the <MCVideo-UE-id> element. For MCVideo UE configuration documents that correspond to a specific MCVideo UE, the name of the MCVideo UE configuration document is created from a value defined by the corresponding element that identifies the MCVideo UE within the <MCVideo-UE-id> element. For a master MCVideo UE configuration documents that does not contain a <MCVideo-UE-id> element, the name of the MCVideo UE configuration document stored in the user directory is "DEFAULT-MCVideo-UE.xml".

9.2.2 Coding

9.2.2.1 Structure

The MCVideo UE configuration document structure is specified in this subclause.

The <mcvideo-UE-configuration> document:

1) shall include a "domain" attribute;
2) may include a <mcvideo-UE-id> element;
3) may include a <name> element;
4) shall include a <common> element;
5) shall include an <on-network> element; and
6) may include any other attribute for the purposes of extensibility.

The <common> element:

1) shall contain an <MCVideo-Private-Call> element containing:
   a) a <Max-Simul-Call-Nc10> element; and
2) shall contain an <MCVideo-Group-Call> element containing:
   a) a <Max-Simul-Call-Nc4> element;
   b) a <Max-Simul-Trans-Nc5> element; and
   c) a <Prioritized-MCVideo-Group> element containing:
      i) a list of <MCVideo-Group-Priority> elements containing:
         1) an <MCVideo-Group-ID> element; and
         2) a <group-priority-hierarchy> element.

The <on-network> element:

1) shall contain a <IPv6Preferred> element;
2) shall contain a <Relay-Service> element; and
3) may contain a list of <Relayed-MCVideo-Group> elements containing:
   a) a <MCVideo-Group-ID> element; and
   b) a <Relay-Service-Code> element.

NOTE: When the <Relay-Service> element is set to "false" a list of <Relayed-MCVideo-Group> elements is not needed.

The <mcvideo-UE-id> element:

1) may contain a list of <Instance-ID-URN> elements; and
2) may contain a list of <IMEI-range> elements.

The <IMEI-range> element:

1) shall contain a <TAC> element;
2) may contain a list of <SNR> elements; and
3) may contain <SNR-range> element.

The <SNR-range> element:

1) shall contain a <Low-SNR> element; and
2) shall contain a <High-SNR> element.

9.2.2.2 Application Unique ID

The AUID shall be set to "org.3gpp.mcvideo.ue-config".

9.2.2.3 XML Schema

```
<?xml version="1.0" encoding="UTF-8"?>

<xs:schema xmlns:mcvideouep="urn:3gpp:mcvideo:mcvideoUEConfig:1.0"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:3gpp:mcvideo:mcvideoUEConfig:1.0"
  elementFormDefault="qualified" attributeFormDefault="unqualified">

  <xs:import namespace="http://www.w3.org/XML/1998/namespace"
    schemaLocation="http://www.w3.org/2001/xml.xsd"/>

  <xs:element name="mcvideo-UE-configuration">
    <xs:complexType>
      <xs:sequence>
        <xs:choice minOccurs="0" maxOccurs="unbounded">
          <xs:element name="mcvideo-UE-id" type="mcvideouep:MCVIDEOUEIDType"/>
          <xs:element name="name" type="mcvideouep:NameType"/>
          <xs:element name="anyExt" type="mcvideouep:anyExtType"/>
          <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
        </xs:choice>
        <xs:element name="common" type="mcvideouep:CommonType"/>
        <xs:element name="on-network" type="mcvideouep:On-networkType"/>
        <xs:element name="anyExt" type="mcvideouep:anyExtType"/>
        <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
      </xs:sequence>
      <xs:attribute name="domain" type="xs:anyURI" use="required"/>
      <xs:attribute name="XUI-URI" type="xs:anyURI"/>
      <xs:attribute name="Instance-ID-URN" type="xs:anyURI"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="NameType">
    <xs:simpleContent>
      <xs:extension base="xs:token">
        <xs:attribute ref="xml:lang"/>
        <xs:attributeGroup ref="mcvideouep:IndexType"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>

  <xs:complexType name="MCVIDEOUEIDType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="Instance-ID-URN" type="xs:anyURI"/>
      <xs:element name="IMEI-range" type="mcvideouep:IMEI-rangeType"/>
      <xs:element name="anyExt" type="mcvideouep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcvideouep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="IMEI-rangeType">
    <xs:sequence>
      <xs:element name="TAC" type="mcvideouep:tacType"/>
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="SNR" type="mcvideouep:snrType"/>
        <xs:element name="SNR-range" type="mcvideouep:SNR-rangeType"/>
      </xs:choice>
      <xs:element name="anyExt" type="mcvideouep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcvideouep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="SNR-rangeType">
    <xs:sequence>
      <xs:element name="Low-SNR" type="mcvideouep:snrType"/>
      <xs:element name="High-SNR" type="mcvideouep:snrType"/>
      <xs:element name="anyExt" type="mcvideouep:anyExtType" minOccurs="0"/>
```

```
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attributeGroup ref="mcvideouep:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:simpleType name="tac-baseType">
    <xs:restriction base="xs:decimal">
      <xs:totalDigits value="8"/>
    </xs:restriction>
</xs:simpleType>

<xs:complexType name="tacType">
  <xs:simpleContent>
    <xs:extension base="mcvideouep:tac-baseType">
      <xs:attributeGroup ref="mcvideouep:IndexType"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:simpleType name="snr-baseType">
  <xs:restriction base="xs:decimal">
    <xs:totalDigits value="6"/>
  </xs:restriction>
</xs:simpleType>

<xs:complexType name="snrType">
  <xs:simpleContent>
    <xs:extension base="mcvideouep:snr-baseType">
      <xs:attributeGroup ref="mcvideouep:IndexType"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:complexType name="CommonType">
  <xs:sequence>
    <xs:element name="MCVIDEO-Private-Call">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="Max-Simul-Call-Nc10" type="xs:positiveInteger"/>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="MCVIDEO-Group-Call">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="Max-Simul-Call-Nc4" type="xs:positiveInteger"/>
          <xs:element name="Max-Simul-Trans-Nc5" type="xs:positiveInteger"/>
          <xs:element name="Prioritized-MCVIDEO-Group">
            <xs:complexType>
              <xs:sequence>
                <xs:element name="MCVIDEO-Group-Priority" maxOccurs="unbounded">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:element name="MCVIDEO-Group-ID" type="xs:anyURI"/>
                      <xs:element name="group-priority-hierarchy" type="xs:nonNegativeInteger"/>
                    </xs:sequence>
                  </xs:complexType>
                </xs:element>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="anyExt" type="mcvideouep:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attributeGroup ref="mcvideouep:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="On-networkType">
  <xs:sequence>
    <xs:element name="IPv6Preferred" type="xs:boolean"/>
    <xs:element name="Relay-Service" type="xs:boolean"/>
```

```
      <xs:element name="Relayed-MCVIDEO-Group" type="mcvideouep:Relayed-MCVIDEO-GroupType"/>
      <xs:element name="anyExt" type="mcvideouep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcvideouep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="Relayed-MCVIDEO-GroupType">
    <xs:sequence>
      <xs:element name="MCVIDEO-Group-ID" type="xs:anyURI"/>
      <xs:element name="Relay-Service-Code" type="xs:string"/>
      <xs:element name="anyExt" type="mcvideouep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

  <xs:attributeGroup name="IndexType">
    <xs:attribute name="index" type="xs:token"/>
  </xs:attributeGroup>

  <xs:complexType name="anyExtType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

9.2.2.4 Default Document Namespace

The default document namespace used in evaluating URIs shall be "urn:3gpp:ns:mcvideoUEConfig:1.0".

9.2.2.5 MIME type

The MIME type for the service configuration document shall be "vnd.3gpp.mcvideo-ue-config+xml".

9.2.2.6 Validation Constraints

If the AUID value of the document URI or node URI in the Request-URI is other than that specified in subclause 9.2.2.2, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid application id used".

If the XUI value of the document URI or node URI in the Request-URI does not match the XUI of the service configuration document URI, the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid XUI".

The MCVideo UE configuration document shall conform to the XML Schema described in subclause 9.2.2.3.

The <mcvideo-UE-configuration> element is the root element of the XML document. The <mcvideo-UE-configuration> element can contain sub-elements.

The <mcvideo-UE-configuration> element shall contain either:

1) one <common> element only;

2) one <common> element and one <on-network> element; or

3) one <on-network> element only.

If the <mcvideo-UE-configuration> element does not conform to one of the three choices above, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the "domain" attribute does not contain a syntactically correct domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect domain name".

If the "domain" attribute contains an unknown domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "unknown domain name".

If an <Instance-ID-URN> element of the <mcvideo-UE-id> element does not conform to a valid Instance ID as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Instance ID URN" and contain the non-conformant <Instance-ID-URN> element.

If the <TAC> element of an <IMEI-range> element does not conform to a valid 8 digit Type Allocation Code as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Type Allocation Code" and contain the non-conformant <TAC> element.

If a <SNR> element of an <IMEI-range> element does not conform to a valid 6 digit Serial Number as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Serial Number" and contain the non-conformant <SNR> element.

If a <Low-SNR> element or a <High-SNR> element of a <SNR-range> element does not conform to a valid 6 digit Serial Number as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Serial Number range" and contain the non-conformant <Low-SNR> or <High-SNR> element.

If the <Max-Simul-Call-Nc10> element of the <MCVideo-Private-Call> element contains a value less than 1, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <Max-Simul-Call-Nc4> element, or <Max-Simul-Trans-Nc5> element of the <MCVideo-Group-Call> element contains a value less than 1, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <MCVideo-Group-ID> element of the <MCVideo-group-priority> element or <Relayed-MCVideo-Group> element does not conform to the syntax of a "uri" attribute specified in OMA OMA-TS-XDM_Group-V1_1[17], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the <group-priority-hierarchy> element of the <MCVideo-group-priority> element contains a value less than 8 and greater than or equal to 0, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <Relay-Service> element of the <On-Network> element does not contain a value of "true" or "false", then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <Relay-Service-Code> element of the <Relayed-MCVideo-Group> element does not conform to the syntax of a valid Relay service code as defined in 3GPP TS 24.333 [12], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the <IPv6-Preferred> element of the <On-Network> element does not contain a value of "true" or "false, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

9.2.2.7 Data Semantics

The "domain" attribute of the <mcvideo-UE-configuration> element contains the domain name of the mission critical organization.

The <name> element of the <mcvideo-UE- configuration> element contains the user displayable name of the MCVideo UE configuration document and corresponds to the "Name" element of subclause 12.2.3 in 3GPP TS 24.483 [4].

The creator of the MCVideo UE configuration document may include an <mcvideo-UE-id> element in the version of the MCVideo UE configuration document that is uploaded to the CMS and may also appear in the MCVideo UE configuration document when downloaded by the MCVideo system administrator. The <mcvideo-UE-id> element does not appear in the MCVideo UE configuration document that is configured to the MCVideo UE. If an <mcvideo-UE-id> element is included then the MCVideo UE configuration document applies only to the MCVideo UE(s) identified by the <mcvideo-UE-id> element. If no <mcvideo-UE-id> element is included then the MCVideo UE configuration document t applies to all the MCVideo UEs of the domain.

If one or more optional <Instance-ID-URN> elements is included in the <mcvideo-UE-id> element then the MCVideo UE configuration document applies to the MCVideo UE with an instance ID equal to the instance ID contained in the <Instance-ID-URN> element.

The <TAC> element of the <IMEI-range> element contains the Type Allocation Code of the MCVideo UE.

The optional <SNR> element of the <IMEI-range> element contains the individual serial number uniquely identifying MCVideo UE within the Type Allocation Code contained in the <TAC> element that the MCVideo UE initial configuration document applies to.

If an optional <SNR-range> element is included within the <IMEI-range> element then the MCVideo UE configuration document applies to all MCVideo UEs within the Type Allocation Code contained in the <TAC> element with the serial number equal or greater than the serial number contained in the <Low-SNR> element and less than or equal to the serial number contained in the <High-SNR> element.

If no <SNR> element nor <SNR-range> element is included within the <IMEI-range> element then the MCVideo UE configuration document applies to all the MCVideo UE(s) with the Type Allocation Code contained within the <TAC> element of the <IMEI-range> element.

If no <mcvideo-UE-id> element is included then the MCVideo UE configuration document applies to all MCVideo UEs of the mission critical organization identified in the "domain" attribute.

The <common> element contains MCVideo UE configuration data common to both on and off network operation.

The <on-network> element contains MCVideo UE configuration data for on-network operation only.

In the <common> element:

1) the <Max-Simul-Call-Nc10> element of the <MCVideo-Private-Call> element contains an integer indicating the number of simultaneous calls (N10) allowed for an on-network or off-network private call and corresponds to the "MaxCallNc10" element of subclause 12.2.5B in 3GPP TS 24.483 [4];

2) the <Max-Simul-Call-Nc4> element of the <MCVideo-Group-Call> element contains an integer indicating the number of simultaneous calls (N4) allowed for an on-network or off-network group call and corresponds to the "MaxCallNc4" element of subclause 12.2.7 in 3GPP TS 24.483 [4];

3) the <Max-Simul-Trans-Nc5> element of the <MCVideo-Group-Call> element contains an integer indicating the maximum number of allowed simultaneous transmissions for an on-network or off-network group call and corresponds to the "MaxTransmissionNc5" element of subclause 12.2.8 in 3GPP TS 24.483 [4]; and

4) the <Prioritized-MCVideo-Group> element of the <MCVideo-Group-Call> element corresponds to the "PrioritizedMCVideoGroup" element of subclause 12.2.9 in 3GPP TS 24.483 [4] contains a list of <MCVideo-Group-Priority> elements that contains:

   a) <MCVideo-Group-ID> element identifying an MCVideo group that corresponds to the "MCVideoGroupID" element of subclause 12.2.11 in 3GPP TS 24.483 [4]; and

   b) a <group-priority-hierarchy> element that contains an integer that identifies the relative priority level of that MCVideo group with 0 being the lowest priority and 7 being the highest priority and corresponds to the "MCVideoGroupPriorityHierarchy" element of subclause 12.2.12 in 3GPP TS 24.483 [4].

In the <on-network> element:

1) if the <Relay-Service> element is set to "true" the MCVideo UE is allowed to offer a relay service, and if set to "false" the MCVideo UE is not allowed to offer relay service. This attribute corresponds to the "RelayService" element of subclause 12.2.14 in 3GPP TS 24.483 [4];

2) an <IPv6Preferred> element which corresponds to the "IPv6Preferred" element of subclause 12.2.15 in 3GPP TS 24.483 [4],

   a) if the UE has both IPv4 and IPv6 host configuration:

      i) if IPv6Preferred is set to true then the UE shall use IPv6 for all on-network signalling and media; otherwise

      ii) if IPv6Preferred is set to false then the UE shall use IPv4 for all on-network signalling and media;

   b) if the UE has only IPv4 host configuration then the UE shall use IPv4 for all on-network signalling and media; and

   c) if the UE has only IPv6 host configuration then the UE shall use IPv6 for all on-network signalling and media; and

3) the <Relayed-MCVideo-Groups> element of the <Relay-Service> element which corresponds to the "RelayedMCVideoGroup" element of subclause 12.2.16 in 3GPP TS 24.483 [4] contains:

   a) a list of <Relay-MCVideo-Group-ID> elements that contains:

      i) "MCVideo-Group-ID" attribute identifying an MCVideo group that is allowed to be used via a relay and corresponds to the "MCVideoGroupID" element of subclause 12.2.18 in 3GPP TS 24.483 [4]; and

      ii) a <Relay-Service-Code> element as specified in 3GPP TS 24.333 [12] which corresponds to the "RelayServiceCode" element of subclause 12.2.19 in 3GPP TS 24.483 [4].

9.2.2.8 Naming Conventions

The present document defines no naming conventions.

9.2.2.9 Global documents

The present document requires no global documents.

9.2.2.10 Resource interdependencies

There are no resource interdependencies.

9.2.2.11 Authorization Policies

The authorization policies for manipulating an MCVideo UE configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*".

9.2.2.12 Subscription to Changes

The MCVideo UE configuration document application usage shall support subscription to changes as specified in] subclause 6.3.13.3.

MCVideo UE configuration documents are kept as XDM collections. Therefore, it is possible to subscribe to all MCVideo UE configuration documents of a MCVideo user according to XCAP URI construction convention of a trailing '/', as specified in IETF RFC 5875 [11].

9.3 MCVideo user profile configuration document

9.3.1 General

The MCVideo user profile configuration document is specified in this subclause. The MCVideo user profile configuration document content is based on requirements of Annex A.3 of 3GPP TS 23.281 [27], and structure and procedures of OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCVideo user profile in the MCVideo service is described in 3GPP TS 24.281 [28]. The schema definition is provided in subclause 9.3.2.

MCVideo user profile documents are "XDM collections" in the user's directory in the "Users Tree", in accordance with OMA OMA-TS-XDM_Core-V2_1-20120403-A [2].

The name of the MCVideo user profile document matches the value of the <ProfileName> element in the MCVideo user profile document.

9.3.2 Coding

9.3.2.1 Structure

The MCVideo user profile configuration document structure is specified in this subclause.

The <mcvideo-user-profile> document:

1) shall include an "XUI-URI" attribute;
2) may include a <Name> element;
3) shall include one <Status> element;
4) shall include a "user-profile-index" attribute;
5) may include any other attribute for the purposes of extensibility;
6) may include one <ProfileName> element;
7) may include a <Pre-selected-indication> element;
8) shall include one or more <Common> elements, each of which:
   a) shall have an "index" attribute;
   b) shall include one <UserAlias> element containing one or more <alias-entry> elements
   c) shall include one <MCVideoUserID> element that contains an <entry> element;
   d) may contain one <ParticipantType> element;
   e) shall contain one <MissionCriticalOrganization>;
   f) shall include one <NotifyList> element that contains zero or more <entry> elements;
   g) shall include one <CatList> element that contains zero or more <catentry> elements; and
   h) shall include one <ReceptionPriority> element.
9) shall include zero or more <OnNetwork> elements each of which:
   a) shall have an "index" attribute;
   b) shall include one or more <MCVideoGroupInfo> elements each containing:
      i) an <MCVideo-Group-ID> element;
      ii) an <GMS-App-Serv-Id> element containing one or more <entry> elements;
      iii) an <IdMS-Token-Endpoint> element containing one or more <entry> elements; and
      iv) one <RelativePresentationPriority> element;
   c) shall include one <MaxAffiliationsNc2>element;
   d) may include an <ImplicitAffiliations> element, containing one or more <entry> elements;
   e) may include a <PresenceStatus> element containing one or more <entry> elements;
   f) may include a <RemoteGroupChange> element, containing one or more <entry> elements;

g) may include a <DeletionPeriod> element

h) may include a <MaxSimultaneousVideoStreams> element

i) may include a <MandatoryReceiveGroups> element containing one or more <entry> elements; and

j) shall include a <MaxTimeSingleTransmit> element.

10) shall include zero or more <OffNetwork> elements each of which:

a) shall contain an "index" attribute;

b) shall include one or more <MCVideoGroupInfo> elements each containing:

i) an <MCVideo-Group-ID> element;

ii) an <GMS-App-Serv-Id> element containing one or more <entry> elements;

iii) an <IdMS-Token-Endpoint> element containing one or more <entry> elements; and

iv) one <RelativePresentationPriority> element;

c) a <User-Info-Id> element; and

11) a <ruleset> element conforming to IETF RFC 4745 [13] containing a sequence of zero or more <rule> elements:

a) the <conditions> of a <rule> element may include the <identity> element as described in IETF RFC 4745 [13]; and

b) the <actions> child element of any <rule> element may contain:

i) an <allow-create-delete-user-alias> element;

ii) an <allow-create-group-broadcast- group> element;

iii) an <allow-create-user-broadcast-group> element;

iv) an <allow-modify-video> element;

v) an <allow-renegotiate-codec> element;

vi) an <allow-camera-control> element;

vii) an <allow-remote-control> element;

viii) an <allow-display-remote-ue> element;

ix) an <allow-remote-camera> element;

x) an <allow-push-video> element;

xi) an <allow-auto-send-notify> element;

xii) an <allow-request-affiliated-groups> element;

xiii) an <allow-request-to-affiliate-other-users> element;

xiv) an <allow-recommend-to-affiliate-other-users> element

xv) an <allow-regroup> element;

xvi) an <allow-presence-status> element;

xvii) an <allow-request-presence> element;

xviii) an <allow-activate-emergency-alert> element;

xix) an <allow-cancel-emergency-alert> element;

xx) an <allow-cancel-emergency-alert-any-user> element;

xxi) an <allow-enable-disable-user> element;

xxii) an <allow-enable-disable-UE> element;

xxiii) an <allow-off-network-manual-switch> element;

xxiv) an <allow-unlimited-video-streams> element;

xxv) an <allow-auto-recv> element;

xxvi) an <allow-auto-recv-emergency> element;

xxvii) an <allow-auto-recv-imminent-peril> element;

xxviii) an <allow-request-override> element;

xxix) an <allow-select-override> element;

xxx) an <allow-override-group-call> element;

xxxi) an <allow-off-network> element; and

xxxii) an <anyExt> element which may contain:

A) an <allow-private-call> element;

B) an <allow-manual-commencement> element;

C) an <allow-automatic-commencement> element;

D) an <allow-failure-restriction> element;

E) an <allow-emergency-group-call> element;

F) an <allow-emergency-private-call> element;

G) an <allow-cancel-group-emergency> element;

H) an <allow-imminent-peril-call> element;

I) an <allow-cancel-imminent-peril> element;

J) an <allow-off-network-group-call-change-to-emergency> element;

K) an <allow-imminent-peril-change> element;

L) an <allow-request-remote-initiated-ambient-viewing> element; and

M) an <allow-request-locally-initiated-ambient-viewing> element.

The <entry> elements:

1) shall contain a <uri-entry> element;

2) shall contain an "index" attribute; and

3) may contain a <display-name> element.

9.3.2.2 Application Unique ID

The AUID shall be "org.3gpp.mcvideo.user-profile".

9.3.2.3 XML Schema

The MCVideo user profile configuration document shall be composed according to the following XML schema:

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
  xmlns:mcvideoup="urn:3gpp:ns:mcvideo:user-profile:1.0"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:3gpp:ns:mcvideo:user-profile:1.0"
  elementFormDefault="qualified" attributeFormDefault="unqualified">
  <xs:import namespace="http://www.w3.org/XML/1998/namespace"
  schemaLocation="http://www.w3.org/2001/xml.xsd"/>
  <!-- This import brings in common policy namespace from RFC 4745 -->
  <xs:import namespace="urn:ietf:params:xml:ns:common-policy"
  schemaLocation="http://www.iana.org/assignments/xml-registry/schema/common-policy.xsd"/>

  <xs:element name="mcvideo-user-profile">
    <xs:complexType>
      <xs:choice minOccurs="1" maxOccurs="unbounded">
        <xs:element name="Name" type="mcvideoup:NameType"/>
        <xs:element name="Status" type="xs:boolean"/>
        <xs:element name="ProfileName" type="mcvideoup:NameType"/>
        <xs:element name="Pre-selected-indication" type="mcvideoup:emptyType"/>
        <xs:element name="Common" type="mcvideoup:CommonType"/>
        <xs:element name="OffNetwork" type="mcvideoup:OffNetworkType"/>
        <xs:element name="OnNetwork" type="mcvideoup:OnNetworkType"/>
        <xs:element name="anyExt" type="mcvideoup:anyExtType" minOccurs="0"/>
        <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
      </xs:choice>
      <xs:attribute name="XUI-URI" type="xs:anyURI" use="required"/>
      <xs:attribute name="user-profile-index" type="xs:unsignedByte" use="required"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="NameType">
    <xs:simpleContent>
      <xs:extension base="xs:token">
        <xs:attribute ref="xml:lang"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>

  <xs:complexType name="CommonType">
    <xs:choice minOccurs="1" maxOccurs="unbounded">
      <xs:element name="UserAlias" type="mcvideoup:UserAliasType"/>
      <xs:element name="MCVideoUserID" type="mcvideoup:EntryType"/>
      <xs:element name="ParticipantType" type="xs:string"/>
      <xs:element name="MissionCriticalOrganization" type="xs:string"/>
      <xs:element name="NotifyList" type="mcvideoup:ListEntryType"/>
      <xs:element name="CatList" type="mcvideoup:CatListType"/>
      <xs:element name="ReceptionPriority" type="xs:nonNegativeInteger"/>

      <xs:element name="anyExt" type="mcvideoup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcvideoup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="OnNetworkType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="MCVideoGroupInfo" type="mcvideoup:MCVideoGroupInfoType"/>
      <xs:element name="MaxAffiliationsNc2" type="xs:nonNegativeInteger"/>
      <xs:element name="ImplicitAffiliations" type="mcvideoup:ListEntryType"/>
      <xs:element name="PresenceStatus" type="mcvideoup:ListEntryType"/>
      <xs:element name="RemoteGroupChange" type="mcvideoup:ListEntryType"/>
      <xs:element name="DeletionPeriod" type="xs:unsignedShort"/>
      <xs:element name="MaxSimultaneousVideoStreams" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="MandatoryReceiveGroups" type="mcvideoup:ListEntryType"/>
      <xs:element name="MaxTimeSingleTransmit" type="xs:unsignedShort"/>
      <xs:element name="anyExt" type="mcvideoup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcvideoup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="OffNetworkType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="MCVideoGroupInfo" type="mcvideoup:MCVideoGroupInfoType"/>
      <xs:element name="User-Info-ID" type="xs:hexBinary"/>
```

```
    <xs:element name="anyExt" type="mcvideoup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:attributeGroup ref="mcvideoup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="MCVideoGroupInfoType">
  <xs:sequence>
    <xs:element name="MCVideo-Group-ID" type="mcvideoup:EntryType"/>
    <xs:element name="GMS-App-Serv-Id" type="mcvideoup:ListEntryType"/>
    <xs:element name="IdMS-Token-Endpoint" type="mcvideoup:ListEntryType"/>
    <xs:element name="RelativePresentationPriority" type="xs:nonNegativeInteger"/>
    <xs:element name="anyExt" type="mcvideoup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="UserAliasType">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="alias-entry" type="mcvideoup:AliasEntryType"/>
    <xs:element name="anyExt" type="mcvideoup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="AliasEntryType">
  <xs:simpleContent>
    <xs:extension base="xs:token">
      <xs:attributeGroup ref="mcvideoup:IndexType"/>
      <xs:attribute ref="xml:lang"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:complexType name="CatListType">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="catentry" type="xs:string"/>
    <xs:element name="anyExt" type="mcvideoup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:attribute ref="xml:lang"/>
  <xs:attributeGroup ref="mcvideoup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="ListEntryType">
  <xs:choice minOccurs="0" maxOccurs="unbounded">
    <xs:element name="entry" type="mcvideoup:EntryType"/>
    <xs:element name="anyExt" type="mcvideoup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:choice>
  <xs:attribute ref="xml:lang"/>
  <xs:attributeGroup ref="mcvideoup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="EntryType">
  <xs:sequence>
    <xs:element name="uri-entry" type="xs:anyURI"/>
    <xs:element name="display-name" type="mcvideoup:DisplayNameElementType" minOccurs="0"/>
    <xs:element name="anyExt" type="mcvideoup:anyExtType" minOccurs="0"/>
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attributeGroup ref="mcvideoup:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:complexType name="DisplayNameElementType">
  <xs:simpleContent>
    <xs:extension base="xs:string">
      <xs:attribute ref="xml:lang"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>
```

```
  <xs:element name="allow-create-delete-user-alias" type="xs:boolean"/>
  <xs:element name="allow-create-group-broadcast-group" type="xs:boolean"/>
  <xs:element name="allow-create-user-broadcast-group" type="xs:boolean"/>
  <xs:element name="allow-modify-video" type="xs:boolean"/>
  <xs:element name="allow-renegotiate-codec" type="xs:boolean"/>
  <xs:element name="allow-camera-control" type="xs:boolean"/>
  <xs:element name="allow-remote-control" type="xs:boolean"/>
  <xs:element name="allow-display-remote-ue" type="xs:boolean"/>
  <xs:element name="allow-remote-camera" type="xs:boolean"/>
  <xs:element name="allow-push-video" type="xs:boolean"/>
  <xs:element name="allow-auto-send-notify" type="xs:boolean"/>
  <xs:element name="allow-request-affiliated-groups" type="xs:boolean"/>
  <xs:element name="allow-request-to-affiliate-other-users" type="xs:boolean"/>
  <xs:element name="allow-recommend-to-affiliate-other-users" type="xs:boolean"/>
  <xs:element name="allow-regroup" type="xs:boolean"/>
  <xs:element name="allow-presence-status" type="xs:boolean"/>
  <xs:element name="allow-request-presence" type="xs:boolean"/>
  <xs:element name="allow-activate-emergency-alert" type="xs:boolean"/>
  <xs:element name="allow-cancel-emergency-alert" type="xs:boolean"/>
  <xs:element name="allow-cancel-emergency-alert-any-user" type="xs:boolean"/>
  <xs:element name="allow-enable-disable-user" type="xs:boolean"/>
  <xs:element name="allow-enable-disable-UE" type="xs:boolean"/>
  <xs:element name="allow-off-network-manual-switch" type="xs:boolean"/>
  <xs:element name="allow-unlimited-video-streams" type="xs:boolean"/>
  <xs:element name="allow-auto-recv" type="xs:boolean"/>
  <xs:element name="allow-auto-recv-emergency" type="xs:boolean"/>
  <xs:element name="allow-auto-recv-imminent-peril" type="xs:boolean"/>
  <xs:element name="allow-request-override" type="xs:boolean"/>
  <xs:element name="allow-select-override" type="xs:boolean"/>
  <xs:element name="allow-override-group-call" type="xs:boolean"/>
  <xs:element name="allow-off-network" type="xs:boolean"/>
  <xs:element name="anyExt" type="mcvideoup:anyExtType"/>
  <xs:element name="allow-private-call" type="xs:boolean"/>
  <xs:element name="allow-manual-commencement" type="xs:boolean"/>
  <xs:element name="allow-automatic-commencement" type="xs:boolean"/>
  <xs:element name="allow-failure-restriction" type="xs:boolean"/>
  <xs:element name="allow-emergency-group-call" type="xs:boolean"/>
  <xs:element name="allow-emergency-private-call" type="xs:boolean"/>
  <xs:element name="allow-cancel-group-emergency" type="xs:boolean"/>
  <xs:element name="allow-imminent-peril-call" type="xs:boolean"/>
  <xs:element name="allow-cancel-imminent-peril" type="xs:boolean"/>
  <xs:element name="allow-off-network-group-call-change-to-emergency" type="xs:boolean"/>
  <xs:element name="allow-imminent-peril-change" type="xs:boolean"/>
  <xs:element name="allow-request-remote-initiated-ambient-viewing" type="xs:boolean"/>
  <xs:element name="allow-request-locally-initiated-ambient-viewing" type="xs:boolean"/>
  <xs:attributeGroup name="IndexType">
    <xs:attribute name="index" type="xs:token"/>
  </xs:attributeGroup>

  <!-- empty complex type -->
  <xs:complexType name="emptyType"/>

  <xs:complexType name="anyExtType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

9.3.2.4 Default Document Namespace

The default document namespace used in evaluating URIs shall be "urn:3gpp:ns:mcvideo:user-profile:1.0".

9.3.2.5 MIME type

The MIME type for the MCVideo user profile configuration document shall be "application/vnd.3gpp.mcvideo-user-profile+xml"

9.3.2.6 Validation Constraints

The MCVideo user profile configuration document shall conform to the XML Schema described in subclause 9.3.2.3 "*XML Schema*", with the clarifications given in this subclause.

The value of the "XUI-URI" attribute of the <mcvideo-user-profile> element shall be the same as the XUI value of the Document URI for the MCVideo user profile configuration document. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Wrong User Profile URI".

The value of the <RelativePresentationPriority> element of the <MCVideoGroupInfo> element shall be within the range of 0 to 255. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Priority value out of range".

The value of the <User-Info-ID> shall be 6 octets expressed in hexadecimal format. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Invalid User Info ID".

If more than one MCVideo user profile document is specified for the MCVideo user in the "XDM collections" in the user's directory, then only one MCVideo user profile document shall contain the <Pre-selected-indication> element. If there is only one MCVideo user profile specified for the MCVideo user in the user's directory, then it is optional to include the <Pre-selected-indication> element. If a MCVideo user profile document containing the <Pre-selected-indication> element already exists for the MCVideo user in the "XDM collections" the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Pre-selected User Profile Indication already exists in:" including the contents of the <Profile-Name> element of the MCVideo user profile document that already contains the <Pre-selected-indication> element.

If the <allow-unlimited-video-streams> element is set to "true" and the MCVideo user profile contains a <MaxSimultaneousVideoStreams> element, then the value contained in the <MaxSimultaneousVideoStreams> element is ignored.

The value of the <ReceptionPriority> element of the <Common> element shall be within the range of 0 to 255. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "ReceptionPriority value out of range".

9.3.2.7 Data Semantics

The <Name> element is of type "token", and corresponds to the "Name" element of subclause 13.2.3 in 3GPP TS 24.483 [4].

The <alias-entry> element of the <UserAlias> element is of type "token" and indicates an alphanumeric alias of the MCVideo user, and corresponds to the leaf nodes of the "UserAlias" element of subclause 13.2.13 in 3GPP TS 24.483 [4].

The <uri-entry> element is of type "anyURI" and when it appears within:

- the <MCVideoUserID> element of the <Common> element, contains the MCVideo user identity (MCVideo ID) of the MCVideo user, and corresponds to the "MCVideoUserID" element of subclause 13.2.7 in 3GPP TS 24.483 [4];

- the <entry> element of the <NotifyList> list element of the <Common> element indicates an MCVideo ID of an MCVideo user for whom to receive notifications about video being pushed to them. and corresponds to the "MCVideoID" element of subclause 13.2.34 in 3GPP TS 24.483 [4];

- the <MCVideo-Group-ID> element of the <MCVideoGroupInfo> element of the <OnNetwork> element contains the MCVideo group ID of an on-network MCVideo group for use by the configured MCVideo user, and corresponds to the "MCVideoGroupID" element of subclause 13.2.43 in 3GPP TS 24.483 [4];

- the <MCVideo-Group-ID> element of the <MCVideoGroupInfo> element of the <OffNetwork> element contains the MCVideo group ID of an off-network MCVideo group for use by the configured MCVideo user, and corresponds to the "MCVideoGroupID" element of subclause 13.2.93 in 3GPP TS 24.483 [4];

- the <entry> element of the <GMS-App-Serv-Id> list element of the <MCVideoGroupInfo> element of the <OnNetwork> element, contains the URI of the group management server hosting the on-network MCVideo group identified by the <MCVideo-Group-ID> element, and corresponds to the "GMSAppServId" element of subclause 13.2.47 in 3GPP TS 24.483 [4];

- the <entry> element of the <IdMS-Token-Endpoint> list element of the <MCVideoGroupInfo> element of the <OnNetwork> element, contains the URI used to contact the identity management server token endpoint for the on-network MCVideo group identified by the <MCVideo-Group-ID> element, and corresponds to the "IdMSTokenEndPoint" element of subclause 13.2.50 in 3GPP TS 24.483 [4]. If the entry element is empty, the idms-auth-endpoint and idms-token-endpoint present in the MCS UE initial configuration document are used;

- the <entry> element of the <GMS-App-Serv-Id> list element of the <MCVideoGroupInfo> element of the <OffNetwork> element, contains the URI of the group management server hosting the off-network MCVideo group identified by the <MCVideo-Group-ID> element, and corresponds to the "GMSAppServId" element of subclause 13.2.97 in 3GPP TS 24.483 [4];

- the <entry> element of the <IdMS-Token-Endpoint> list element of the <MCVideoGroupInfo> element of the <OffNetwork> element, contains the URI used to contact the identity management server token endpoint for the off-network MCVideo group identified by the <MCVideo-Group-ID> element, and corresponds to the "IdMSTokenEndPoint" element of subclause 13.2.100 in 3GPP TS 24.483 [4]. If the entry element is empty, the idms-auth-endpoint and idms-token-endpoint present in the MCS UE initial configuration document are used;

- the <entry> element of the <ImplicitAffiliations> list element of the <OnNetwork> element indicates an MCVideo group ID of an MCVideo group that the MCVideo user is implicitly affiliated with, and corresponds to the "MCVideoGroupID" element of subclause 13.2.55 in 3GPP TS 24.483 [4];

- the <entry> element of the <PresenceStatus> list element of the <OnNetwork> element indicates an MCVideo ID of an MCVideo user that the configured MCVideo user is authorised to obtain presence status, and corresponds to the "MCVideoID" element of subclause 13.2.60 in 3GPP TS 24.483 [4];

- the <entry> element of the <RemoteGroupChange> list element of the <OnNetwork> element indicates an MCVideo ID of an MCVideo user whose selected groups are authorised to be remotely changed by the configured MCVideo user and corresponds to the "MCVideoID" element of subclause 13.2.65 in 3GPP TS 24.483 [4];

- the <entry> element of the <MandatoryReceiveGroups> list element of the <OnNetwork> element indicates an MCVideo group ID of an MCVideo for which video can be automatically/mandatorily received, and corresponds to the "MCVideoGroupID" element of subclause 13.2.82 in 3GPP TS 24.483 [4];

The <display-name> element is of type "string", contains a human readable name and when it appears within:

- the <entry> element of the <NotifyList> list element of the <Common> element indicates the name of an MCVideo user for whom to receive notifications about video being pushed to them. and corresponds to the "DisplayName" element of subclause 13.2.35 in 3GPP TS 24.483 [4];

- the <MCVideo-Group-ID> element of the <MCVideoGroupInfo> element of the <OnNetwork> element contains the name of an on-network MCVideo group for use by the configured MCVideo user, and corresponds to the "DisplayName" element of subclause 13.2.44 in 3GPP TS 24.483 [4];

- the <MCVideo-Group-ID> element of the <MCVideoGroupInfo> element of the <OffNetwork> element contains the name of an off-network MCVideo group for use by the configured MCVideo user, and corresponds to the "DisplayName" element of subclause 13.2.94 in 3GPP TS 24.483 [4];

- the <entry> element of the <ImplicitAffiliations> list element of the <OnNetwork> element indicates the name of an MCVideo group that the MCVideo user is implicitly affiliated with, and corresponds to the "DisplayName" element of subclause 13.2.56 in 3GPP TS 24.483 [4];

- the <entry> element of the <PresenceStatus> list element of the <OnNetwork> element indicates the name of an MCVideo user that the configured MCVideo user is authorised to obtain presence status of, and corresponds to the "DisplayName" element of subclause 13.2.61 in 3GPP TS 24.483 [4];

- the <entry> element of the <RemoteGroupChange> list element of the <OnNetwork> element indicates the name of an MCVideo user whose selected groups are authorised to be remotely changed by the configured MCVideo user and corresponds to the "DisplayName" element of subclause 13.2.66 in 3GPP TS 24.483 [4];

- the <entry> element of the <MandatoryReceiveGroups> list element of the <OnNetwork> element indicates the name of a MCVideo group for which video can be automatically/mandatorily received, and corresponds to the "DisplayName" element of subclause 13.2.83 in 3GPP TS 24.483 [4];

The "index" attribute is of type "token" and is included within some elements for uniqueness purposes, and does not appear in the user profile configuration managed object specified in 3GPP TS 24.483 [4].

The <Status> element is of type "Boolean" and indicates whether this particular MCVideo user profile is enabled or disabled and corresponds to the "Status" element of subclause 13.2.126 in 3GPP TS 24.483 [4]. When set to "true" this MCVideo user profile is enabled. When set to "false" this MCVideo user profile is disabled.

The "user-profile-index" is of type "unsignedByte" and indicates the particular MCVideo user profile configuration document in the collection and corresponds to the "MCVideoUserProfileIndex" element of subclause 13.2.8 in 3GPP TS 24.483 [4].

The <ProfileName> element is of type "token" and specifies the name of the MCVideo user profile configuration document in the MCVideo user profile XDM collection and corresponds to the "MCVideoUserProfileName" element of subclause 13.2.9 in 3GPP TS 24.483 [4].

The <Pre-selected-indication> element is of type "mcvideoup:emptyType". Presence of the <Pre-selected-indication> element indicates that this particular MCVideo user profile is designated to be the pre-selected MCVideo user profile as defined in 3GPP TS 23.281 [27], and corresponds to the "PreSelectedIndication" element of subclause 13.2.10 in 3GPP TS 24.483 [4]. Absence of the <Pre-selected-indication> element indicates that this MCVideo user profile is not designated as the pre-selected MCVideo user profile within the collection of MCVideo user profiles for the MCVideo user or is the only MCVideo user profile within the collection and is the pre-selected MCVideo user profile by default.

The "XUI-URI" attribute is of type "anyURI" that contains the XUI of the MCVideo user for whom this MCVideo user profile configuration document is intended and does not appear in the user profile configuration managed object specified in 3GPP TS 24.483 [4].

The <ParticipantType> element of the <Common> element is of type "token" and indicates the functional category of the MCVideo user (e.g., first responder, second responder, dispatch, dispatch supervisor). The <ParticipantType> element corresponds to the "ParticipantType" element of subclause 13.2.15 in 3GPP TS 24.483 [4].

The <ReceptionPriority> element of the <Common> element is of a type "nonNegativeInteger", indicates the priority of the MCVideo user for receiving MCVideo calls and corresponds to the "ReceptionPriority" element of subclause 13.2.x in 3GPP TS 24.483 [4].The <MissionCriticalOrganization> element of the <Common> element is of type "string" and indicates the name of the mission critical organization the MCVideo User belongs to. The <MissionCriticalOrganization> element corresponds to the "Organization" element of subclause 13.2.16 in 3GPP TS 24.483 [4].

The <catentry> element is of type "string" and when it appears in the <CatList> element of the <Common> element it represents a specific video category that the MCVideo user is allowed to receive. The <catentry> element corresponds to the "VideoCat" element of subclause 13.2.38 in 3GPP TS 24.483 [4].

The <RelativePresentationPriority> element is of type "nonNegativeInteger" and when it appears in:

- the <MCVideoGroupInfo> element of the <OnNetwork> element, contains an integer value between 0 and 255 indicating the presentation priority of the on-network group relative to other on-network groups and on-network users, and corresponds to the "PresentationPriority" element of subclause 13.2.51 in 3GPP TS 24.483 [4];

- the <MCVideoGroupInfo> element of the <OffNetwork> element, contains an integer value between 0 and 255 indicating the presentation priority of the off-network group relative to other off-network groups and off-network users, and corresponds to the "PresentationPriority" element of subclause 13.2.101 in 3GPP TS 24.483 [4];

The <MaxAffiliationsNc2> element is of type "nonNegativeInteger", and indicates the maximum number of MCVideo groups that the MCVideo user is authorised to affiliate with, and corresponds to the "MaxAffiliationsNc2" element of subclause 13.2.67 in 3GPP TS 24.483 [4].

The <DeletionPeriod> element of the <OnNetwork> element is of type "unsignedShort" and contains the period (in hours) after which MCVideo data on a MCVideo UE is to be deleted if no action is taken by an authorized MCVideo user, and corresponds to the "DeletionPeriod" element of subclause 13.2.72 in 3GPP TS 24.483 [4].

The <MaxSimultaneousVideoStreams> element of the <OnNetwork> element is of type "unsignedShort" and contains maximum number of simultaneous video streams that can be received by the MCVideo user, and corresponds to the "MaxStreams" element of subclause 13.2.74 in 3GPP TS 24.483 [4].

The <MaxTimeSingleTransmit> element of the <OnNetwork> element is of type "unsignedShort" and contains the maximum length of time (in seconds) that an MCVideo user can transmit for a single video transmission, and corresponds to the "MaxTimeSingleTransmit" element of subclause 13.2.87 in 3GPP TS 24.483 [4].

The <User-Info-ID> element is of type "hexBinary". When the <User-Info-ID> element appears within:- the <OffNetwork> element, indicates the ProSe "User Info ID" as defined in 3GPP TS 23.303 [18] and 3GPP TS 24.334 [19] of the MCVideo UE for off-network operation and corresponds to the "UserInfoID" element of subclause 13.2.102 in 3GPP TS 24.483 [4].

The <allow-create-delete-user-alias> element is of type Boolean, as specified in table 9.3.2.7-1, and corresponds to the "AuthorisedAlias" element of subclause 13.2.14 in 3GPP TS 24.483 [4].

Table 9.3.2.7-1: Values of <allow-create-delete-user-alias>

"true"	indicates that the MCVideo user is locally authorised to create or delete aliases of an MCVideo user and its associated user profiles.
"false"	indicates that the MCVideo user is not locally authorised to create or delete aliases of an MCVideo user and its associated user profiles.

The <allow-create-group-broadcast- group> element is of type Boolean, as specified in table 9.3.2.7-2, and corresponds to the "Authorised" element of subclause 13.2.18 in 3GPP TS 24.483 [4].

Table 9.3.2.7-2: Values of <allow-create-group-broadcast-group>

"true"	indicates that the MCVideo user is locally authorised to send a request to create a group-broadcast group according to the procedures of 3GPP TS 24.481 [5].
"false"	Indicates that the MCVideo user is not locally authorised to send a request to create a group-broadcast group according to the procedures of 3GPP TS 24.481 [5].

The <allow-create-user-broadcast-group> element is of type Boolean, as specified in table 9.3.2.7-3, and corresponds to the "Authorised" element of subclause 13.2.20 in 3GPP TS 24.483 [4].

Table 9.3.2.7-3: Values of <allow-create-user-broadcast-group>

"true"	indicates that the MCVideo user is locally authorised to send a request to create a user-broadcast group according to the procedures of 3GPP TS 24.481 [5].
"false"	Indicates that the MCVideo user is not locally authorised to send a request to create a user-broadcast group according to the procedures of 3GPP TS 24.481 [5].

The <allow-modify-video> element is of type Boolean, as specified in table 9.3.2.7-4, and corresponds to the "AllowedModifyVideo" element of subclause 13.2.21 in 3GPP TS 24.483 [4].

Table 9.3.2.7-4: Values of <allow-modify-video>

"true"	indicates that the MCVideo user is authorised to modify the video settings of the transmitted video stream of another MCVideo user.
"false"	indicates that the MCVideo user is not authorised to modify the video settings of the transmitted video stream of another MCVideo user.

The <allow-renegotiate-codec> element is of type Boolean, as specified in table 9.3.2.7-5, and corresponds to the "AllowedRenegotiateCodec" element of subclause 13.2.22 in 3GPP TS 24.483 [4].

Table 9.3.2.7-5: Values of <allow-renegotiate-codec>

"true"	indicates that the MCVideo user is authorised to renegotiate a codec during a video transmission.
"false"	indicates that the MCVideo user is not authorised to renegotiate a codec during a video transmission

The <allow-camera-control> element is of type Boolean, as specified in table 9.3.2.7-6, and corresponds to the "AllowedCameraControl" element of subclause 13.2.23 in 3GPP TS 24.483 [4].

Table 9.3.2.7-6: Values of <allow-camera-control>

"true"	indicates that the MCVideo user is authorised to remotely control the video capabilities or parameters for a camera on an MCVideo UE.
"false"	indicates that the MCVideo user is not authorised to remotely control the video capabilities or parameters for a camera on an MCVideo UE.

The <allow-remote-control> element is of type Boolean, as specified in table 9.3.2.7-7, and corresponds to the "AllowedRemoteControl" element of subclause 13.2.24 in 3GPP TS 24.483 [4].

Table 9.3.2.7-7: Values of <allow-remote-control>

"true"	indicates that the MCVideo user is authorised to remotely control the video capabilities or parameters of a remote MCVideo UE.
"false"	indicates that the MCVideo user is not authorised remotely control the video capabilities or parameters of a remote MCVideo UE.

The <allow-display-remote-ue> element is of type Boolean, as specified in table 9.3.2.7-8, and corresponds to the "AllowedDisplayRemoteUE" element of subclause 13.2.25 in 3GPP TS 24.483 [4].

Table 9.3.2.7-8: Values of <allow-display-remote-ue>

"true"	indicates that the MCVideo user is authorised to receive and display the capabilities of a remote MCVideo UE.
"false"	indicates that the MCVideo user is not authorised to receive and display the capabilities of a remote MCVideo UE.

The <allow-remote-camera> element is of type Boolean, as specified in table 9.3.2.7-9, and corresponds to the "AllowedRemoteCamera" element of subclause 13.2.26 in 3GPP TS 24.483 [4].

Table 9.3.2.7-9: Values of <allow-remote-camera>

"true"	indicates that the MCVideo user is authorised to remotely activate another MCVideo user's camera.
"false"	indicates that the MCVideo user is not authorised to remotely activate another MCVideo user's camera.

The <allow-push-video> element is of type Boolean, as specified in table 9.3.2.7-10, and corresponds to the "AllowedPushVideo" element of subclause 13.2.27 in 3GPP TS 24.483 [4].

Table 9.3.2.7-10: Values of <allow-push-video>

"true"	indicates that the MCVideo user is authorised to push a video to another MCVideo user.
"false"	indicates that the MCVideo user is not authorised to push a video to another MCVideo user.

The <allow-auto-send-notify> element is of type Boolean, as specified in table 9.3.2.7-11, and corresponds to the "AllowedAutoSendNotify" element of subclause 13.2.28 in 3GPP TS 24.483 [4].

Table 9.3.2.7-11: Values of <allow-auto-send-notify>

"true"	indicates that the MCVideo user is authorised to enable and disable the automatic sending of a notification to a second MCVideo user that a video is being pushed to a third MCVideo user.
"false"	indicates that the MCVideo user is not authorised to enable and disable the automatic sending of a notification to a second MCVideo user that a video is being pushed to a third MCVideo user.

The <allow-request-affiliated-groups> element is of type Boolean, as specified in table 9.3.2.7-12, and does not appear in the user profile configuration managed object specified in 3GPP TS 24.483 [4]

Table 9.3.2.7-12: Values of <allow-request-affiliated-groups>

"true"	Instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to request the list of MCVideo groups to which a specified MCVideo user is affiliated.
"false"	Instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to request the list of MCVideo groups to which the a specified MCVideo user is affiliated.

The <allow-request-to-affiliate-other-users> element is of type Boolean, as specified in table 9.3.2.7-13, and does not appear in the MCVideo user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 9.3.2.7-13: Values of <allow-request-to-affiliate-other-users>

"true"	Instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to request specified MCVideo user(s) to be affiliated to/deaffiliated from specified MCVideo group(s).
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to request specified MCVideo user(s) to be affiliated to/deaffiliated from specified MCVideo group(s).

The <allow-recommend-to-affiliate-other-users> element is of type Boolean, as specified in table 9.3.2.7-14, and does not appear in the MCVideo user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 9.3.2.7-14: Values of <allow-recommend-to-affiliate-other-users>

"true"	Instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to recommend to specified MCVideo user(s) to affiliate to specified MCVideo group(s).
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to recommend to specified MCVideo user(s) to affiliate to specified MCVideo group(s).

The <allow-regroup> element is of type Boolean, as specified in table 9.3.2.7-15, and corresponds to the "AllowedRegroup" element of subclause 13.2.68 in 3GPP TS 24.483 [4].

Table 9.3.2.7-15: Values of <allow-regroup>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is locally authorised to send a dynamic regrouping request according to the procedures defined in 3GPP TS 24.481 [5].
"false"	instructs the MCVideo server performing the participating MCVideo function for the MCVideo user, that the MCVideo user is not locally authorised to send a dynamic regrouping request according to the procedures defined in 3GPP TS 24.481 [5].

The <allow-presence-status> element is of type Boolean, as specified in table 9.3.2.7-16, and corresponds to the "AllowedPresenceStatus" element of subclause 13.2.69 in 3GPP TS 24.483 [4].

Table 9.3.2.7-16: Values of <allow-presence-status>

"true"	indicates to the MCVideo user that their presence on the network is available.
"false"	indicates to the MCVideo user that their presence on the network is not available

The <allow-request-presence> element is of type Boolean, as specified in table 9.3.2.7-17, and corresponds to the "AllowedPresence" element of subclause 13.2.70 in 3GPP TS 24.483 [4].

Table 9.3.2.7-17: Values of <allow-request-presence>

"true"	indicates that the MCVideo user is locally authorised to request whether a particular MCVideo User is present on the network.
"false"	indicates that the MCVideo user is not locally authorised to request whether a particular MCVideo User is present on the network.

The <allow-activate-emergency-alert> element is of type Boolean, as specified in table 9.3.2.7-18, and corresponds to the "AllowedActivateAlert" element of subclause 13.2.29 in 3GPP TS 24.483 [4].

Table 9.3.2.7-18: Values of <allow-activate-emergency-alert>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to activate an emergency alert using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to activate an emergency alert using the procedures defined in 3GPP TS 24.281 [28].

The <allow-cancel-emergency-alert> element is of type Boolean, as specified in table 9.3.2.7-19, and corresponds to the "AllowedCancelAlert" element of subclause 13.2.30 in 3GPP TS 24.483 [4].

Table 9.3.2.7-19: Values of <allow-cancel-emergency-alert>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to cancel an emergency alert using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to cancel an emergency alert using the procedures defined in 3GPP TS 24.281 [28].

The <allow-cancel-emergency-alert-any-user> element is of type Boolean, as specified in table 9.3.2.7-20, and does not appear in the MCVideo user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 9.3.2.7-20: Values of <allow-cancel-emergency-alert-any-user>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to cancel any on-network emergency alert on any MCVideo UE of any user, using the procedures defined in 3GPP TS 24.282 [25].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to cancel any on-network emergency alert on any MCVideo UE of any user, using the procedures defined in 3GPP TS 24.282 [25].

The <allow-enable-disable-user> element is of type Boolean, as specified in table 9.3.2.7-21, and does not appear in the MCVideo user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 9.3.2.7-21: Values of <allow-enable-disable-user>

"true"	indicates that the MCVideo user is locally authorised to enable/disable other MCVideo users from receiving MCVideo service.
"false"	indicates that the MCVideo user is not locally authorised to enable/disable other MCVideo users from receiving MCVideo service.

The <allow-enable-disable-UE> element is of type Boolean, as specified in table 9.3.2.7-22, and does not appear in the MCVideo user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 9.3.2.7-22: Values of <allow-enable-disable-UE>

"true"	indicates that the MCVideo user is locally authorised to enable/disable other MCVideo UEs from receiving MCVideo service.
"false"	indicates that the MCVideo user is not locally authorised to enable/disable other MCVideo UEs from receiving MCVideo service.

The <allow-off-network-manual-switch> element is of type Boolean, as specified in table 9.3.2.7-23, and corresponds to the "AllowedManualSwitch" element of subclause 13.2.71 in 3GPP TS 24.483 [4].

Table 9.3.2.7-23: Values of <allow-off-network-manual-switch>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised for manual switch to off-network operation while in on-network, using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised for manual switch to off-network operation while in on-network, using the procedures defined in 3GPP TS 24.281 [28].

The <allow-unlimited-video-streams> element is of type Boolean, as specified in table 9.3.2.7-24, and corresponds to the "AllowedUnlimited" element of subclause 13.2.75 in 3GPP TS 24.483 [4].

Table 9.3.2.7-24: Values of <allow-unlimited-video-streams>

"true"	indicates that the MCVideo user is allowed to receive an unlimited number of simultaneous video streams.
"false"	indicates that the MCVideo user is not allowed to receive an unlimited number of simultaneous video streams.

The <allow-auto-recv> element is of type Boolean, as specified in table 9.3.2.7-25, and corresponds to the "AllowedAutoRecv" element of subclause 13.2.76 in 3GPP TS 24.483 [4].

Table 9.3.2.7-25: Values of <allow-auto-recv>

"true"	indicates that the MCVideo user is authorised to automatically receive video communications.
"false"	indicates that the MCVideo user is not authorised to automatically receive video communications.

The <allow-auto-recv-emergency> element is of type Boolean, as specified in table 9.3.2.7-26, and corresponds to the "AllowedAutoRecvEmergency" element of subclause 13.2.77in 3GPP TS 24.483 [4].

Table 9.3.2.7-26: Values of <allow-auto-recv-emergency>

"true"	indicates that the MCVideo user is authorised to automatically receive emergency video streams.
"false"	indicates that the MCVideo user is not authorised to automatically receive emergency video streams.

The <allow-auto-recv-imminent-peril> element is of type Boolean, as specified in table 9.3.2.7-27, and corresponds to the "AllowedAutoRecvImminentPeril" element of subclause 13.2.78 in 3GPP TS 24.483 [4].

Table 9.3.2.7-27: Values of <allow-auto-recv-imminent-peril>

"true"	indicates that the MCVideo user is authorised to automatically receive imminent peril video streams.
"false"	indicates that the MCVideo user is not authorised to automatically receive imminent peril video streams.

The <allow-request-override> element is of type Boolean, as specified in table 9.3.2.7-28, and corresponds to the "AllowedRequestOverride" element of subclause 13.2.84 in 3GPP TS 24.483 [4].

Table 9.3.2.7-28: Values of <allow-request-override>

"true"	indicates that the MCVideo user is authorised to request to override an active MCVideo transmission.
"false"	indicates that the MCVideo user is not authorised to request to override an active MCVideo transmission.

The <allow-select-override> element is of type Boolean, as specified in table 9.3.2.7-29, and corresponds to the "AllowedSelectOverride" element of subclause 13.2.85 in 3GPP TS 24.483 [4].

Table 9.3.2.7-29: Values of <allow-select-override>

"true"	indicates that the MCVideo user is authorised to select MCVideo transmissions that can be overridden.
"false"	indicates that the MCVideo user is not authorised to select MCVideo transmissions that can be overridden.

The <allow-override-group-call> element is of type Boolean, as specified in table 9.3.2.7-30, and corresponds to the "AllowedOverrideGroupCall" element of subclause 13.2.86 in 3GPP TS 24.483 [4].

Table 9.3.2.7-30: Values of <allow-override-group-call>

"true"	indicates that the MCVideo user is authorised to allow MCVideo private communications to override active MCVideo group communications..
"false"	indicates that the MCVideo user is not authorised to allow MCVideo private communications to override active MCVideo group communications.

The <allow-off-network> element is of type Boolean, as specified in table 9.3.2.7-31, and corresponds to the "Authorised" element of subclause 13.2.89 in 3GPP TS 24.483 [4].

Table 9.3.2.7-31: Values of <allow-off-network>

"true"	Indicates that the MCVideo user is authorised for off-network operation using the procedures defined in 3GPP TS 24.281 [28].
"false"	Indicates that the MCVideo user is not authorised for off-network operation using the procedures defined in 3GPP TS 24.281 [28].

The <allow-private-call> element is of type Boolean, as specified in table Table 9.3.2.7-32, and corresponds to the "Authorised" element of subclause 13.2.38I in 3GPP TS 24.483 [4].

Table Table 9.3.2.7-32: Values of <allow-private-call>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to request a private call request using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, to reject private call request using the procedures defined in 3GPP TS 24.281 [28]. This shall be the default value taken in the absence of the element;

The <allow-manual-commencement> element is of type Boolean, as specified in table 9.3.2.7-33, and corresponds to the "ManualCommence" element of subclause 13.2.38J in 3GPP TS 24.483 [4].

Table 9.3.2.7-33-8: Values of <allow-manual-commencement>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to request a private call with manual commencement using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to request a private call with manual commencement using the procedures defined in 3GPP TS 24.281 [28].

The <allow-automatic-commencement> element is of type Boolean, as specified in table 9.3.2.7-34, corresponds to the "AutoCommence" element of subclause 13.2.38K in 3GPP TS 24.4283 [4].

Table 9.3.2.7-34: Values of <allow-automatic-commencement>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to request a private call with automatic commencement using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to request a private call with automatic commencement using the procedures defined in 3GPP TS 24.281 [28].

The <allow-failure-restriction> element is of type Boolean, as specified in table 9.3.2.7-35, and corresponds to the "FailRestrict" element of subclause 13.2.38L in 3GPP TS 24.483 [4].

Table 9.3.2.7-35: Values of <allow-failure-restriction>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to restrict the notification of a call failure reason for a private call using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to restrict the notification of a call failure reason for a private call using the procedures defined in 3GPP TS 24.281 [28].

The <allow-emergency-group-call> element is of type Boolean, as specified in table 9.3.2.7-36, and corresponds to the "Enabled" element of subclause 13.2.38C in 3GPP TS 24.483 [4].

Table 9.3.2.7-36: Values of <allow-emergency-group-call>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to request an emergency group call using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to request an emergency group call using the procedures defined in 3GPP TS 24.281 [28].

The <allow-emergency-private-call> element is of type Boolean, as specified in table 9.3.2.7-37, and corresponds to the "Authorised" element of subclause 13.2.38F in 3GPP TS 24.483 [4].

Table 9.3.2.7-37: Values of <allow-emergency-private-call>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to request an emergency private call using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to request an emergency private call using the procedures defined in 3GPP TS 24.281 [28].

The <allow-cancel-group-emergency> element is of type Boolean, as specified in table 9.3.2.7-38, and corresponds to the "CancelMCVideoGroup" element of subclause 13.2.38D in 3GPP TS 24.483 [4].

Table 9.3.2.7-38: Values of <allow-cancel-group-emergency>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to cancel an emergency group call using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to cancel an emergency group call using the procedures defined in 3GPP TS 24.281 [28].

The <allow-imminent-peril-call> element is of type Boolean, as specified in table 9.3.2.7-39, and corresponds to the "Authorised" element of subclause 13.2.38F in 3GPP TS 24.483 [4].

Table 9.3.2.7-39: Values of <allow-imminent-peril-call>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to request an imminent peril group call using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to request an imminent peril group call using the procedures defined in 3GPP TS 24.281 [28].

The <allow-cancel-imminent-peril> element is of type Boolean, as specified in table 9.3.2.7-40, and corresponds to the "Cancel" element of subclause 13.2.38G in 3GPP TS 24.483 [4].

Table 9.3.2.7-40: Values of <allow-cancel-imminent-peril>

"true"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is authorised to cancel an imminent peril group call using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the originating participating MCVideo function for the MCVideo user, that the MCVideo user is not authorised to cancel an imminent peril group call using the procedures defined in 3GPP TS 24.281 [28].

The <allow-off-network-group-call-change-to-emergency> element is of type Boolean, as specified in table 9.3.2.7-41, and corresponds to the "EmergencyCallChange" element of subclause 13.2.102A in 3GPP TS 24.483 [4].

Table 9.3.2.7-41: Values of <allow-off-network-group-call-change-to-emergency>

"true"	Indicates that the MCVideo user is allowed to to change an off-network group call in-progress to an off-network MCVideo emergency group call.
"false"	Indicates that the MCVideo user is not allowed to change an off-network group call in-progress to an off-network MCVideo emergency group call.

The <allow-imminent-peril-change> element is of type Boolean, as specified in table 9.3.2.7-42, and corresponds to the "ImminentPerilCallChange" element of subclause 13.2.102B in 3GPP TS 24.483 [4].

Table 9.3.2.7-42: Values of <allow-imminent-peril-change>

"true"	Indicates that the MCVideo user is allowed to to change an off-network group call in-progress to an off-network MCVideo emergency group call.
"false"	Indicates that the MCVideo user is not allowed to change an off-network group call in-progress to an off-network MCVideo emergency group call.

The <allow-request-remote-initiated-ambient-viewing> element is of type Boolean, as specified in table 9.4.2.7-43, and corresponds to the "AllowedRemoteInitiatedAmbientViewing" element of subclause Y1 in 3GPP TS 24.483 [4].

Table 9.4.2.7-43: Values of <allow-request-remote-initiated-ambient-viewing>

"true"	instructs the MCVideo server performing the controlling MCVideo function for the MCVideo user, that the MCVideo user is authorised to request a remote initiated ambient viewing call using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCVideo server performing the controlling MCVideo function for the MCVideo user, that the MCVideo user is not authorised to request a remote initiated ambient viewing call using the procedures defined in 3GPP TS 24.281 [28].

The <allow-request-locally-initiated-ambient-viewing> element is of type Boolean, as specified in table 9.4.2.7-44, and corresponds to the "AllowedLocallyInitiatedAmbientViewing" element of subclause Y2 in 3GPP TS 24.483 [4].

Table 9.4.2.7-44: Values of <allow-request-locally-initiated-ambient-viewing>

"true"	instructs the MCVideo server performing the controlling MCVideo function for the MCVideo user, that the MCVideo user is authorised to request a locally initiated ambient viewing call using the procedures defined in 3GPP TS 24.281 [28].
"false"	instructs the MCPVideo server performing the controlling MCVideo function for the MCVideo user, that the MCVideo user is not authorised to request a locally initiated ambient viewing call using the procedures defined in 3GPP TS 24.281 [28].

9.3.2.8 Naming Conventions

The name of user profile configuration document shall be in the format of a static "mcvideo-user-profile" string concatenated with the value of <user-profile-index> attribute and including ".xml" filetype. For instance, "mcvideo-user-profile-9.xml" is the user profile document name for an MCVideo user profile with the index value of 9.

9.3.2.9 Global documents

The present document requires no global documents.

9.3.2.10 Resource interdependencies

This Application Usage is interdependent on user profile data in the MCVideo Database and the MCVideo Management Object.

9.3.2.11 Access Permissions Policies

The authorization and access policies for a user profile configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*" and subclause *5.6.7* "*Access Permissions Document*" with the following exceptions:

1) The Principal (i.e., the user) of the user profile configuration document shall have permission to create, modify, or delete <alias-entry> child elements of the <UserAlias> elements, if the rule of the Access Permissions document associated with the user profile configuration document contains the action element <allow-any-operation-own-data>, as specified in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.6.7 "*Access Permissions Document*".

9.3.2.12 Subscription to Changes

The User Access Policy Application Usage shall support subscription to changes as specified in subclause 6.3.13.3.

MCVideo user profile configuration documents are kept as XDM collections. Therefore, it is possible to subscribe to all MCVideo user profile configuration documents of a MCVideo user according to XCAP URI construction convention of a trailing '/', as specified in IETF RFC 5875 [11].

9.4 MCVideo service configuration document

9.4.1 General

The MCVideo service configuration document is specified in this subclause. The MCVideo service configuration document content is based on requirements of Annex A.5 of 3GPP TS 23.281 [27], and structure and procedures of OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCVideo service configuration in the MCVideo service is described in 3GPP TS 24.281 [28] and 3GPP TS 24.581 [29]. The schema definition is provided in subclause 9.4.2.3. Each mission critical organization is configured with an MCVideo service configuration document.

9.4.2 Coding

9.4.2.1 Structure

The service configuration document structure is specified in this subclause.

The <service configuration> document:

1) shall include a "domain" attribute;
2) may include a <common> element;
3) may include an <on-network> element;
4) may include an <off-network> element; and
5) may include any other attribute for the purposes of extensibility.

The <common> element:

1) may include a <min-length-alias> element;
2) may contain a <broadcast-group> element containing:
   a) a <num-levels-group-hierarchy> element; and
   b) a <num-levels-user-hierarchy> element;

The <on-network> element:

1) may contain a <signalling-protection> element containing:
   a) a <confidentiality-protection> element; and
   b) an <integrity-protection> element;
2) may contain a <protection-between-mcvideo-servers> element containing:
   a) an <allow-signalling-protection> element; and
   b) an <allow-transmission-control-protection> element.

The <off-network> element:

1) may contain a <default-prose-per-packet-priority> element containing:
   a) an <mcvideo-private-call-signalling> element;
   b) an <mcvideo-private-call-media> element;
   c) an <mcvideo-emergency-private-call-signalling> element; and
   d) an <mcvideo-emergency-private-call-media> element; and
2) may contain a <private-call> element containing:
   a) an <mcvideo-max-duration> element.

9.4.2.2 Application Unique ID

The AUID shall be set to "org.3gpp.mcvideo.service-config".

9.4.2.3 XML Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
```

```
targetNamespace="urn:3gpp:ns:mcvideoServiceConfig:1.0"
xmlns:mcvideosc="urn:3gpp:ns:mcvideoServiceConfig:1.0">

<!-- the root element -->
  <xs:element name="service-configuration-info" type="mcvideosc:service-configuration-info-Type"/>

<!-- the root type -->
<!-- this is refined with one or more sub-types -->
  <xs:complexType name="service-configuration-info-Type">
    <xs:sequence>
      <xs:element name="service-configuration-params" type="mcvideosc:service-configuration-params-
Type" minOccurs="0"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
     </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

<!-- definition of the service-configuration-params-Type subtype-->
  <xs:complexType name="service-configuration-params-Type">
    <xs:sequence>
      <xs:element name="common" type="mcvideosc:commonType" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="on-network" type="mcvideosc:on-networkType" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="off-network" type="mcvideosc:off-networkType" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="domain" type="xs:anyURI" use="required"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="commonType">
    <xs:sequence>
      <xs:element name="min-length-alias" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="broadcast-group" type="mcvideosc:broadcast-groupType" minOccurs="0"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="on-networkType">
    <xs:sequence>
      <xs:element name="signalling-protection" type="mcvideosc:signalling-protectionType"
minOccurs="0"/>
      <xs:element name="protection-between-mcvideo-servers" type="mcvideosc:server-protectionType"
minOccurs="0"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="off-networkType">
    <xs:sequence>
      <xs:element name="default-prose-per-packet-priority" type="mcvideosc:default-prose-per-packet-
priorityType" minOccurs="0"/>
      <xs:element name="private-call" type="mcvideosc:private-callType" minOccurs="0"/>
      <xs:element name="num-levels-priority-hierarchy" type="mcvideosc:priorityhierarchyType"
minOccurs="0"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="broadcast-groupType">
    <xs:sequence>
      <xs:element name="num-levels-group-hierarchy" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="num-levels-user-hierarchy" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>
```

```
  <xs:complexType name="default-prose-per-packet-priorityType">
    <xs:sequence>
      <xs:element name="mcvideo-private-call-signalling" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="mcvideo-private-call-media" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="mcvideo-emergency-private-call-signalling" type="xs:unsignedShort"
minOccurs="0"/>
      <xs:element name="mcvideo-emergency-private-call-media" type="xs:unsignedShort"
minOccurs="0"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="private-callType">
    <xs:sequence>
      <xs:element name="mcvideo-max-duration" type="xs:duration" minOccurs="0"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:simpleType name="priorityhierarchyType">
    <xs:restriction base="xs:unsignedShort">
      <xs:minInclusive value="4"/>
      <xs:maxInclusive value="256"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:complexType name="signalling-protectionType">
    <xs:sequence>
      <xs:element name="confidentiality-protection" type="xs:boolean" minOccurs="0" default="true"/>
      <xs:element name="integrity-protection" type="xs:boolean" minOccurs="0" default="true"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="server-protectionType">
    <xs:sequence>
      <xs:element name="allow-signalling-protection" type="xs:boolean" minOccurs="0"
default="true"/>
      <xs:element name="allow-transmission-control-protection" type="xs:boolean" minOccurs="0"
default="true"/>
      <xs:element name="anyExt" type="mcvideosc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="anyExtType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

9.4.2.4 Default Document Namespace

The default document namespace used in evaluating URIs shall be "urn:3gpp:ns:mcvideoServiceConfig:1.0".

9.4.2.5 MIME type

The MIME type for the service configuration document shall be "vnd.3gpp.mcvideo-service-config+xml".

9.4.2.6 Validation Constraints

If the AUID value of the document URI or node URI in the Request-URI is other than that specified in subclause 9.4.2.2, then the configuration management server shall return an HTTP 409 (Conflict) response including the

XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid application id used".

If the XUI value of the document URI or node URI in the Request-URI does not match the XUI of the service configuration document URI, the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid XUI".

The service configuration document shall conform to the XML Schema described in subclause 9.4.2.3.

The <service-configuration-info> element is the root element of the XML document. The <service-configuration-info> element can contain sub-elements.

NOTE 1: The sub-elements of the <service-configuration-info> are validated by the <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/> particle of the <mcvideo-info> element.

The <service-configuration-params> element is a subelement of the <service-configuration-info> element.

If the <service-configuration-info> element does not contain a <service-configuration-params> element, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "mandatory element is missing".

If the <service-configuration-params> element does not include a <common> element, an <on-network> element or an <off-network> element, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "mandatory element is missing".

The <service-configuration-params> element shall contain either:

1) one <common> element only;

2) one <common> element and one <on-network> element;

3) one <common> element and one <off-network> element;

4) one <on-network> element only;

5) one <off-network> element only;

6) one <on-network> element and one <off-network> element; or

7) one <common> element, one <on-network> element and one <off-network> element.

If the <service-configuration-params> element does not confirm to one of the seven choices above, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the "domain" attribute does not contain a syntactically correct domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect domain name".

If the "domain" attribute contains an unknown domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "unknown domain name".

The value of the <min-length-alias> element in the <common> element refers to variable N3 defined in Annex A of 3GPP TS 22.179 [3] and contains a value between 0 and 255.

If the <min-length-alias> element of the <common> element contains a value greater than 255, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

The value of the <num-levels-group-hierarchy> element in the <broadcast-group> element refers to variable Bc1 defined in Annex E of 3GPP TS 22.280 [30].

The value of the <num-levels-user-hierarchy> element in the <broadcast-group> element refers to variable Bc2 defined in Annex E of 3GPP TS 22.280 [30].

If the values of the <min-length-alias>, the <num-levels-group-hierarchy> element or the <num-levels-user-hierarchy> element do not contain a semantically valid value, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If any of the constituent elements of the <default-prose-per-packet-priority> element contain a value less than 1 and greater than 8, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

NOTE 2: The higher the <default-prose-per-packet-priority> value, the higher the priority given to the signalling or media.

The default value for the <confidentiality-protection> element of the <signalling-protection> element is "true" indicating that confidentiality protection is enabled.

The default value for the <integrity-protection> element of the <signalling-protection> element is "true" indicating that integrity protection is enabled.

The default value for the <allow-signalling-protection> element of the <protection-between-mcvideo-servers> element is "true" indicating that signaling protection between MCVideo servers is enabled.

The default value for the <allow-transmission-control-protection> element of the <protection-between-mcvideo-servers> element is "true" indicating that transmission control protection between MCVideo servers is enabled.

The service configuration server ignores any unknown element and any unknown attribute.

If the configuration management server receives a duplicate element or attribute, it shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "duplicate attribute or element received".

The following elements conform to the "xs: duration" XML type:

1) <mcvideo-max-duration>.

The elements of "xs: duration" type specified above shall be represented in seconds using the element value: "PT<h>H<m>M<n>S" where <n> represents a valid value in seconds.

NOTE 3: "xs:duration" allows the use of decimal notation for seconds, e.g. 300ms is represented as <PT0.3S>.

If any of the elements of "xs: duration" type specified above contain values that do not conform to the "PT <n>S" structure then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid format for duration".

If an invalid value is received for <n>, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid value for duration".

9.4.2.7 Data Semantics

The "domain" attribute of the <service-configuration-params> element contains the domain name of the mission critical organization.

The <common> element contains service configuration data common to both on and off network service.

The <on-network> element contains service configuration data for on-network service only.

The <off-network> element contains service configuration data for off-network service only.

In the <common> element:

1) the <min-length-alias> element contains the minimum length (N3) of alphanumeric names assigned to MCVideo users by the MCVideo administrator, which corresponds to the "MinLengthAliasID" element as specified in subclause 14.2.9 of 3GPP TS 24.483 [4];

2) the <num-levels- group-hierarchy> element of the <broadcast-group> element contains an integer indicating the number levels of group hierarchy for group-broadcast groups, which corresponds to the "NumLevelGroupHierarchy" element as specified in subclause 14.2.7 of 3GPP TS 24.483 [4]; and

3) the <num-levels-user-hierarchy> element of the <broadcast-group> element contains an integer indicating the number levels of user hierarchy for user-broadcast groups, which corresponds to the "NumLevelUserHierarchy" element as specified in subclause 14.2.8 of 3GPP TS 24.483 [4];

In the <on-network> element:

1) the <confidentiality-protection> element of the <signalling-protection> element contains a boolean indicating whether confidentiality protection of MCVideo signalling is enabled or disabled between the MCVideo client and MCVideo server;

2) the <integrity-protection> element of the <signalling-protection> element contains a boolean indicating whether integrity protection of MCVideo signalling is enabled or disabled between the MCVideo client and MCVideo server;

3) the <allow-signalling-protection> element of the <protection-between-mcvideo-servers> element contains a boolean indicating whether protection of MCVideo signalling is enabled between MCVideo servers; and

4) the <allow-transmission-control-protection> element of the <protection-between-mcvideo-servers> element contains a boolean indicating whether protection of MCVideo transmission control signalling is enabled between MCVideo servers.

NOTE: The default values of the <confidentiality-protection> element, the <integrity-protection> element, the <allow-signalling-protection> element and the <allow-transmission-control-protection> element are "true".

In the <off-network> element:

1) the <default-prose-per-packet-priority> element contains priority values for off-network calls, for each of the following constituent elements:

   a) <mcvideo-private-call-signalling> element, which corresponds to the "MCVideoPrivateCallSignalling" element as specified in subclause 14.2.12 of 3GPP TS 24.483 [4];

   b) <mcvideo-private-call-media> element, which corresponds to the "MCVideoPrivateCallMedia" element as specified in subclause 14.2.13 of 3GPP TS 24.483 [4];

   c) <mcvideo-emergency-private-call-signalling> element, which corresponds to the "MCVideoEmergencyPrivateCallSignalling" element as specified in subclause 14.2.14 of 3GPP TS 24.483 [4]; and

   d) <mcvideo-emergency-private-call-media> element, which corresponds to the "MCVideoEmergencyPrivateCallMedia" element as specified in subclause 14.2.15 of 3GPP TS 24.483 [4];

2) the <private-call> element contains configuration values for off-network private calls, for each of the following constituent elements:

   a) <mcvideo-max-duration> element contains the maximum duration allowed for an off-network private call, as specified in subclause 14.2.17 of 3GPP TS 24.483 [4]; and

3) the <num-levels-priority-hierarchy> element contains a priority hierarchy for determining what participants, participant types, and urgent transmission types shall be granted a request to override an active off-network MCVideo transmission, which corresponds to the "NumLevelHierarchy" element as specified in subclause 14.2.18 of 3GPP TS 24.483 [4]. Absence of the <num-levels-priority-hierarchy> element in the <off-network> element indicates that the lowest possible value is used according to the schema to represent the priority hierarchy

9.4.2.8 Naming Conventions

The MCVideo service configuration document name shall be called "mcvideo-service-config.xml".

9.4.2.9 Global documents

The MCVideo service configuration document is a global document. This document resides under the global tree for the CMSXCAPROOT. Since there is only one document for each mission critical organization, the CMSXCAPROOT may be used to distinquish different MC Video service configuration documents. Otherwise, a subdirectory under the global tree, named by the mission critical organization name can be used to distinquish different service configuraiton documents. For example, if the CMSXCAPROOTURI respresents a single one mission critical organization, then the document URI would be:

mc-org-domain/mcorg12345/org.3gpp.mcvideo.service-config/global/mcvideo-service-config.xml

otherwise, if it services multiple organizations then the document URI would be:

CMSXCAPROOTURI/org.3gpp.mcvideo.service-config/global/mc-org-name/mcvideo-service-config.xml

Since the mcvideo service configuration is a global document, all users will have read-only access. Read-write access is only allowed for the system administrators of the mission critical organization.

9.4.2.10 Resource interdependencies

There are no resource interdependencies.

9.4.2.11 Authorization Policies

The authorization policies for manipulating a service configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*".

9.4.2.12 Subscription to Changes

The service configuration document application usage shall support subscription to changes as specified in subclause 6.3.13.3.

10 MCData configuration management documents

10.1 Introduction

This subclause defines the structure, default document namespace, AUID, XML schema, MIME type, validation constraints and data semantics following documents;

MCData UE configuration document;

MCData user profile configuration document; and

MCData service configuration document.

10.2 MCData UE configuration document

10.2.1 General

The MCData UE configuration document is specified in this subclause. The MCData UE configuration document content is based on requirements of Annex A.2 of 3GPP TS 23.282 [24], in accordance with OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCData UE configuration document in the MCData service is described in 3GPP TS 24.282 [25] and 3GPP TS 24.582 [26]. The schema definition is provided in subclause 10.2.2.3.

An MCData UE configuration document may apply to all MCData UEs of a mission critical organization or apply to specific MCData UEs identified in the <mcdata-UE-id> element. If there is no <mcdata-UE-id> element in the MCData UE configuration document, then by default the MCData UE configuration document applies to all MCData UEs of the mission critical organization that are not specifically identified in the <mcdata-UE-id> element of another MCData UE initial configuration document of the mission critical organization. Each MCData UE of a mission critical organization is configured with an MCData UE configuration document that is identified by the instance ID of the MCData UE.

MCData UE configuration documents of a MCData user are contained as "XDM collections" in the user's directory of the "Users Tree", in accordance with OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. A MCData UE configuration document corresponding to a specific MCData UE the MCData user has used to authenticate and is authorised to use the MCData service with is placed in the user directory of the MCData user.

The MCData UE configuration document acts as a template for the CMS to generate UE configuration documents that are downloaded to specific MCData UEs. The MCData UE configuration document that acts as a template is referred to as a "master MCData UE configuration document". The master MCData UE configuration document name is assigned by an MCData system administrator when the document is created and is stored in the users tree of that MCData system administrator. The master MCData UE configuration document does not directly apply to a specific MCData UE, but instead acts as template that the CMS uses to populate the MCData UE configuration documents of MCData UEs identified by elements of the <MCData-UE-id> element. For MCData UE configuration documents that correspond to a specific MCData UE, the name of the MCData UE configuration document is created from a value defined by the corresponding element that identifies the MCData UE within the <MCData-UE-id> element. For a master MCData UE configuration documents that does not contain a <MCData-UE-id> element, the name of the MCData UE configuration document stored in the user directory is "DEFAULT-MCData-UE.xml".

10.2.2 Coding

10.2.2.1 Structure

The MCData UE configuration document structure is specified in this subclause.

The <mcdata-UE-configuration> document:

1) shall include a "domain" attribute;
2) may include a <mcdata-UE-id> element;
3) may include a <name> element;
4) shall include a <common> element;
5) shall include an <on-network> element; and
6) may include any other attribute for the purposes of extensibility.

The <common> element:

1) shall contain a <short-data-service> element containing:
   a) a <Max-Simul-SDS-Txns-Nc4> element; and
   b) a <SDS-Presentation-Priority> element containing:
      i) a list of <MCData-Group-Priority> elements containing:
         A) an <MCData-Group-ID> element; and
         B) a <group-priority-hierarchy> element;
2) shall contain a <file-distribution> element containing:
   a) a <Max-Simul-FD-Txns-Nc4> element; and
   b) a <FD-Presentation-Priority> element containing:
      i) a list of <MCData-Group-Priority> elements containing:

1) an <MCData-Group-ID> element; and
2) a <group-priority-hierarchy> element;

3) shall contain a <conversation-management> element containing:
   a) a <Conversation-Presentation-Priority> element containing:
      i) a list of <MCData-Group-Priority> elements containing:
         1) an <MCData-Group-ID> element; and
         2) a <group-priority-hierarchy> element;
4) shall contain a <transmission-control> element containing:
   a) a <Max-Simul-Data-Transmissions-Nc4> element;
   b) a <Max-Data-Transmissions-In-Group-Nc5> element; and
   c) a <Data-Presentation-Priority> element containing:
      i) a list of <MCData-Group-Priority> elements containing:
         1) an <MCData-Group-ID> element; and
         2) a <group-priority-hierarchy> element;
5) shall contain a <reception-control> element containing:
   a) a <Max-Simul-Data-Receptions-Nc4> element; and
   b) a <Max-Data-Receptions-In-Group-Nc5> element.

The <on-network> element:

1) shall contain a <IPv6Preferred> element;
2) shall contain a <Relay-Service> element; and
3) may contain a list of <Relayed-MCData-Group> elements containing:
   a) a <MCData-Group-ID> element; and
   b) a <Relay-Service-Code> element.

NOTE: When the <Relay-Service> element is set to "false" a list of <Relayed-MCData-Group> elements is not needed.

The <mcdata-UE-id> element:

1) may contain a list of <Instance-ID-URN> elements; and
2) may contain a list of <IMEI-range> elements.

The <IMEI-range> element:

1) shall contain a <TAC> element;
2) may contain a list of <SNR> elements; and
3) may contain <SNR-range> element.

The <SNR-range> element:

1) shall contain a <Low-SNR> element; and
2) shall contain a <High-SNR> element.

10.2.2.2 Application Unique ID

The AUID shall be set to "org.3gpp.mcdata.ue-config".

10.2.2.3 XML Schema

```
<?xml version="1.0" encoding="UTF-8"?>

<xs:schema xmlns:mcdatauep="urn:3gpp:mcdata:mcdataUEConfig:1.0"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:3gpp:mcdata:mcdataUEConfig:1.0"
  elementFormDefault="qualified" attributeFormDefault="unqualified">

  <xs:import namespace="http://www.w3.org/XML/1998/namespace"
    schemaLocation="http://www.w3.org/2001/xml.xsd"/>

  <xs:element name="mcdata-UE-configuration">
    <xs:complexType>
      <xs:sequence>
        <xs:choice minOccurs="0" maxOccurs="unbounded">
          <xs:element name="mcdata-UE-id" type="mcdatauep:MCDataUEIDType"/>
          <xs:element name="name" type="mcdatauep:NameType"/>
          <xs:element name="anyExt" type="mcdatauep:anyExtType"/>
          <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
        </xs:choice>
        <xs:element name="common" type="mcdatauep:CommonType"/>
        <xs:element name="on-network" type="mcdatauep:On-networkType"/>
        <xs:element name="anyExt" type="mcdatauep:anyExtType"/>
        <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
      </xs:sequence>
      <xs:attribute name="domain" type="xs:anyURI" use="required"/>
      <xs:attribute name="XUI-URI" type="xs:anyURI"/>
      <xs:attribute name="Instance-ID-URN" type="xs:anyURI"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="NameType">
    <xs:simpleContent>
      <xs:extension base="xs:token">
        <xs:attribute ref="xml:lang"/>
        <xs:attributeGroup ref="mcdatauep:IndexType"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>

  <xs:complexType name="MCDataUEIDType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="Instance-ID-URN" type="xs:anyURI"/>
      <xs:element name="IMEI-range" type="mcdatauep:IMEI-rangeType"/>
      <xs:element name="anyExt" type="mcdatauep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcdatauep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="IMEI-rangeType">
    <xs:sequence>
      <xs:element name="TAC" type="mcdatauep:tacType"/>
      <xs:choice minOccurs="0" maxOccurs="unbounded">
        <xs:element name="SNR" type="mcdatauep:snrType"/>
        <xs:element name="SNR-range" type="mcdatauep:SNR-rangeType"/>
      </xs:choice>
      <xs:element name="anyExt" type="mcdatauep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcdatauep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="SNR-rangeType">
    <xs:sequence>
      <xs:element name="Low-SNR" type="mcdatauep:snrType"/>
      <xs:element name="High-SNR" type="mcdatauep:snrType"/>
      <xs:element name="anyExt" type="mcdatauep:anyExtType" minOccurs="0"/>
```

```
    <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
  </xs:sequence>
  <xs:attributeGroup ref="mcdatauep:IndexType"/>
  <xs:anyAttribute namespace="##any" processContents="lax"/>
</xs:complexType>

<xs:simpleType name="tac-baseType">
    <xs:restriction base="xs:decimal">
      <xs:totalDigits value="8"/>
    </xs:restriction>
</xs:simpleType>

<xs:complexType name="tacType">
  <xs:simpleContent>
    <xs:extension base="mcdatauep:tac-baseType">
      <xs:attributeGroup ref="mcdatauep:IndexType"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:simpleType name="snr-baseType">
  <xs:restriction base="xs:decimal">
    <xs:totalDigits value="6"/>
  </xs:restriction>
</xs:simpleType>

<xs:complexType name="snrType">
  <xs:simpleContent>
    <xs:extension base="mcdatauep:snr-baseType">
      <xs:attributeGroup ref="mcdatauep:IndexType"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:extension>
  </xs:simpleContent>
</xs:complexType>

<xs:complexType name="CommonType">
  <xs:sequence>
    <xs:element name="short-data-service">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="Max-Simul-SDS-Txns-Nc4" type="xs:positiveInteger"/>
          <xs:element name="SDS-Presentation-Priority">
            <xs:complexType>
              <xs:sequence>
                <xs:element name="MCData-Group-Priority" maxOccurs="unbounded">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:element name="MCData-Group-ID" type="xs:anyURI"/>
                      <xs:element name="group-priority-hierarchy" type="xs:nonNegativeInteger"/>
                    </xs:sequence>
                  </xs:complexType>
                </xs:element>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
      </xs:complexType>
    </xs:element>
    <xs:element name="file-distribution">
      <xs:complexType>
        <xs:sequence>
          <xs:element name="Max-Simul-FD-Txns-Nc4" type="xs:positiveInteger"/>
          <xs:element name="FD-Presentation-Priority">
            <xs:complexType>
              <xs:sequence>
                <xs:element name="MCData-Group-Priority" maxOccurs="unbounded">
                  <xs:complexType>
                    <xs:sequence>
                      <xs:element name="MCData-Group-ID" type="xs:anyURI"/>
                      <xs:element name="group-priority-hierarchy" type="xs:nonNegativeInteger"/>
                    </xs:sequence>
                  </xs:complexType>
                </xs:element>
              </xs:sequence>
            </xs:complexType>
          </xs:element>
        </xs:sequence>
```

```
        </xs:complexType>
      </xs:element>
      <xs:element name="conversation-management">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Conversation-Presentation-Priority">
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="MCData-Group-Priority" maxOccurs="unbounded">
                    <xs:complexType>
                      <xs:sequence>
                        <xs:element name="MCData-Group-ID" type="xs:anyURI"/>
                        <xs:element name="group-priority-hierarchy" type="xs:nonNegativeInteger"/>
                      </xs:sequence>
                    </xs:complexType>
                  </xs:element>
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="transmission-control">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Max-Simul-Data-Transmissions-Nc4" type="xs:positiveInteger"/>
            <xs:element name="Max-Data-Transmissions-In-Group-Nc5" type="xs:positiveInteger"/>
            <xs:element name="Data-Presentation-Priority">
              <xs:complexType>
                <xs:sequence>
                  <xs:element name="MCData-Group-Priority" maxOccurs="unbounded">
                    <xs:complexType>
                      <xs:sequence>
                        <xs:element name="MCData-Group-ID" type="xs:anyURI"/>
                        <xs:element name="group-priority-hierarchy" type="xs:nonNegativeInteger"/>
                      </xs:sequence>
                    </xs:complexType>
                  </xs:element>
                </xs:sequence>
              </xs:complexType>
            </xs:element>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
      <xs:element name="reception-control">
        <xs:complexType>
          <xs:sequence>
            <xs:element name="Max-Simul-Data-Reception-Nc4" type="xs:positiveInteger"/>
            <xs:element name="Max-Data-Receptions-In-Group-Nc5" type="xs:positiveInteger"/>
          </xs:sequence>
        </xs:complexType>
      </xs:element>
    </xs:sequence>
    <xs:attributeGroup ref="mcdatauep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="On-networkType">
    <xs:sequence>
      <xs:element name="IPv6Preferred" type="xs:boolean"/>
      <xs:element name="Relay-Service" type="xs:boolean"/>
      <xs:element name="Relayed-MCData-Group" type="mcdatauep:Relayed-MCData-GroupType"
minOccurs="0"/>
      <xs:element name="anyExt" type="mcdatauep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcdatauep:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="Relayed-MCData-GroupType">
    <xs:sequence>
      <xs:element name="MCData-Group-ID" type="xs:anyURI"/>
      <xs:element name="Relay-Service-Code" type="xs:string"/>
      <xs:element name="anyExt" type="mcdatauep:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>
```

```
  <xs:attributeGroup name="IndexType">
    <xs:attribute name="index" type="xs:token"/>
  </xs:attributeGroup>

  <xs:complexType name="anyExtType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

10.2.2.4 Default Document Namespace

The default document namespace used in evaluating URIs shall be "urn:3gpp:ns:mcdataUEConfig:1.0".

10.2.2.5 MIME type

The MIME type for the service configuration document shall be "vnd.3gpp.mcdata-ue-config+xml".

10.2.2.6 Validation Constraints

If the AUID value of the document URI or node URI in the Request-URI is other than that specified in subclause 10.2.2.2, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid application id used".

If the XUI value of the document URI or node URI in the Request-URI does not match the XUI of the service configuration document URI, the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid XUI".

The MCData UE configuration document shall conform to the XML Schema described in subclause 10.2.2.3.

The <mcdata-UE-configuration> element is the root element of the XML document. The <mcdata-UE-configuration> element can contain sub-elements.

The <mcdata-UE-configuration> element shall contain either:

1) one <common> element only;

2) one <common> element and one <on-network> element; or

3) one <on-network> element only.

If the <mcdata-UE-configuration> element does not conform to one of the three choices above, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the "domain" attribute does not contain a syntactically correct domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect domain name".

If the "domain" attribute contains an unknown domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "unknown domain name".

If an <Instance-ID-URN> element of the <mcdata-UE-id> element does not conform to a valid Instance ID as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Instance ID URN" and contain the non-conformant <Instance-ID-URN> element.

If the <TAC> element of an <IMEI-range> element does not conform to a valid 8 digit Type Allocation Code as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Type Allocation Code" and contain the non-conformant <TAC> element.

If a <SNR> element of an <IMEI-range> element does not conform to a valid 6 digit Serial Number as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Serial Number" and contain the non-conformant <SNR> element.

If a <Low-SNR> element or a <High-SNR> element of a <SNR-range> element does not conform to a valid 6 digit Serial Number as specified in 3GPP TS 23.003 [16], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect Serial Number range" and contain the non-conformant <Low-SNR> or <High-SNR> element.

If the <MCData-Group-ID> element of the <MCData-group-priority> element of the <SDS-Presentation-Priority> element, <FD-Presentation-Priority> element, <Conversation-Presentation-Priority> element or <Data-Presentation-Priority> element, does not conform to the syntax of a "uri" attribute specified in OMA OMA-TS-XDM_Group-V1_1[17], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the <group-priority-hierarchy> element of the <MCData-group-priority> element of the <SDS-Presentation-Priority> element, <FD-Presentation-Priority> element, <Conversation-Presentation-Priority> element or <Data-Presentation-Priority> element contains a value greater than 255, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <Relay-Service> element of the <On-Network> element does not contains a value of "true" or "false", then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

If the <Relay-Service-Code> element of the <Relayed-MCData-Group> element does not conform to the syntax of a valid Relay service code as defined in 3GPP TS 24.333 [12], then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the <IPv6-Preferred> element of the <On-Network> element does not contains a value of "true" or "false, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

10.2.2.7 Data Semantics

The "domain" attribute of the <mcdata-UE-configuration> element contains the domain name of the mission critical organization.

The <name> element of the <mcdata-UE- configuration> element contains the user displayable name of the MCData UE configuration document and corresponds to the "Name" element of subclause 9.2.3 in 3GPP TS 24.483 [4].

The creator of the MCData UE configuration document may include an <mcdata-UE-id> element in the version of the MCData UE configuration document that is uploaded to the CMS and may also appear in the MCData UE configuration document when downloaded by the MCData system administrator. The <mcdata-UE-id> element does not appear in the MCData UE configuration document that is configured to the MCData UE. If an <mcdata-UE-id> element is included then the MCData UE configuration document applies only to the MCData UE(s) identified by the <mcdata-UE-id> element. If no <mcdata-UE-id> element is included then the MCData UE configuration document applies to all the MCData UEs of the domain.

If one or more optional <Instance-ID-URN> elements is included in the <mcdata-UE-id> element then the MCData UE configuration document applies to the MCData UE with an instance ID equal to the instance ID contained in the <Instance-ID-URN> element.

The <TAC> element of the <IMEI-range> element contains the Type Allocation Code of the MCData UE.

The optional <SNR> element of the <IMEI-range> element contains the individual serial number uniquely identifying MCData UE within the Type Allocation Code contained in the <TAC> element that the MCData UE initial configuration document applies to.

If an optional <SNR-range> element is included within the <IMEI-range> element then the MCData UE configuration document applies to all MCData UEs within the Type Allocation Code contained in the <TAC> element with the serial

number equal or greater than the serial number contained in the <Low-SNR> element and less than or equal to the serial number contained in the <High-SNR> element.

If no <SNR> element nor <SNR-range> element is included within the <IMEI-range> element then the MCData UE configuration document applies to all the MCData UE(s) with the Type Allocation Code contained within the <TAC> element of the <IMEI-range> element.

If no <mcdata-UE-id> element is included then the MCData UE configuration document applies to all MCData UEs of the mission critical organization identified in the "domain" attribute.

The <common> element contains MCData UE configuration data common to both on and off network operation.

The <on-network> element contains MCData UE configuration data for on-network operation only.

In the <common> element:

1) the <Max-Simul-SDS-Txns-Nc4> element of the <short-data-service> element contains an integer indicating the maximum number of simultaneous SDS transactions (Nc4) allowed for an MCData UE for on-network or off-network group SDS and corresponds to the "MaxSDSNc4" element of subclause 9.2.7 in 3GPP TS 24.483 [4];

2) the <SDS-Presentation-Priority> element of the <short-data-service> element corresponds to the "SDSPresentationPriority" element of subclause 9.2.8 in 3GPP TS 24.483 [4] and contains a list of <MCData-Group-Priority> elements that contains:

   a) <MCData-Group-ID> element identifying an MCData group that corresponds to the "MCDataGroupID" element of subclause 9.2.10 in 3GPP TS 24.483 [4]; and

   b) a <group-priority-hierarchy> element that contains an integer that identifies the relative priority level of that MCData group with 0 being the lowest priority and 255 being the highest priority and corresponds to the "MCDataGroupPriorityHierarchy" element of subclause 9.2.11 in 3GPP TS 24.483 [4].

3) the <Max-Simul-FD-Txns-Nc4> element of the <file-distribution> element contains an integer indicating the maximum number of simultaneous FD transactions (Nc4) allowed for an MCData UE for on-network or off-network group FD and corresponds to the "MaxFDNc4" element of subclause 9.2.12 in 3GPP TS 24.483 [4];

4) the <FD-Presentation-Priority> element of the <file-distribution> element corresponds to the "FDPresentationPriority" element of subclause 9.2.13 in 3GPP TS 24.483 [4] and contains a list of <MCData-Group-Priority> elements that contains:

   a) <MCData-Group-ID> element identifying an MCData group that corresponds to the "MCDataGroupID" element of subclause 9.2.15 in 3GPP TS 24.483 [4]; and

   b) a <group-priority-hierarchy> element that contains an integer that identifies the relative priority level of that MCData group with 0 being the lowest priority and 255 being the highest priority and corresponds to the "MCDataGroupPriorityHierarchy" element of subclause 9.2.16 in 3GPP TS 24.483 [4].

5) the <Conversation-Presentation-Priority> element of the <conversation-management> element corresponds to the "ConversationPresentationPriority" element of subclause 9.2.17 in 3GPP TS 24.483 [4] and contains a list of <MCData-Group-Priority> elements that contains:

   a) <MCData-Group-ID> element identifying an MCData group that corresponds to the "MCDataGroupID" element of subclause 9.2.19 in 3GPP TS 24.483 [4]; and

   b) a <group-priority-hierarchy> element that contains an integer that identifies the relative priority level of that MCData group with 0 being the lowest priority and 255 being the highest priority and corresponds to the "MCDataGroupPriorityHierarchy" element of subclause 9.2.20 in 3GPP TS 24.483 [4].

6) the <Max-Simul-Data-Transmissions-Nc4> element of the <transmission-control> element contains an integer indicating the maximum number of simultaneous data transmissions (Nc4) allowed for an MCData UE for on-network or off-network group data transmissions and corresponds to the "MaxTCNc4" element of subclause 9.2.21 in 3GPP TS 24.483 [4];

7) the <Max-Data-Transmissions-In-Group-Nc5> element of the <transmission-control> element contains an integer indicating the maximum number of data transmissions in a group (Nc5) allowed for an MCData UE for on-network or off-network group data transmission and corresponds to the "MaxTCNc5" element of subclause 9.2.22 in 3GPP TS 24.483 [4];

8) the <Data-Presentation-Priority> element of the <transmission-control> element corresponds to the "DataPresentationPriority" element of subclause 9.2.23 in 3GPP TS 24.483 [4] and contains a list of <MCData-Group-Priority> elements that contains:

   a) <MCData-Group-ID> element identifying an MCData group that corresponds to the "MCDataGroupID" element of subclause 9.2.25 in 3GPP TS 24.483 [4]; and

   b) a <group-priority-hierarchy> element that contains an integer that identifies the relative priority level of that MCData group with 0 being the lowest priority and 255 being the highest priority and corresponds to the "MCDataGroupPriorityHierarchy" element of subclause 9.2.26 in 3GPP TS 24.483 [4].

9) the <Max-Simul-Data-Receptions-Nc4> element of the <reception-control> element contains an integer indicating the maximum number of simultaneous data receptions (Nc4) allowed for an MCData UE for on-network or off-network group data transmissions and corresponds to the "MaxRCNc4" element of subclause 9.2.27in 3GPP TS 24.483 [4];

10) the <Max-Data-Receptions-In-Group-Nc5> element of the <transmission-control> element contains an integer indicating the maximum number of data receptions in a group (Nc5) allowed for an MCData UE for on-network or off-network group data transmission and corresponds to the "MaxRCNc5" element of subclause 9.2.28in 3GPP TS 24.483 [4];

In the <on-network> element:

1) if the <Relay-Service> element is set to "true" the MCData UE is allowed to offer a relay service, and if set to "false" the MCData UE is not allowed to offer relay service. This attribute corresponds to the "RelayService" element of subclause 9.2.30 in 3GPP TS 24.483 [4];

2) an <IPv6Preferred> element which corresponds to the "IPv6Preferred" element of subclause 9.2.31 in 3GPP TS 24.483 [4],

   a) if the UE has both IPv4 and IPv6 host configuration:

      i) if IPv6Preferred is set to true then the UE shall use IPv6 for all on-network signalling and media; and

      ii) if IPv6Preferred is set to false then the UE shall use IPv4 for all on-network signalling and media;

   b) if the UE has only IPv4 host configuration then the UE shall use IPv4 for all on-network signalling and media; and

   c) if the UE has only IPv6 host configuration then the UE shall use IPv6 for all on-network signalling and media; and

3) the <Relayed-MCData-Groups> element of the <Relay-Service> element which corresponds to the "RelayedMCDataGroup" element of subclause 9.2.32 in 3GPP TS 24.483 [4] contains:

   a) a list of <Relay-MCData-Group-ID> elements that contains:

      i) "MCData-Group-ID" attribute identifying an MCData group that is allowed to be used via a relay and corresponds to the "MCDataGroupID" element of subclause 9.2.34in 3GPP TS 24.483 [4]; and

      ii) a <Relay-Service-Code> element as specified in 3GPP TS 24.333 [12] which corresponds to the "RelayServiceCode" element of subclause 9.2.35 in 3GPP TS 24.483 [4].

10.2.2.8 Naming Conventions

The present document defines no naming conventions.

10.2.2.9 Global documents

The present document requires no global documents.

10.2.2.10 Resource interdependencies

There are no resource interdependencies.

10.2.2.11 Authorization Policies

The authorization policies for manipulating an MCData UE configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*".

10.2.2.12 Subscription to Changes

The MCData UE configuration document application usage shall support subscription to changes as specified in] subclause 6.3.13.3.

MCData UE configuration documents are kept as XDM collections. Therefore, it is possible to subscribe to all MCData UE configuration documents of a MCData user according to XCAP URI construction convention of a trailing '/', as specified in IETF RFC 5875 [11].

10.3 MCData user profile configuration document

10.3.1 General

The MCData user profile configuration document is specified in this subclause. The MCData user profile configuration document content is based on requirements of Annex A.3 of 3GPP TS 23.282 [24], and structure and procedures of OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCData user profile in the MCData service is described in 3GPP TS 24.282 [25]. The schema definition is provided in subclause 10.3.2.

MCData user profile documents are "XDM collections" in the user's directory in the "Users Tree", in accordance with OMA OMA-TS-XDM_Core-V2_1-20120403-A [2].

The name of the MCData user profile document matches the value of the <ProfileName> element in the MCData user profile document.

10.3.2 Coding

10.3.2.1 Structure

The MCData user profile configuration document structure is specified in this subclause.

The <mcdata-user-profile> document:

1) shall include an "XUI-URI" attribute;
2) may include a <Name> element;
3) shall include one <Status> element;
4) shall include a "user-profile-index" attribute;
5) may include any other attribute for the purposes of extensibility;
6) may include one <ProfileName> element;
7) may include a <Pre-selected-indication> element;
8) shall include one or more <Common> elements, each of which:
    a) shall have an "index" attribute;
    b) shall include one <UserAlias> element containing one or more <alias-entry> elements
    c) shall include one <MCDataUserID> element that contains an <entry> element;
    d) may include one <MCDataUserID-KMSURI> element that contains an <entry> element;
    e) may contain one <ParticipantType> element;

f) shall contain one <MissionCriticalOrganization>;

g) shall include one <FileDistribution> element. The <FileDistribution> element contains:

i) one or more <FD-Cancel-List-Entry> elements containing:

A) an <MCData-ID> element that contains an <entry> element; and

B) a <MCData-ID-KMSURI> element that contains an <entry> element;

h) shall include one <TxRxControl> element. The <TxRxControl> element contains:

i) one <MaxData1To1> element;

ii) one <MaxTime1to1> element; and

iii) an <TxReleaseList> element that contains zero or more <entry> elements; and

i) shall include one <GroupEmergencyAlert> element containing an <entry> element;

j) may contain an <One-to-One-Communication> element containing:

i) one or more <One-to-One-CommunicationListEntry> elements containing:

A) an <MCData-ID> element that contains an <entry> element;

B) a <ProSeUserID-entry> element; and

C) a <MCData-ID-KMSURI> element that contains an <entry> element;

9) shall include zero or more <OnNetwork> elements each of which:

a) shall have an "index" attribute;

b) shall include one or more <MCDataGroupInfo> elements each containing:

i) an <MCData-Group-ID> element containing an <entry> element;

ii) an <GMS-App-Serv-Id> element containing one or more <entry> elements;

iii) an <IdMS-Token-Endpoint> element containing one or more <entry> elements; and

iv) one <RelativePresentationPriority> element;

c) shall include one <MaxAffiliationsN2>element;

d) may include an <ImplicitAffiliations> element, containing one or more <entry> elements;

e) may include a <PresenceStatus> element containing one or more <entry> elements;

f) may include a <RemoteGroupChange> element, containing one or more <entry> elements;

g) may contain one <ConversationManagement> element containing

i) one or more <MCDataGroupHangTime> elements each containing:

A) an <MCData-Group-ID> element containing an <entry> element; and

B) a <Hang-Time> element

ii) a <DeliveredDisposition> element, containing zero or more <entry> elements; and

iii) a <ReadDisposition> element, containing zero or more <entry> elements; and

h) shall include one <One-To-One-EmergencyAlert> element containing an <entry> element;

10) shall include zero or more <OffNetwork> elements each of which:

a) shall contain an "index" attribute;

b) shall include one or more <MCDataGroupInfo> elements each containing:

i) an <MCData-Group-ID> element containing an <entry> element;

ii) an <GMS-App-Serv-Id> element containing one or more <entry> elements;

iii) an <IdMS-Token-Endpoint> element containing one or more <entry> elements; and

iv) one <RelativePresentationPriority> element; and

c) a <User-Info-Id> element; and

11) a <ruleset> element conforming to IETF RFC 4745 [13] containing a sequence of zero or more <rule> elements:

a) the <conditions> of a <rule> element may include the <identity> element as described in IETF RFC 4745 [13]; and

b) the <actions> child element of any <rule> element may contain:

i) an <allow-create-delete-user-alias> element;

ii) an <allow-create-group-broadcast- group> element;

iii) an <allow-create-user-broadcast-group> element;

iv) an <allow-transmit-data> element;

v) an <allow-request-affiliated-groups> element;

vi) an <allow-request-to-affiliate-other-users> element;

vii) an <allow-recommend-to-affiliate-other-users> element

viii) an <allow-regroup> element;

ix) an <allow-presence-status> element;

x) an <allow-request-presence> element;

xi) an <allow-activate-emergency-alert> element;

xii) an <allow-cancel-emergency-alert> element;

xiii) an <allow-cancel-emergency-alert-any-user> element;

xiv) an <allow-enable-disable-user> element;

xv) an <allow-enable-disable-UE> element;

xvi) an <allow-off-network-manual-switch> element; and

xvii) an <allow-off-network> element.

The <entry> elements:

1) shall contain a <uri-entry> element;

2) shall contain an "index" attribute;

3) may contain a <display-name> element; and

4) may contain an "entry-info" attribute.

The <ProSeUserID-entry> elements:

1) shall contain a <DiscoveryGroupID> element;

2) shall contain an <User-Info-ID> element; and

3) shall contain an "index" attribute.

10.3.2.2 Application Unique ID

The AUID shall be "org.3gpp.mcdata.user-profile".

10.3.2.3 XML Schema

The MCData user profile configuration document shall be composed according to the following XML schema:

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema
  xmlns:mcdataup="urn:3gpp:ns:mcdata:user-profile:1.0"
  xmlns:xs="http://www.w3.org/2001/XMLSchema"
  targetNamespace="urn:3gpp:ns:mcdata:user-profile:1.0"
  elementFormDefault="qualified" attributeFormDefault="unqualified">
  <xs:import namespace="http://www.w3.org/XML/1998/namespace"
  schemaLocation="http://www.w3.org/2001/xml.xsd"/>
  <!-- This import brings in common policy namespace from RFC 4745 -->
  <xs:import namespace="urn:ietf:params:xml:ns:common-policy"
  schemaLocation="http://www.iana.org/assignments/xml-registry/schema/common-policy.xsd"/>

  <xs:element name="mcdata-user-profile">
    <xs:complexType>
      <xs:choice minOccurs="1" maxOccurs="unbounded">
        <xs:element name="Name" type="mcdataup:NameType"/>
        <xs:element name="Status" type="xs:boolean"/>
        <xs:element name="ProfileName" type="mcdataup:NameType"/>
        <xs:element name="Pre-selected-indication" type="mcdataup:emptyType"/>
        <xs:element name="Common" type="mcdataup:CommonType"/>
        <xs:element name="OffNetwork" type="mcdataup:OffNetworkType"/>
        <xs:element name="OnNetwork" type="mcdataup:OnNetworkType"/>
        <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
        <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
      </xs:choice>
      <xs:attribute name="XUI-URI" type="xs:anyURI" use="required"/>
      <xs:attribute name="user-profile-index" type="xs:unsignedByte" use="required"/>
      <xs:anyAttribute namespace="##any" processContents="lax"/>
    </xs:complexType>
  </xs:element>

  <xs:complexType name="NameType">
    <xs:simpleContent>
      <xs:extension base="xs:token">
        <xs:attribute ref="xml:lang"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>

  <xs:complexType name="CommonType">
    <xs:choice minOccurs="1" maxOccurs="unbounded">
      <xs:element name="UserAlias" type="mcdataup:UserAliasType"/>
      <xs:element name="MCDataUserID" type="mcdataup:EntryType"/>
      <xs:element name="MCDataUserID-KMSURI" type="mcdataup:EntryType"/>
      <xs:element name="ParticipantType" type="xs:string"/>
      <xs:element name="MissionCriticalOrganization" type="xs:string"/>
      <xs:element name="FileDistribution" type="mcdataup:FileDistributionType"/>
      <xs:element name="TxRxControl" type="mcdataup:TxRxControlType"/>
      <xs:element name="GroupEmergencyAlert" type="mcdataup:EmergencyAlertType"/>
      <xs:element name="One-to-One-Communication" type="mcdataup:One-to-One-CommunicationType"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcdataup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="OnNetworkType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="MCDataGroupInfo" type="mcdataup:MCDataGroupInfoType"/>
      <xs:element name="MaxAffiliationsN2" type="xs:nonNegativeInteger"/>
      <xs:element name="ImplicitAffiliations" type="mcdataup:ListEntryType"/>
      <xs:element name="PresenceStatus" type="mcdataup:ListEntryType"/>
      <xs:element name="RemoteGroupChange" type="mcdataup:ListEntryType"/>
      <xs:element name="ConversationManagement" type="mcdataup:ConversationManagementType"/>
```

```
      <xs:element name="One-To-One-EmergencyAlert" type="mcdataup:EmergencyAlertType"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcdataup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="OffNetworkType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="MCDataGroupInfo" type="mcdataup:MCDataGroupInfoType"/>
      <xs:element name="User-Info-ID" type="xs:hexBinary"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcdataup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

<xs:complexType name="One-to-One-CommunicationType">
    <xs:sequence>
      <xs:element name="One-to-One-CommunicationListEntry" type="mcdataup:One-to-One-
CommunicationListEntryType" minOccurs="0" maxOccurs="unbounded"/>      <xs:element name="anyExt"
type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="One-to-One-CommunicationListEntryType">
    <xs:choice minOccurs="1" maxOccurs="unbounded">
      <xs:element name="MCData-ID" type="mcdataup:EntryType"/>
      <xs:element name="ProSeUserID-entry" type="mcdataup:ProSeUserEntryType"/>
      <xs:element name="MCData-ID-KMSURI" type="mcdataup:EntryType"/>      <xs:element name="anyExt"
type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcdataup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="EmergencyAlertType">
    <xs:sequence>
      <xs:element name="entry" type="mcdataup:EntryType"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="ConversationManagementType">
    <xs:sequence>
      <xs:element name="MCDataGroupHangTime" type="mcdataup:GroupHangTimeType" minOccurs="1"
maxOccurs="unbounded"/>
      <xs:element name="DeliveredDisposition" type="mcdataup:ListEntryType"/>
      <xs:element name="ReadDisposition" type="mcdataup:ListEntryType"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="GroupHangTimeType">
    <xs:sequence>
      <xs:element name="MCData-Group-ID" type="mcdataup:EntryType"/>
      <xs:element name="Hang-Time" type="xs:duration"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="MCDataGroupInfoType">
    <xs:sequence>
      <xs:element name="MCData-Group-ID" type="mcdataup:EntryType"/>
      <xs:element name="GMS-App-Serv-Id" type="mcdataup:ListEntryType"/>
      <xs:element name="IdMS-Token-Endpoint" type="mcdataup:ListEntryType"/>
      <xs:element name="Group-KMSURI" type="mcdataup:EntryType"/>
```

```
      <xs:element name="RelativePresentationPriority" type="xs:nonNegativeInteger"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="FileDistributionType">
    <xs:sequence>
      <xs:element name="FD-Cancel-List-Entry" type="mcdataup:FD-Cancel-ListEntryType" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="FD-Cancel-ListEntryType">
    <xs:choice minOccurs="1" maxOccurs="unbounded">
      <xs:element name="MCData-ID" type="mcdataup:EntryType"/>
      <xs:element name="MCData-ID-KMSURI" type="mcdataup:EntryType"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attributeGroup ref="mcdataup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="TxRxControlType">
    <xs:sequence>
      <xs:element name="MaxData1To1" type="xs:positiveInteger"/>
      <xs:element name="MaxTime1To1" type="xs:duration"/>
      <xs:element name="TxReleaseList" type="mcdataup:ListEntryType"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="UserAliasType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="alias-entry" type="mcdataup:AliasEntryType"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="AliasEntryType">
    <xs:simpleContent>
      <xs:extension base="xs:token">
        <xs:attributeGroup ref="mcdataup:IndexType"/>
        <xs:attribute ref="xml:lang"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>

  <xs:complexType name="ListEntryType">
    <xs:choice minOccurs="0" maxOccurs="unbounded">
      <xs:element name="entry" type="mcdataup:EntryType"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:choice>
    <xs:attribute ref="xml:lang"/>
    <xs:attributeGroup ref="mcdataup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:simpleType name="EntryInfoTypeList">
    <xs:restriction base="xs:normalizedString">
      <xs:enumeration value="UseCurrentlySelectedGroup"/>
      <xs:enumeration value="DedicatedGroup"/>
      <xs:enumeration value="UsePreConfigured"/>
      <xs:enumeration value="LocallyDetermined"/>
    </xs:restriction>
  </xs:simpleType>

  <xs:complexType name="EntryType">
```

```
    <xs:sequence>
      <xs:element name="uri-entry" type="xs:anyURI"/>
      <xs:element name="display-name" type="mcdataup:DisplayNameElementType" minOccurs="0"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="entry-info" type="mcdataup:EntryInfoTypeList"/>
    <xs:attributeGroup ref="mcdataup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="ProSeUserEntryType">
    <xs:sequence>
      <xs:element name="DiscoveryGroupID" type="xs:hexBinary"/>
      <xs:element name="User-Info-ID" type="xs:hexBinary"/>
      <xs:element name="anyExt" type="mcdataup:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attributeGroup ref="mcdataup:IndexType"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="DisplayNameElementType">
    <xs:simpleContent>
      <xs:extension base="xs:string">
        <xs:attribute ref="xml:lang"/>
        <xs:anyAttribute namespace="##any" processContents="lax"/>
      </xs:extension>
    </xs:simpleContent>
  </xs:complexType>

  <xs:element name="allow-create-delete-user-alias" type="xs:boolean"/>
  <xs:element name="allow-create-group-broadcast-group" type="xs:boolean"/>
  <xs:element name="allow-create-user-broadcast-group" type="xs:boolean"/>
  <xs:element name="allow-transmit-data" type="xs:boolean"/>
  <xs:element name="allow-request-affiliated-groups" type="xs:boolean"/>
  <xs:element name="allow-request-to-affiliate-other-users" type="xs:boolean"/>
  <xs:element name="allow-recommend-to-affiliate-other-users" type="xs:boolean"/>
  <xs:element name="allow-regroup" type="xs:boolean"/>
  <xs:element name="allow-presence-status" type="xs:boolean"/>
  <xs:element name="allow-request-presence" type="xs:boolean"/>
  <xs:element name="allow-activate-emergency-alert" type="xs:boolean"/>
  <xs:element name="allow-cancel-emergency-alert" type="xs:boolean"/>
  <xs:element name="allow-cancel-emergency-alert-any-user" type="xs:boolean"/>
  <xs:element name="allow-enable-disable-user" type="xs:boolean"/>
  <xs:element name="allow-enable-disable-UE" type="xs:boolean"/>
  <xs:element name="allow-off-network-manual-switch" type="xs:boolean"/>
  <xs:element name="allow-off-network" type="xs:boolean"/>
  <xs:element name="anyExt" type="mcdataup:anyExtType"/>

  <xs:attributeGroup name="IndexType">
    <xs:attribute name="index" type="xs:token"/>
  </xs:attributeGroup>

  <!-- empty complex type -->
  <xs:complexType name="emptyType"/>

  <xs:complexType name="anyExtType">
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

10.3.2.4 Default Document Namespace

The default document namespace used in evaluating URIs shall be "urn:3gpp:ns:mcdata:user-profile:1.0".

10.3.2.5 MIME type

The MIME type for the MCData user profile configuration document shall be "application/vnd.3gpp.mcdata-user-profile+xml"

10.3.2.6 Validation Constraints

The MCData user profile configuration document shall conform to the XML Schema described in subclause 10.3.2.3 "*XML Schema*", with the clarifications given in this subclause.

The value of the "XUI-URI" attribute of the <mcdata-user-profile> element shall be the same as the XUI value of the Document URI for the MCData user profile configuration document. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Wrong User Profile URI".

The value of the <RelativePresentationPriority> element of the <MCDataGroupInfo> element shall be within the range of 0 to 255. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Priority value out of range".

The value of the <DiscoveryGroupID> shall be 3 octets expressed in hexadecimal format. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Invalid Discovery Group ID".

The value of the <User-Info-ID> shall be 6 octets expressed in hexadecimal format. If not, the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Invalid User Info ID".

If more than one MCData user profile document is specified for the MCData user in the "XDM collections" in the user's directory, then only one MCData user profile document shall contain the <Pre-selected-indication> element. If there is only one MCData user profile specified for the MCData user in the user's directory, then it is optional to include the <Pre-selected-indication> element. If a MCData user profile document containing the <Pre-selected-indication> element already exists for the MCData user in the "XDM collections" the XDMS shall return an HTTP "409 Conflict" response as described in IETF RFC 4825 [14], including the <constraint-failure> error element. If included, the "phrase" attribute should be set to "Pre-selected User Profile Indication already exists in:" including the contents of the <Profile-Name> element of the MCData user profile document that already contains the <Pre-selected-indication> element.

10.3.2.7 Data Semantics

Editor's Note: In the bullets specified in this subclause, the <kms-sec> element of the <App-Server-Info> of the MCS UE initial configuration document needs to be specified in line with the CR#0055 in TS 23.280 (S6-170728) and a corresponding "KMSSEC" element will also need to be specified in the initial configuration document under the AppServerInfo node.

The <Name> element is of type "token", and corresponds to the "Name" element of subclause 10.2.3 in 3GPP TS 24.483 [4].

The <alias-entry> element of the <UserAlias> element is of type "token" and indicates an alphanumeric alias of the MCData user, and corresponds to the leaf nodes of the "UserAlias" element of subclause 10.2.13 in 3GPP TS 24.483 [4].

The <uri-entry> element is of type "anyURI" and when it appears within:

- the <MCDataUserID> element of the <Common> element, contains the MCData user identity (MCData ID) of the MCData user, and corresponds to the "MCDataUserID" element of subclause 10.2.21 in 3GPP TS 24.483 [4];

- the <MCDataUserID-KMSURI> element of the <Common> element contains the KMS URI for the security domain of the MCData user identity (MCData ID) of the MCData user and corresponds to the "MCDataUserIDKMSURI" element of subclause 10.2.9A in 3GPP TS 24.483 [4]. If this parameter is absent, the KMS URI is identified by the <kms-sec> element of the <App-Server-Info> of the MCS UE initial configuration document as specified in subclause 7.2.2.1;- the <MCData-ID> element of the <One-to-One-Communication-ListEntry> element of the <One-to-One-Communication> element of the <Common> element, contains the MCData user identity (MCData ID) of an MCData user that the configured MCData user is authorised to initiate a one-to-one communication, and corresponds to the "MCDataID" element of subclause 10.2.16E in 3GPP TS 24.483 [4];

- the <MCData-ID-KMSURI> element of the <One-to-One-Communication-ListEntry> element of the <One-to-One-Communication> element of the <Common> element, contains the KMS URI for the security domain of the MCData user identity (MCData ID) of an MCData user that the configured MCData user is authorised to initiate a one-to-one communication, and corresponds to the "MCDataIDKMSURI" element of subclause 10.2.16H in 3GPP TS 24.483 [4]. If this parameter is absent, the KMS URI is identified by the <kms-sec> element of the <App-Server-Info> of the MCS UE initial configuration document as specified in subclause 7.2.2.1;

- the <MCData-Group-ID> element of the <MCDataGroupInfo> element of the <OnNetwork> element contains the MCData group ID of an on-network MCData group for use by the configured MCData user, and corresponds to the "MCDataGroupID" element of subclause 10.2.47 in 3GPP TS 24.483 [4];

- the <Group-KMSURI> element of the <MCDataGroupInfo> element of the <OnNetwork> element contains the KMS URI for the security domain of the MCData group identity (MCData Group ID) of the on-network MCData group and corresponds to the "MCDataGroupIDKMSURI" element of subclause 10.2.54A in 3GPP TS 24.483 [4]. If this parameter is absent, the KMS URI is identified by the <kms-sec> element of the <App-Server-Info> of the MCS UE initial configuration document as specified in subclause 7.2.2.1;

- the <MCData-Group-ID> element of the <MCDataGroupInfo> element of the <OffNetwork> element contains the MCData group ID of an off-network MCData group for use by the configured MCData user, and corresponds to the "MCDataGroupID" element of subclause 10.2.103 in 3GPP TS 24.483 [4];

- the <Group-KMSURI> element of the <MCDataGroupInfo> element of the <OffNetwork> element contains the KMS URI for the security domain of the MCData group identity (MCData Group ID) of the off-network MCData group and corresponds to the "MCDataGroupIDKMSURI" element of subclause 10.2.110A in 3GPP TS 24.483 [4]. If this parameter is absent, the KMS URI is identified by the <kms-sec> element of the <App-Server-Info> of the MCS UE initial configuration document as specified in subclause 7.2.2.1;

- the <entry> element of the <GMS-App-Serv-Id> list element of the <MCDataGroupInfo> element of the <OnNetwork> element, contains the URI of the group management server hosting the on-network MCData group identified by the <MCData-Group-ID> element, and corresponds to the "GMSAppServId" element of subclause 10.2.51 in 3GPP TS 24.483 [4];

- the <entry> element of the <IdMS-Token-Endpoint> list element of the <MCDataGroupInfo> element of the <OnNetwork> element, contains the URI used to contact the identity management server token endpoint for the on-network MCData group identified by the <MCData-Group-ID> element, and corresponds to the "IdMSTokenEndPoint" element of subclause 10.2.54 in 3GPP TS 24.483 [4]. If the entry element is empty, the idms-auth-endpoint and idms-token-endpoint present in the MCS UE initial configuration document are used;

- the <entry> element of the <GMS-App-Serv-Id> list element of the <MCDataGroupInfo> element of the <OffNetwork> element, contains the URI of the group management server hosting the off-network MCData group identified by the <MCData-Group-ID> element, and corresponds to the "GMSAppServId" element of subclause 10.2.107 in 3GPP TS 24.483 [4];

- the <entry> element of the <IdMS-Token-Endpoint> list element of the <MCDataGroupInfo> element of the <OffNetwork> element, contains the URI used to contact the identity management server token endpoint for the off-network MCData group identified by the <MCData-Group-ID> element, and corresponds to the "IdMSTokenEndPoint" element of subclause 10.2.110 in 3GPP TS 24.483 [4]. If the entry element is empty, the idms-auth-endpoint and idms-token-endpoint present in the MCS UE initial configuration document are used;

- the <MCData-Group-ID> element of the <MCDataGroupHangTime> element of the <ConversationManagement> element of the <OnNetwork> element, contains the MCData group ID of an MCData group for which the MCData user has an associated <Hang-Time> duration, and corresponds to the "MCDataGroupID" element of subclause 10.2.76 in 3GPP TS 24.483 [4];

- the <MCData-ID> element of the <FD-Cancel-List-Entry> list element of the <FileDistribution> element of the <Common> element, indicates an MCData ID of an MCData user that is allowed to cancel distribution of files beings sent or waiting to be sent, and corresponds to the "MCDataID" element of subclause 10.2.21 in 3GPP TS 24.483 [4];

- the <MCData-ID-KMSURI> element of the <FD-Cancel-List-Entry> list element of the <FileDistribution> element of the <Common> element element contains the KMS URI for the security domain of the MCData user identity (MCData ID) of an MCData user that the configured MCData user is authorised to initiate a one-to-one communication, and corresponds to the "MCDataIDKMSURI" element of subclause 10.2.21A in

3GPP TS 24.483 [4]. If this parameter is absent, the KMS URI is identified by the <kms-sec> element of the <App-Server-Info> of the MCS UE initial configuration document as specified in subclause 7.2.2.1;

- the <entry> element of the <TxReleaseList> list element of the <TxRxControl> element of the <Common> element, indicates an MCData ID of an MCData user that this MCData user is allowed to request release of an ongoing transmission and corresponds to the "MCDataID" element of subclause 10.2.30 in 3GPP TS 24.483 [4];

- the <entry> element of the <GroupEmergencyAlert> element of the <Common> element, indicates the MCData group recipient for an MCData emergency Alert and corresponds to the "ID" element of subclause 10.2.38 in 3GPP TS 24.483 [4];- the <entry> element of the <ImplicitAffiliations> list element of the <OnNetwork> element indicates an MCData group ID of an MCData group that the MCData user is implicitly affiliated with, and corresponds to the "MCDataGroupID" element of subclause 10.2.59 in 3GPP TS 24.483 [4];

- the <entry> element of the <PresenceStatus> list element of the <OnNetwork> element indicates an MCData ID of an MCData user that the configured MCData user is authorised to obtain presence status, and corresponds to the "MCDataID" element of subclause 10.2.64 in 3GPP TS 24.483 [4];

- the <entry> element of the <RemoteGroupChange> list element of the <OnNetwork> element indicates an MCData ID of an MCData user whose selected groups are authorised to be remotely changed by the configured MCData user and corresponds to the "MCDataID" element of subclause 10.2.69 in 3GPP TS 24.483 [4];

- the <entry> element of the <DeliveredDisposition> list element of the <ConversationManagement> element of the <OnNetwork> element, indicates an MCData ID of an MCData user who is to be sent a message delivered disposition notification in addition to the message sender and corresponds to the "MCDataID" element of subclause 10.2.82 in 3GPP TS 24.483 [4];

- the <entry> element of the <ReadDisposition> list element of the <ConversationManagement> element of the <OnNetwork> element, indicates an MCData ID of an MCData user who is to be sent a message delivered disposition notification in addition to the message sender, and corresponds to the "MCDataID" element of subclause 10.2.87 in 3GPP TS 24.483 [4]; and

- the <entry> element of the <One-To-One-EmergencyAlert> element of the <OnNetwork> element indicates the MCData user recipient for an on-network MCData emergency one-to-one alert and corresponds to the "ID" element of subclause 10.2.91 in 3GPP TS 24.483 [4].

The <DiscoveryGroupID> element is of type "hexBinary" and is used as the Discovery Group ID in the ProSe discovery procedures as specified in 3GPP TS 23.303 [18] and 3GPP TS 23.334 [19]. When it appears within:

- the <ProSeUserID-entry> element of the <One-To-One-CommunicationListEntry> element of the <One-To-One-Communication> element of the <OffNetwork> element, it identifies the Discovery Group ID that the MCData UE uses to initiate a one-to-one communication during off-network operation and corresponds to the "DiscoveryGroupID" element of subclause 10.2.16F in 3GPP TS 24.483 [4].

The <display-name> element is of type "string", contains a human readable name and when it appears within:

- the <MCData-ID> element of the <One-to-One-CommunicationListEntry> element of the <One-to-One-Communication> element of the <OffNetwork> element, contains the name of an MCData user that the configured MCData user is authorised to initiate a one-to-one communication, and corresponds to the "DisplayName" element of subclause 10.2.16I in 3GPP TS 24.483 [4];

- the <MCData-Group-ID> element of the <MCDataGroupInfo> element of the <OnNetwork> element contains the name of an on-network MCData group for use by the configured MCData user, and corresponds to the "DisplayName" element of subclause 10.2.48 in 3GPP TS 24.483 [4];

- the <MCData-Group-ID> element of the <MCDataGroupInfo> element of the <OffNetwork> element contains the name of an off-network MCData group for use by the configured MCData user, and corresponds to the "DisplayName" element of subclause 10.2.104 in 3GPP TS 24.483 [4];

- the <MCData-Group-ID> element of the <MCDataGroupHangTime> element of the <ConversationManagement> element of the <OnNetwork> element, contains the name of an MCData group for which the MCData user has an associated <Hang-Time> duration, and corresponds to the "DisplayName" element of subclause 10.2.77 in 3GPP TS 24.483 [4];

- the <MCData-ID> element of the <FD-Cancel-List-Entry> list element of the <FileDistribution> element of the <Common> element, indicates the name of an MCData user that is allowed to cancel distribution of files beings

sent or waiting to be sent and corresponds to the "DisplayName" element of subclause 10.2.22 in 3GPP TS 24.483 [4];

- the <entry> element of the <TxReleaseList> list element of the <TxRxControl> element of the <Common> element, indicates the name of an MCData user that is allowed to request release of an ongoing transmission and corresponds to the "DisplayName" element of subclause 10.2.31 in 3GPP TS 24.483 [4];

- the <entry> element of the <GroupEmergencyAlert> element of the <Common> element, indicates the name of the MCData group recipient for an MCData emergency Alert and corresponds to the "DisplayName" element of subclause 10.2.39 in 3GPP TS 24.483 [4];

- the <entry> element of the <ImplicitAffiliations> list element of the <OnNetwork> element indicates the name of an MCData group that the MCData user is implicitly affiliated with, and corresponds to the "DisplayName" element of subclause 10.2.60 in 3GPP TS 24.483 [4];;

- the <entry> element of the <PresenceStatus> list element of the <OnNetwork> element indicates the name of an MCData user that the configured MCData user is authorised to obtain presence status of, and corresponds to the "DisplayName" element of subclause 10.2.65 in 3GPP TS 24.483 [4];;

- the <entry> element of the <RemoteGroupChange> list element of the <OnNetwork> element indicates the name of an MCData user whose selected groups are authorised to be remotely changed by the configured MCData user and corresponds to the "DisplayName" element of subclause 10.2.70 in 3GPP TS 24.483 [4];

- the <entry> element of the <DeliveredDisposition> list element of the <ConversationManagement> element of the <OnNetwork> element, indicates the name of an MCData user who is to be sent a message delivered disposition notification in addition to the message sender, and corresponds to the "DisplayName" element of subclause 10.2.83 in 3GPP TS 24.483 [4];

- the <entry> element of the <ReadDisposition> list element of the <ConversationManagement> element of the <OnNetwork> element, indicates the name of an MCData user who is to be sent a message read disposition notification in addition to the message sender, and corresponds to the "DisplayName" element of subclause 10.2.88 in 3GPP TS 24.483 [4]; and

- the <entry> element of the <One-To-One-EmergencyAlert> element of the <OnNetwork> element indicates the name of the MCData user recipient for an on-network MCData emergency one-to-one alert and corresponds to the "DisplayName" element of subclause 10.2.92 in 3GPP TS 24.483 [4].

The "index" attribute is of type "token" and is included within some elements for uniqueness purposes, and does not appear in the user profile configuration managed object specified in 3GPP TS 24.483 [4].

The <Status> element is of type "Boolean" and indicates whether this particular MCData user profile is enabled or disabled and corresponds to the "Status" element of subclause 10.2.121 in 3GPP TS 24.483 [4]. When set to "true" this MCData user profile is enabled. When set to "false" this MCData user profile is disabled.

The "user-profile-index" is of type "unsignedByte" and indicates the particular MCData user profile configuration document in the collection and corresponds to the "MCDataUserProfileIndex" element of subclause 10.2.8 in 3GPP TS 24.483 [4].

The <ProfileName> element is of type "token" and specifies the name of the MCData user profile configuration document in the MCData user profile XDM collection and corresponds to the "MCDataUserProfileName" element of subclause 10.2.9 in 3GPP TS 24.483 [4].

The <Pre-selected-indication> element is of type "mcdataup:empty Type". Presence of the <Pre-selected-indication> element indicates that this particular MCData user profile is designated to be the pre-selected MCData user profile as defined in 3GPP TS 23.282 [24], and corresponds to the "PreSelectedIndication" element of subclause 10.2.10 in 3GPP TS 24.483 [4]. Absence of the <Pre-selected-indication> element indicates that this MCData user profile is not designated as the pre-selected MCData user profile within the collection of MCData user profiles for the MCData user or is the only MCData user profile within the collection and is the pre-selected MCData user profile by default.

The "XUI-URI" attribute is of type "anyURI" that contains the XUI of the MCData user for whom this MCData user profile configuration document is intended and does not appear in the user profile configuration managed object specified in 3GPP TS 24.483 [4].

The <ParticipantType> element of the <Common> element is of type "token" and indicates the functional category of the MCData user (e.g., first responder, second responder, dispatch, dispatch supervisor). The <ParticipantType> element corresponds to the "ParticipantType" element of subclause 10.2.15 in 3GPP TS 24.483 [4].

The <MissionCriticalOrganization> element of the <Common> element is of type "string" and indicates the name of the mission critical organization the MCData User belongs to. The <MissionCriticalOrganization> element corresponds to the "Organization" element of subclause 10.2.16 in 3GPP TS 24.483 [4].

The <MaxData1To1> element of the <TxRxControl> element of the <Common> element is of type "positive integer" and indicates the maximum amount of data (in megabytes) that an MCData user can transmit in a single request during one-to-one communication. The <MaxData1To1> element corresponds to the "MaxData1To1" element of subclause 10.2.25 in 3GPP TS 24.483 [4].

The <MaxTime1To1> element of the <TxRxControl> element of the <Common> element is of type "duration" and indicates the maximum amount of time that an MCData user can transmit for in a single request during one-to-one communication. The <MaxTime1To1> element corresponds to the "MaxTime1To1" element of subclause 10.2.26 in 3GPP TS 24.483 [4].

The <RelativePresentationPriority> element is of type "nonNegativeInteger" and when it appears in:

- the <MCDataGroupInfo> element of the <OnNetwork> element, contains an integer value between 0 and 255 indicating the presentation priority of the on-network group relative to other on-network groups and on-network users, and corresponds to the "PresentationPriority" element of subclause 10.2.55 in 3GPP TS 24.483 [4]; and

- the <MCDataGroupInfo> element of the <OffNetwork> element, contains an integer value between 0 and 255 indicating the presentation priority of the off-network group relative to other off-network groups and off-network users, and corresponds to the "PresentationPriority" element of subclause 10.2.111 in 3GPP TS 24.483 [4];

The <MaxAffiliationsN2> element is of type "nonNegativeInteger", and indicates the maximum number of MCData groups that the MCData user is authorised to affiliate with, and corresponds to the "MaxAffiliationsN2" element of subclause 10.2.71 in 3GPP TS 24.483 [4].

The <HangTime> element of the <MCDataGroupHangTime> element of the <ConversationManagement> element of the <OnNetwork> element is of type "duration", and contains the conversation hang time associated with the configured MCData group, for the MCData user, and corresponds to the "HangTime" element of subclause 10.2.78 in 3GPP TS 24.483 [4];

The <User-Info-ID> element is of type "hexBinary". When the <User-Info-ID> element appears within:

- the <ProSeUserID-entry> element of the <One-to-One-CommunicationListEntry> element of the <One-To-One-Communication> element of the <Off-Network> element indicates the ProSe "User Info ID" as defined in 3GPP TS 23.303 [18] and 3GPP TS 24.334 [19] of the recipient MCData user for a one-to-one communication and corresponds to the "UserInfoID" element of subclause 10.2.16G in 3GPP TS 24.483 [4]; and

- the <OffNetwork> element, indicates the ProSe "User Info ID" as defined in 3GPP TS 23.303 [18] and 3GPP TS 24.334 [19] of the MCData UE for off-network operation and corresponds to the "UserInfoID" element of subclause 10.2.112 in 3GPP TS 24.483 [4].

The "entry-info" attribute is of type "string" and when it appears within:

- the <entry> element within the <GroupEmergencyAlert> element of the <Common> element, it corresponds to the "Usage" element of subclause 10.2.40 in 3GPP TS 24.483 [4] and indicates to use as the destination address for a group emergency alert:

  a) the MCData user currently selected MCData group if the "entry-info" attribute has the value of 'UseCurrentlySelectedGroup'; and

  b) the value in the <uri-entry> element within the <entry> element of the <GroupEmergencyAlert> element for an on-network group emergency alert, if the "entry-info" attribute has the value of:

     i) 'DedicatedGroup'; or

     ii) 'UseCurrentlySelectedGroup' and the MCData user has no currently selected MCData group; and

- the <entry> element within the <One-To-One-EmergencyAlert> element of the <OnNetwork> element, it corresponds to the "Usage" element of subclause 10.2.93 in 3GPP TS 24.483 [4] and indicates to use as the destination address for on-network one-to-one emergency alert:

  a) the MCData ID of an MCData user that is selected by the MCData user if the "entry-info" attribute has the value of 'LocallyDetermined'; and

  b) the value in the <uri-entry> element within the <entry> element of the <One-To-One-EmergencyAlert> element, if the "entry-info" attribute has the value of:

     i) 'UsePreConfigured'; or

     ii) 'LocallyDetermined' and the MCData user has no currently selected MCData user.

The <allow-create-delete-user-alias> element is of type Boolean, as specified in table 10.3.2.7-1, and corresponds to the "AuthorisedAlias" element of subclause 10.2.14 in 3GPP TS 24.483 [4].

Table 10.3.2.7-1: Values of <allow-create-delete-user-alias>

"true"	indicates that the MCData user is locally authorised to create or delete aliases of an MCData user and its associated user profiles.
"false"	indicates that the MCData user is not locally authorised to create or delete aliases of an MCData user and its associated user profiles.

The <allow-create-group-broadcast- group> element is of type Boolean, as specified in table 10.3.2.7-2, and corresponds to the "Authorised" element of subclause 10.2.33 in 3GPP TS 24.483 [4].

Table 10.3.2.7-2: Values of <allow-create-group-broadcast- group>

"true"	indicates that the MCData user is locally authorised to send a request to create a group-broadcast group according to the procedures of 3GPP TS 24.481 [5].
"false"	Indicates that the MCData user is not locally authorised to send a request to create a group-broadcast group according to the procedures of 3GPP TS 24.481 [5].

The <allow-create-user-broadcast-group> element is of type Boolean, as specified in table 10.3.2.7-3, and corresponds to the "Authorised" element of subclause 10.2.35 in 3GPP TS 24.483 [4].

Table 10.3.2.7-3: Values of <allow-create-user-broadcast-group>

"true"	indicates that the MCData user is locally authorised to send a request to create a user-broadcast group according to the procedures of 3GPP TS 24.481 [5].
"false"	Indicates that the MCData user is not locally authorised to send a request to create a user-broadcast group according to the procedures of 3GPP TS 24.481 [5].

The <allow-transmit-data> element is of type Boolean, as specified in table 10.3.2.7-4, and corresponds to the "AuthorisedTransmit" element of subclause 10.2.24 in 3GPP TS 24.483 [4].

Table 10.3.2.7-4: Values of <allow-transmit-data>

"true"	indicates that the MCData user is permitted to transmit data.
"false"	indicates that the MCData user is not permitted to transmit data.

The <allow-request-affiliated-groups> element is of type Boolean, as specified in table 10.3.2.7-5, and does not appear in the user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 10.3.2.7-5: Values of <allow-request-affiliated-groups>

"true"	Instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is authorised to request the list of MCData groups to which a specified MCData user is affiliated.
"false"	Instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is not authorised to request the list of MCData groups to which the a specified MCData user is affiliated.

The <allow-request-to-affiliate-other-users> element is of type Boolean, as specified in table 10.3.2.7-6, and does not appear in the MCData user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 10.3.2.7-6: Values of <allow-request-to-affiliate-other-users>

"true"	Instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is authorised to request specified MCData user(s) to be affiliated to/deaffiliated from specified MCData group(s).
"false"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is not authorised to request specified MCData user(s) to be affiliated to/deaffiliated from specified MCData group(s).

The <allow-recommend-to-affiliate-other-users> element is of type Boolean, as specified in table 10.3.2.7-7, and does not appear in the MCData user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 10.3.2.7-7: Values of <allow-recommend-to-affiliate-other-users>

"true"	Instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is authorised to recommend to specified MCData user(s) to affiliate to specified MCData group(s).
"false"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is not authorised to recommend to specified MCData user(s) to affiliate to specified MCData group(s).

The <allow-regroup> element is of type Boolean, as specified in table 10.3.2.7-8, and corresponds to the "AllowedRegroup" element of subclause 10.2.94 in 3GPP TS 24.483 [4].

Table 10.3.2.7-8: Values of <allow-regroup>

"true"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is locally authorised to send a dynamic regrouping request according to the procedures defined in 3GPP TS 24.481 [5].
"false"	instructs the MCData server performing the participating MCData function for the MCData user, that the MCData user is not locally authorised to send a dynamic regrouping request according to the procedures defined in 3GPP TS 24.481 [5].

The <allow-presence-status> element is of type Boolean, as specified in table 10.3.2.7-9, and corresponds to the "AllowedPresenceStatus" element of subclause 10.2.95 in 3GPP TS 24.483 [4].

Table 10.3.2.7-9: Values of <allow-presence-status>

"true"	indicates to the MCData user that their presence on the network is available.
"false"	indicates to the MCData user that their presence on the network is not available

The <allow-request-presence> element is of type Boolean, as specified in table 10.3.2.7-10, and corresponds to the "AllowedPresence" element of subclause 10.2.96 in 3GPP TS 24.483 [4].

Table 10.3.2.7-10: Values of <allow-request-presence>

"true"	indicates that the MCData user is locally authorised to request whether a particular MCData User is present on the network.
"false"	indicates that the MCData user is not locally authorised to request whether a particular MCData User is present on the network.

The <allow-activate-emergency-alert> element is of type Boolean, as specified in table 10.3.2.7-11, and corresponds to the "AllowedActivateAlert" element of subclause 10.2.41 in 3GPP TS 24.483 [4].

Table 10.3.2.7-11: Values of <allow-activate-emergency-alert>

"true"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is authorised to activate an emergency alert using the procedures defined in 3GPP TS 24.282 [25].
"false"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is not authorised to activate an emergency alert using the procedures defined in 3GPP TS 24.282 [25].

The <allow-cancel-emergency-alert> element is of type Boolean, as specified in table 10.3.2.7-12, and corresponds to the "AllowedCancelAlert" element of subclause 10.2.42 in 3GPP TS 24.483 [4].

Table 10.3.2.7-12: Values of <allow-cancel-emergency-alert>

"true"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is authorised to cancel an emergency alert using the procedures defined in 3GPP TS 24.282 [25].
"false"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is not authorised to cancel an emergency alert using the procedures defined in 3GPP TS 24.282 [25].

The <allow-cancel-emergency-alert-any-user> element is of type Boolean, as specified in table 10.3.2.7-13, and does not appear in the MCData user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 10.3.2.7-13: Values of <allow-cancel-emergency-alert-any-user>

"true"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is authorised to cancel any on-network emergency alert on any MCData UE of any user, using the procedures defined in 3GPP TS 24.282 [25].
"false"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is not authorised to cancel any on-network emergency alert on any MCData UE of any user, using the procedures defined in 3GPP TS 24.282 [25].

The <allow-enable-disable-user> element is of type Boolean, as specified in table 10.3.2.7-14, and does not appear in the MCData user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 10.3.2.7-14: Values of <allow-enable-disable-user>

"true"	indicates that the MCData user is locally authorised to enable/disable other MCData users from receiving MCData service.
"false"	indicates that the MCData user is not locally authorised to enable/disable other MCData users from receiving MCData service.

The <allow-enable-disable-UE> element is of type Boolean, as specified in table 10.3.2.7-15, and does not appear in the MCData user profile configuration managed object specified in 3GPP TS 24.483 [4].

Table 10.3.2.7-15: Values of <allow-enable-disable-UE>

"true"	indicates that the MCData user is locally authorised to enable/disable other MCData UEs from receiving MCData service.
"false"	indicates that the MCData user is not locally authorised to enable/disable other MCData UEs from receiving MCData service.

The <allow-off-network-manual-switch> element is of type Boolean, as specified in table 10.3.2.7-16, and corresponds to the "AllowedManualSwitch" element of subclause 10.2.97 in 3GPP TS 24.483 [4].

Table 10.3.2.7-16: Values of <allow-off-network-manual-switch>

"true"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is authorised for manual switch to off-network operation while in on-network, using the procedures defined in 3GPP TS 24.282 [25].
"false"	instructs the MCData server performing the originating participating MCData function for the MCData user, that the MCData user is not authorised for manual switch to off-network operation while in on-network, using the procedures defined in 3GPP TS 24.282 [25].

The <allow-off-network> element is of type Boolean, as specified in table 10.3.2.7-17, and corresponds to the "Authorised" element of subclause 10.2.99 in 3GPP TS 24.483 [4].

Table 10.3.2.7-17: Values of <allow-off-network>

"true"	Indicates that the MCData user is authorised for off-network operation using the procedures defined in 3GPP TS 24.282 [25].
"false"	Indicates that the MCData user is not authorised for off-network operation using the procedures defined in 3GPP TS 24.282 [25].

10.3.2.8 Naming Conventions

The name of user profile configuration document shall be in the format of a static "mcdata-user-profile" string concatenated with the value of <user-profile-index> attribute and including ".xml" filetype. For instance "mcdata-user-profile-9.xml" is the user profile document name for a MCData user profile with the index value of 9.

10.3.2.9 Global documents

The present document requires no global documents.

10.3.2.10 Resource interdependencies

This Application Usage is interdependent on user profile data in the MCData Database and the MCData Management Object.

10.3.2.11 Access Permissions Policies

The authorization and access policies for a user profile configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*" and subclause *5.6.7* "*Access Permissions Document*" with the following exceptions:

1) The Principal (i.e., the user) of the user profile configuration document shall have permission to create, modify, or delete <alias-entry> child elements of the <UserAlias> elements, if the rule of the Access Permissions document associated with the user profile configuration document contains the action element <allow-any-operation-own-data>, as specified in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.6.7 "*Access Permissions Document*".

10.3.2.12 Subscription to Changes

The User Access Policy Application Usage shall support subscription to changes as specified in subclause 6.3.13.3.

MCData user profile configuration documents are kept as XDM collections. Therefore, it is possible to subscribe to all MCData user profile configuration documents of a MCData user according to XCAP URI construction convention of a trailing '/', as specified in IETF RFC 5875 [11].

10.4 MCData service configuration document

10.4.1 General

The MCData service configuration document is specified in this subclause. The MCData service configuration document content is based on requirements of Annex A.5 of 3GPP TS 23.282 [24], and structure and procedures of OMA OMA-TS-XDM_Core-V2_1-20120403-A [2]. The usage of an MCData service configuration in the MCData service is described in 3GPP TS 24.282[25] and 3GPP TS 24.582 [26]. The schema definition is provided in subclause 10.4.2.3. Each mission critical organization is configured with an MCData service configuration document.

10.4.2 Coding

10.4.2.1 Structure

The MCData service configuration document structure is specified in this subclause.

The <service configuration> document:

1) shall include a "domain" attribute;
2) may include a <common> element;
3) may include an <on-network> element;
4) may include an <off-network> element; and
5) may include any other attribute for the purposes of extensibility.

The <common> element:

1) may include a <tx-and-rx-control> element containing:
   a) a <time-temp-data-waiting> element.

The <on-network> element:

1) may include a <tx-and-rx-control> element containing:
   a) a <max-data-size-sds-bytes> element;
   b) a <max-payload-size-sds-cplane-bytes> element;
   c) a <max-data-size-fd-bytes> element;
   d) a <max-data-size-auto-recv-bytes> element;
   e) a <default-file-availability> element; and
   f) a <max-file-availability> element.
2) may contain a <signalling-protection> element containing:
   a) a <confidentiality-protection> element; and
   b) an <integrity-protection> element; and
3) may contain a <protection-between-mcdata-servers> element containing:
   a) an <allow-signalling-protection> element.

Editor's Note: Mechanisms for signaling protection and media protection are yet to be agreed by SA3. It is expected that configuration for security protection will need to be added. P2P signalling protection would cover signalling content in XML (e.g. group-id) and MCData signalling content. Media protection is E2E between clients.

The <off-network> element:

1) may contain a <default-prose-per-packet-priority> element containing:

   a) an <mcdata-one-to-one-call-signalling> element; and

   b) an <mcdata-one-to-one-call-media> element.

10.4.2.2 Application Unique ID

The AUID shall be set to "org.3gpp.mcdata.service-config".

10.4.2.3 XML Schema

```
<?xml version="1.0" encoding="UTF-8"?>
<xs:schema attributeFormDefault="unqualified" elementFormDefault="qualified"
xmlns:xs="http://www.w3.org/2001/XMLSchema"
targetNamespace="urn:3gpp:ns:mcdataServiceConfig:1.0"
xmlns:mcdatasc="urn:3gpp:ns:mcdataServiceConfig:1.0">

<!-- the root element -->
  <xs:element name="service-configuration-info" type="mcdatasc:service-configuration-info-Type"/>

<!-- the root type -->
<!-- this is refined with one or more sub-types -->
  <xs:complexType name="service-configuration-info-Type">
    <xs:sequence>
      <xs:element name="service-configuration-params" type="mcdatasc:service-configuration-params-
Type" minOccurs="0"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
     </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

<!-- definition of the service-configuration-params-Type subtype-->
  <xs:complexType name="service-configuration-params-Type">
    <xs:sequence>
      <xs:element name="common" type="mcdatasc:commonType" minOccurs="0" maxOccurs="unbounded"/>
      <xs:element name="on-network" type="mcdatasc:on-networkType" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="off-network" type="mcdatasc:off-networkType" minOccurs="0"
maxOccurs="unbounded"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:attribute name="domain" type="xs:anyURI" use="required"/>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="commonType">
    <xs:sequence>
      <xs:element name="tx-and-rx-control" type="mcdatasc:common-tx-and-rx-controlType"
minOccurs="0"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="on-networkType">
    <xs:sequence>
      <xs:element name="tx-and-rx-control" type="mcdatasc:on-network-tx-and-rx-controlType"
minOccurs="0"/>
      <xs:element name="signalling-protection" type="mcdatasc:signalling-protectionType"
minOccurs="0"/>
      <xs:element name="protection-between-mcdata-servers" type="mcdatasc:server-protectionType"
minOccurs="0"/>
      <xs:element name="file-availability" type="mcdatasc:on-network-file-availabilityType"/>
```

```
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="off-networkType">
    <xs:sequence>
      <xs:element name="default-prose-per-packet-priority" type="mcdatasc:default-prose-per-packet-
priorityType" minOccurs="0"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="default-prose-per-packet-priorityType">
    <xs:sequence>
      <xs:element name="mcdata-one-to-one-call-signalling" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="mcdata-one-to-one-call-media" type="xs:unsignedShort" minOccurs="0"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="common-tx-and-rx-controlType">
    <xs:sequence>
      <xs:element name="time-temp-data-waiting" type="xs:duration" minOccurs="0"/>
      <xs:element name="time-periodic-announcement" type="xs:duration" minOccurs="0"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>
  <xs:complexType name="signalling-protectionType">
    <xs:sequence>
      <xs:element name="confidentiality-protection" type="xs:boolean" minOccurs="0" default="true"/>
      <xs:element name="integrity-protection" type="xs:boolean" minOccurs="0" default="true"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="server-protectionType">
    <xs:sequence>
      <xs:element name="allow-signalling-protection" type="xs:boolean" minOccurs="0"
default="true"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="on-network-tx-and-rx-controlType">
    <xs:sequence>
      <xs:element name="max-data-size-sds-bytes" type="xs:unsignedInt" minOccurs="0"/>
      <xs:element name="max-payload-size-sds-cplane-bytes" type="xs:unsignedInt" minOccurs="0"/>
      <xs:element name="max-data-size-fd-bytes" type="xs:unsignedInt" minOccurs="0"/>
      <xs:element name="max-data-size-auto-recv-bytes" type="xs:unsignedInt" minOccurs="0"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="on-network-file-availabilityType">
    <xs:sequence>
      <xs:element name="default-file-availability" type="xs:unsignedInt"/>
      <xs:element name="max-file-availability" type="xs:unsignedInt" minOccurs="0"/>
      <xs:element name="anyExt" type="mcdatasc:anyExtType" minOccurs="0"/>
      <xs:any namespace="##other" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
    <xs:anyAttribute namespace="##any" processContents="lax"/>
  </xs:complexType>

  <xs:complexType name="anyExtType">
```

```
    <xs:sequence>
      <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/>
    </xs:sequence>
  </xs:complexType>

</xs:schema>
```

10.4.2.4 Default Document Namespace

The default document namespace used in evaluating URIs shall be "urn:3gpp:ns:mcdataServiceConfig:1.0".

10.4.2.5 MIME type

The MIME type for the service configuration document shall be "vnd.3gpp.mcdata-service-config+xml".

10.4.2.6 Validation Constraints

If the AUID value of the document URI or node URI in the Request-URI is other than that specified in subclause 10.4.2.2, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid application id used".

If the XUI value of the document URI or node URI in the Request-URI does not match the XUI of the service configuration document URI, the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid XUI".

The service configuration document shall conform to the XML Schema described in subclause 10.4.2.3.

The <service-configuration-info> element is the root element of the XML document. The <service-configuration-info> element can contain sub-elements.

NOTE 1: The sub-elements of the <service-configuration-info> are validated by the <xs:any namespace="##any" processContents="lax" minOccurs="0" maxOccurs="unbounded"/> particle of the <mcdata-info> element.

The <service-configuration-params> element is a subelement of the <service-configuration-info> element.

If the <service-configuration-info> element does not contain a <service-configuration-params> element, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "mandatory element is missing".

If the <service-configuration-params> element does not include a <common> element, an <on-network> element or an <off-network> element, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "mandatory element is missing".

The <service-configuration-params> element shall contain either:

1) one <common> element only;
2) one <common> element and one <on-network> element;
3) one <common> element and one <off-network> element;
4) one <on-network> element only;
5) one <off-network> element only;
6) one <on-network> element and one <off-network> element; or
7) one <common> element, one <on-network> element and one <off-network> element.

If the <service-configuration-params> element does not confirm to one of the seven choices above, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "semantic error".

If the "domain" attribute does not contain a syntactically correct domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "syntactically incorrect domain name".

If the "domain" attribute contains an unknown domain name, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "unknown domain name".

The following elements conform to the "xs: duration" XML type:

1) <time-temp-data-waiting>; and

2) <time-periodic-announcement>.

The elements of "xs: duration" type specified above shall be represented in seconds using the element value: "PT<h>H<m>M<n>S" where <n> represents a valid value in seconds using decimal notation.

If any of the elements of "xs: duration" type specified above contain values that do not conform to the "PT <n>S" structure then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid format for duration".

If an invalid value is received for <n>, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "invalid value for duration".

If the <max-data-size-sds-bytes> element is not included, then there is no size limit imposed on the size of the SDS message.

If the <max-payload-size-sds-cplane-bytes> element is not included, then there is no size limit imposed for the use of C-plane procedures for the SDS message.

If the <max-data-size-fd-bytes> element is not included, then there is no size limit imposed on the size of the FD message.

If the <max-data-size-auto-recv-bytes> element is not included, then there is no size limit imposed on auto receive.

If the <default-file-availability> is not present, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "default file availability not provided".

If the <max-file-availability> element is not included, then there is no limit imposed on file availability time.

If any of the constituent elements of the <default-prose-per-packet-priority> element contain a value less than 1 and greater than 8, then the configuration management server shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "element value out of range".

NOTE 2: The higher the <default-prose-per-packet-priority> value, the higher the priority given to the signalling or media.

The default value for the <confidentiality-protection> element of the <signalling-protection> element is "true" indicating that confidentiality protection is enabled.

The default value for the <integrity-protection> element of the <signalling-protection> element is "true" indicating that integrity protection is enabled.

The default value for the <allow-signalling-protection> element of the <protection-between-mcdata-servers> element is "true" indicating that signaling protection between MCData servers is enabled.

The service configuration server ignores any unknown element and any unknown attribute.

If the configuration management server receives a duplicate element or attribute, it shall return an HTTP 409 (Conflict) response including the XCAP error element <constraint-failure>. If included, the "phrase" attribute should be set to "duplicate attribute or element received".

10.4.2.7 Data Semantics

The "domain" attribute of the <service-configuration-params> element contains the domain name of the mission critical organization.

The <common> element contains service configuration data common to both on and off network service.

The <on-network> element contains service configuration data for on-network service only.

The <off-network> element contains service configuration data for off-network service only.

In the <common> element:

1) the <time-temp-data-waiting> element of the <tx-and-rx-control> element contains the time limit for the temporarily stored data that is waiting to be delivered to a receiving user which corresponds to the "TimeTempDataWaiting" element as specified in subclause 11.2.7 of 3GPP TS 24.483 [4]; and

2) the <time-periodic-announcement> element of the <tx-and-rx-control> element contains the timer for the periodic announcement which contains a list of available recently invited data group communications which corresponds to the "TimePeriodicAnnouncement" element as specified in subclause 11.2.8 of 3GPP TS 24.483 [4].

In the <on-network> element:

1) the <max-data-size-sds-bytes> element of the <tx-and-rx-control> element contains the maximum data that the originating client can send in an SDS message;

2) the <max-payload-size-sds-cplane-bytes> element of the <tx-and-rx-control> element contains the maximum payload data that the originating client can send in an SDS message over C-plane;

3) the <max-data-size-fd-bytes> element of the <tx-and-rx-control> element contains the maximum data that the originating client can send in an FD message;

4) the <max-data-size-auto-recv-bytes> element of the <tx-and-rx-control> element contains the maximum data that the server can send to the terminating client without requesting the user to indicate a present need for the data;

5) the <default-file-availability> element of the <file-availability> element contains the default time for which a file is available on the server for download, if a explicit time period is not requested by the originating client;

6) the <max-file-availability> element of the <file-availability> element contains the maximum time for which a file can be made available on the server for download.

7) the <confidentiality-protection> element of the <signalling-protection> element contains a boolean indicating whether confidentiality protection of MCData signalling is enabled or disabled between the MCData client and MCData server;

8) the <integrity-protection> element of the <signalling-protection> element contains a boolean indicating whether integrity protection of MCData signalling is enabled or disabled between the MCData client and MCData server; and

9) the <allow-signalling-protection> element of the <protection-between-mcdata-servers> element contains a boolean indicating whether protection of MCData signalling is enabled between MCData servers.

NOTE: The default values of the <confidentiality-protection> element, the <integrity-protection> element, the <allow-signalling-protection> element and the <allow-floor-control-protection> element are "true".

In the <off-network> element:

1) the <default-prose-per-packet-priority> element contains priority values for off-network calls, for each of the following constituent elements:

   a) <mcdata-one-to-one-call-signalling> element, which corresponds to the "MCDataOneToOneSignalling" element as specified in subclause 11.2.11 of 3GPP TS 24.483 [4]; and

b) <mcdata-one-to-one-call-media> element, which corresponds to the "MCDataOneToOneMedia" element as specified in subclause 11.2.12 of 3GPP TS 24.483 [4].

10.4.2.8 Naming Conventions

The MCData service configuration document name shall be called mcdata-service-config.xml.

10.4.2.9 Global documents

The MCData service configuration document is a global document. This document resides under the global tree for the CMSXCAPROOT. Since there is only one document for each mission critical organization, the CMSXCAPROOT may be used to distinquish different MCData service configuration documents. Otherwise, a subdirectory under the global tree, named by the mission critical organization name can be used to distinquish different service configuraiton documents. For example, if the CMSXCAPROOTURI respresents a single one mission critical organization, then the document URI would be:

mc-org-domain/mcorg12345/org.3gpp.mcdata.service-config/global/mcdata-service-config.xml

otherwise, if it services multiple organizations then the document URI would be:

CMSXCAPROOTURI/org.3gpp.mcdata.service-config/global/mc-org-name/mcdata-service-config.xml

Since the mcdata service configuration is a global document, all users will have read-only access. Read-write access is only allowed for the system administrators of the mission critical organization.

10.4.2.10 Resource interdependencies

There are no resource interdependencies.

10.4.2.11 Authorization Policies

The authorization policies for manipulating a service configuration document shall conform to those described in OMA OMA-TS-XDM_Core-V2_1-20120403-A [2] subclause 5.1.5 "*Authorization*".

10.4.2.12 Subscription to Changes

The service configuration document application usage shall support subscription to changes as specified in subclause 6.3.13.3.

Annex A (informative): Signalling flows

A.1 Scope of signalling flows

This annex gives examples of signalling flows for configuration management using the extensible markup language configuration access protocol (XCAP) and the session initiation protocol (SIP).

HTTP header fields and SIP header fields insignificant for the configuration management are omitted.

A.2 Signalling flows for MCPTT user profile configuration document creation

A.2.1 CMC creating a MCPTT user profile configuration document on behalf of MCPTT user

Figure A.2.1-1 shows a flow for a system adminstrator using configuration management client CMC-1 creating an MCPTT user profile configuration document on a configuration management server CMS-1 which then uploads it to the MCPTT user database.

CMC-1 serves the system administrator (user1@example.com). The CMC-1 is configured with the CMSXCAPRootURI /MissionCriticalOrg/MCO-12345/.

In the example below the MCPTT user profile configuration document is user-profile.xml and is created on behalf of user2@example.com (MCPTT ID sip:user2@example.com) who has an alias of "Officer 12345".

The XUI of the document is the owner of the document (user1@example.com).

The document contains a single user profile for user2@example.com (Default Duty Shift Profile of Officer 12345).

The user profile configures user2@example.com to be allowed to place private calls to three users (user1@example.com, user3@example.com and user4@example.com).

The user profile is configured to allow making an emergency group call to MCPTTGroupEmergency@example.com and is alowed to have up to two simultaneous group calls. The user is allowed to place an emergency private call to user1@example.com.

The user profile is configured to allow making an imminent peril call to MCPTTGroupEmergency@example.com The user is allowed to place an Emergency Alert to user1@example.com.

The user profile is configured to allow making on network group calls to four groups (MCPTTGroup-A@example.com, MCPTTGroup-B@example.com, MCPTTGroup-C@example.com and MCPTTGroup-D@example.com).

The user is allowed to affiliate to a maximum of three groups and is implictly affiliated to MCPTTGroup-A@example.com and MCPTTGroup-B@example.com. The maximum number of simultaneous transmissions with a group is limited to one.

The user profile is configured to allow making off network group calls to two groups (MCPTTGroup-A@example.com, and MCPTTGroup-B@example.com).

The hostname of CMS-1 is cms1.example.com.

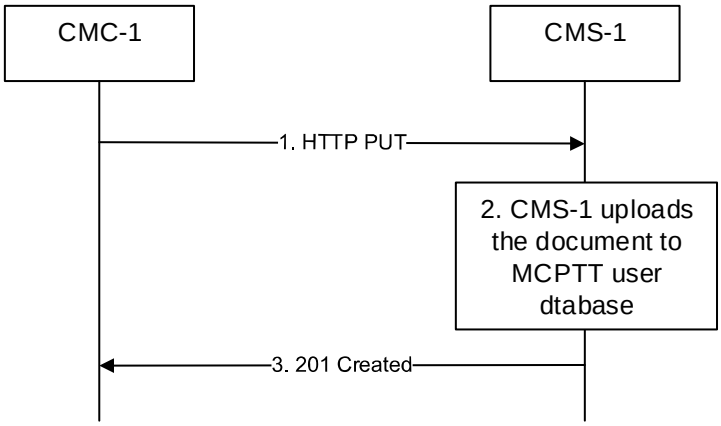

Figure A.2.1-1: CMC-1 creating a MCPTT user profile configuration document on CMS-1 which is uploaded to the MCPTT user database

The details of the flows are as follows:

1) CMC-1 sends an HTTP PUT request shown in table A.2.1-1 to the CMS-1.

Table A.2.1-1: HTTP PUT request

```
PUT /MissionCriticalOrg/MCO-12345/org.3gpp.mcptt.user-
profile/users/sip:User2@example.com/user-profile.xml HTTP/1.1
Host: cms1.example.com
Content-Type: application/org.3gpp.mcptt.user-profile+xml; charset="utf-8"
Authorization: Bearer
eyJhbGciOiJSUzI1NiJ9.eyJtY3B0dF9pZCI6ImFsaWNlQG9yZy5jb20iLCJleHAiOjE0NTM1MDYxMjEsInNjb3BlIjp
bIm9wZW5pZCIsIjNncHA6bWNwdHQ6cHR0X3NlcnZlciJdLCJjbGllbnRfaWQiOiJtY3B0dF9jbGllbnQifQ.XYIqai4Y
KSZCKRNMLipGC_5nV4BE79IJpvjexWjIqqcqiEx6AmHHIRo0mhcxeCESrXei9krom9e8Goxr_hgF3szvgbwl8JRbFuv9
7XgepDLjEq4jL3Cbu41Q9b0WdXAdFmeEbiB8wo_xggiGwv6IDR1b3TgAAsdjkRxSK4ctIKPaOJSRmM7MKMcKhIug3BEk
SC9-aXBTSIv5fAGN-ShDbPvHycBpjzKWXBvMIR5PaCg-9fwjELXZXdRwz8C6JbRM8aqzhdt4CVhQ3-Arip-S9CKd0tu-
qhHfF2rvJDRlg8ZBiihdPH8mJs-qpTFep_1-kON3mL0_g54xVmlMwN0XQA


<?xml version="1.0" encoding="UTF-8"?>

<mcptt-user-profile user-profile-index="0" XUI-URI="sip:User1@example.com"
xsi:schemaLocation="urn:3gpp:mcptt:user-profile:1.0 mcptt-user-profile.xsd"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns="urn:3gpp:mcptt:user-
profile:1.0" xmlns:cp="urn:ietf:params:xml:ns:common-policy">
  <Name xml:lang="en-GB">Default Duty Shift Profile of Officer 12345</Name>
  <Status>true</Status>
  <ProfileName xml:lang="en-GB">Default Duty Shift Profile of Officer 12345</ProfileName>
  <Pre-selected-indication />
  <Common index="0">
    <UserAlias>
      <alias-entryindex="0" xml:lang="en-GB">Officer 12345</alias-entry>
      <anyExt />
    </UserAlias>
    <MCPTTUserID>
      <uri-entry>sip:user2@example.com</uri-entry>
      <display-name xml:lang="en-GB">User 2</display-name>
      <anyExt />
    </MCPTTUserID>
    <PrivateCall>
      <PrivateCallList index="0">
        <PrivateCallURI index="0">
          <uri-entry>sip:user1@example.com</uri-entry>
          <display-name xml:lang="en-GB">User 1</display-name>
          <anyExt />
        </PrivateCallURI>
        <PrivateCallURI index="1">
          <uri-entry>sip:user3@example.com</uri-entry>
          <display-name xml:lang="en-GB">User 3</display-name>
          <anyExt />
        </PrivateCallURI>
        <PrivateCallURI index="2">
          <uri-entry>sip:user4@example.com</uri-entry>
          <display-name xml:lang="en-GB">User 4</display-name>
          <anyExt />
```

```
        </PrivateCallURI>
        <PrivateCallProSeUser index="0">
          <DiscoveryGroupID>123abc87</DiscoveryGroupID>
          <User-Info-ID>1234afcd5521</User-Info-ID>
          <anyExt />
        </PrivateCallProSeUser>
        <PrivateCallProSeUser index="1">
          <DiscoveryGroupID>123abd01</DiscoveryGroupID>
          <User-Info-ID>1234afcd4567</User-Info-ID>
          <anyExt />
        </PrivateCallProSeUser>
        <PrivateCallProSeUser index="2">
          <DiscoveryGroupID>123abc84</DiscoveryGroupID>
          <User-Info-ID>1234afcd591f</User-Info-ID>
          <anyExt />
        </PrivateCallProSeUser>
        <anyExt>
          <PrivateCallKMSURI>
            <PrivateCallKMSURI>
              <uri-entry>https://KMS.example.com</uri-entry>
              <anyExt />
            </PrivateCallKMSURI>
          </PrivateCallKMSURI>
        </anyExt>
      </PrivateCallList>
      <EmergencyCall>
        <MCPTTPrivateRecipient>
          <entry entry-info="UsePreConfigured" index="0">
            <uri-entry>sip:user1@example.com</uri-entry>
            <display-name>User 1</display-name>
            <anyExt />
          </entry>
          <ProSeUserID-entry index="0">
            <DiscoveryGroupID>123abc87</DiscoveryGroupID>
            <User-Info-ID>1234afcd5521</User-Info-ID>
            <anyExt />
          </ProSeUserID-entry>
          <anyExt />
        </MCPTTPrivateRecipient>
      </EmergencyCall>
      <anyExt />
    </PrivateCall>
    <MCPTT-group-call>
      <MaxSimultaneousCallsN6>3</MaxSimultaneousCallsN6>
      <EmergencyCall>
        <MCPTTGroupInitiation>
          <entry entry-info="DedicatedGroup" index="0">
            <uri-entry>sip:MCPTTGroupEmergency@example.com</uri-entry>
            <display-name>Emergency MCPTT Group</display-name>
            <anyExt />
          </entry>
        </MCPTTGroupInitiation>
      </EmergencyCall>
      <ImminentPerilCall>
        <MCPTTGroupInitiation>
          <entry entry-info="DedicatedGroup" index="0">
            <uri-entry>sip:MCPTTGroupEmergency@example.com</uri-entry>
            <display-name>Emergency MCPTT Group</display-name>
            <anyExt />
          </entry>
        </MCPTTGroupInitiation>
        <anyExt />
      </ImminentPerilCall>
      <EmergencyAlert>
        <entry entry-info="UsePreConfigured" index="0">
          <uri-entry>sip:user1@example.com</uri-entry>
          <display-name>User 1</display-name>
          <anyExt />
        </entry>
        <anyExt />
      </EmergencyAlert>
      <Priority>56</Priority>
      <anyExt />
    </MCPTT-group-call>
    <ParticipantType>First Responder</ParticipantType>
    <MissionCriticalOrganization>Gotham PD</MissionCriticalOrganization>
    <anyExt />
  </Common>
```

```
  <OnNetwork index="0">
    <MCPTTGroupInfo xml:lang="en-GB" index="0">
      <entry index="0">
        <uri-entry>sip:MCPTTGroup-A@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group A</display-name>
        <anyExt />
      </entry>
      <entry index="1">
        <uri-entry>sip:MCPTTGroup-B@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group B</display-name>
        <anyExt />
      </entry>
      <entry index="2">
        <uri-entry>sip:MCPTTGroup-C@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group C</display-name>
        <anyExt />
      </entry>
      <entry index="3">
        <uri-entry>sip:MCPTTGroup-D@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group D</display-name>
        <anyExt />
      </entry>
      <anyExt />
    </MCPTTGroupInfo>
    <MaxAffiliationsN2>3</MaxAffiliationsN2>
    <ImplicitAffiliations xml:lang="en-GB" index="0">
      <entry index="0">
        <uri-entry>sip:MCPTTGroup-A@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group A</display-name>
        <anyExt />
      </entry>
      <entry index="1">
        <uri-entry>sip:MCPTTGroup-B@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group B</display-name>
        <anyExt />
      </entry>
      <anyExt />
    </ImplicitAffiliations>
    <MaxSimultaneousTransmissionsN7>1</MaxSimultaneousTransmissionsN7>
    <PrivateEmergencyAlert>
      <entry entry-info="UsePreConfigured" index="0">
        <uri-entry>sip:user1@example.com</uri-entry>
        <display-name xml:lang="en-GB">User 1</display-name>
        <anyExt />
      </entry>
    </PrivateEmergencyAlert>
    <anyExt>
      <RemoteGroupSelectionURIList>
        <entry index="0">
          <uri-entry>sip:user3@example.com</uri-entry>
          <display-name xml:lang="en-GB">User 3</display-name>
          <anyExt />
        </entry>
        <anyExt />
      </RemoteGroupSelectionURIList>
      <GroupServerInfo>
        <GMS-Serv-Id index="0">
          <entry index="0">
            <uri-entry>https://GMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </GMS-Serv-Id>
        <IDMS-token-endpoint index="0">
          <entry index=0>
            <uri-entry>https://IDMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </IDMS-token-endpoint>
        <KMS-URI index="0">
          <entry index="0">
            <uri-entry>https://KMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </KMS-URI>
        <anyExt />
```

```
      </GroupServerInfo>
    </anyExt>
  </OnNetwork>
  <OffNetwork index="0">
    <MCPTTGroupInfo index="0">
      <entry entry-info="DedicatedGroup" index="0">
        <uri-entry>sip:MCPTTGroup-A@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group A</display-name>
        <anyExt />
      </entry>
      <entry entry-info="DedicatedGroup" index="1">
        <uri-entry>sip:MCPTTGroup-B@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group B</display-name>
        <anyExt />
      </entry>
    </MCPTTGroupInfo>
    <User-Info-ID>5ff37ab2c103</User-Info-ID>
    <anyExt>
      <OffNetworkGroupServerInfo>
        <GMS-Serv-Id index="0">
          <entry index="0">
            <uri-entry>https://GMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </GMS-Serv-Id>
        <IDMS-token-endpoint index="0">
          <entry index="0">
            <uri-entry>https://IDMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </IDMS-token-endpoint>
        <KMS-URI index="0">
          <entry index="0">
            <uri-entry>https://KMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </KMS-URI>
        <anyExt />
      </OffNetworkGroupServerInfo>
    </anyExt>
  </OffNetwork>
  <cp:ruleset>
    <cp:rule id="f3g44r0">
      <cp:conditions>
        <identity>
          <one id="sip:user2@example.com" />
        </identity>
      </cp:conditions>
      <cp:actions>
        <allow-presence-status>false</allow-presence-status>
        <allow-request-presence>false</allow-request-presence>
        <allow-query-availability-for-private-calls>false</allow-query-availability-for-
private-calls>
        <allow-enable-disable-user>false</allow-enable-disable-user>
        <allow-enable-disable-UE>false</allow-enable-disable-UE>
        <allow-create-delete-user-alias>false</allow-create-delete-user-alias>
        <allow-private-call>true</allow-private-call>
        <allow-manual-commencement>true</allow-manual-commencement>
        <allow-automatic-commencement>true</allow-automatic-commencement>
        <allow-force-auto-answer>false</allow-force-auto-answer>
        <allow-failure-restriction>false</allow-failure-restriction>
        <allow-emergency-group-call>true</allow-emergency-group-call>
        <allow-emergency-private-call>true</allow-emergency-private-call>
        <allow-cancel-group-emergency>true</allow-cancel-group-emergency>
        <allow-cancel-private-emergency-call>true</allow-cancel-private-emergency-call>
        <allow-imminent-peril-call>true</allow-imminent-peril-call>
        <allow-cancel-imminent-peril>true</allow-cancel-imminent-peril>
        <allow-activate-emergency-alert>true</allow-activate-emergency-alert>
        <allow-cancel-emergency-alert>true</allow-cancel-emergency-alert>
        <allow-offnetwork>true</allow-offnetwork>
        <allow-imminent-peril-change>true</allow-imminent-peril-change>
        <allow-private-call-media-protection>true</allow-private-call-media-protection>
        <allow-private-call-floor-control-protection>true</allow-private-call-floor-control-
protection>
        <allow-request-affiliated-groups>true</allow-request-affiliated-groups>
```

```
        <allow-request-to-affiliate-other-users>false</allow-request-to-affiliate-other-
users>
        <allow-recommend-to-affiliate-other-users>false</allow-recommend-to-affiliate-other-
users>
        <allow-private-call-to-any-user>false</allow-private-call-to-any-user>
        <allow-regroup>true</allow-regroup>
        <allow-private-call-participation>true</allow-private-call-participation>
        <allow-override-of-transmission>false</allow-override-of-transmission>
        <allow-listen-both-overriding-and-overridden>false</allow-listen-both-overriding-
and-overridden>
        <allow-transmit-during-override>false</allow-transmit-during-override>
        <allow-off-network-group-call-change-to-emergency>true</allow-off-network-group-
call-change-to-emergency>
        <allow-revoke-transmit>false</allow-revoke-transmit>
        <allow-create-group-broadcast-group>false</allow-create-group-broadcast-group>
        <allow-create-user-broadcast-group>false</allow-create-user-broadcast-group>
        <anyExt>
          <allow-request-private-call-call-back>false</allow-request-private-call-call-back>
          <allow-cancel-private-call-call-back>false</allow-cancel-private-call-call-back>
          <allow-request-remote-initiated-ambient-listening>false</allow-request-remote-
initiated-ambient-listening>
          <allow-request-locally-initiated-ambient-listening>false</allow-request-locally-
initiated-ambient-listening>
          <allow-request-first-to-answer-call>true</allow-request-first-to-answer-call>
          <allow-request-remote-init-private-call>true</allow-request-remote-init-private-
call>
          <allow-request-remote-init-group-call>true</allow-request-remote-init-group-call>
        </anyExt>
      </cp:actions>
      <cp:transformations />
    </cp:rule>
  </cp:ruleset>
  <anyExt />
</mcptt-user-profile>
```

2) CMS-1 authenticates User1using the access token in the authorization header field and creates the MCPTT user profile configuration document so that it is accessible using the XCAP URI http://MissionCriticalOrg/MCO-12345/sip:User2@example.com/user-profile.xml and then uploads the document to the MCPTT user database (see 3GPP TS 29.283 [7]).

3) Once CMS-1 receives confirmation from the MCPTT user database that the new MCPTT user profile document is stored then the CMS-1 sends a HTTP 201 (Created) response to indicate that the creation was successful.

A.2.2 CMC subscribing to and obtaining MCPTT configuration documents

Figure A.2.2-1 shows a flow for a CMC subscribing to and obtaining MCPTT configuration documents

The hostname of CMS-1 is cms1.example.com.

The user of the CMC is user2@example.com.

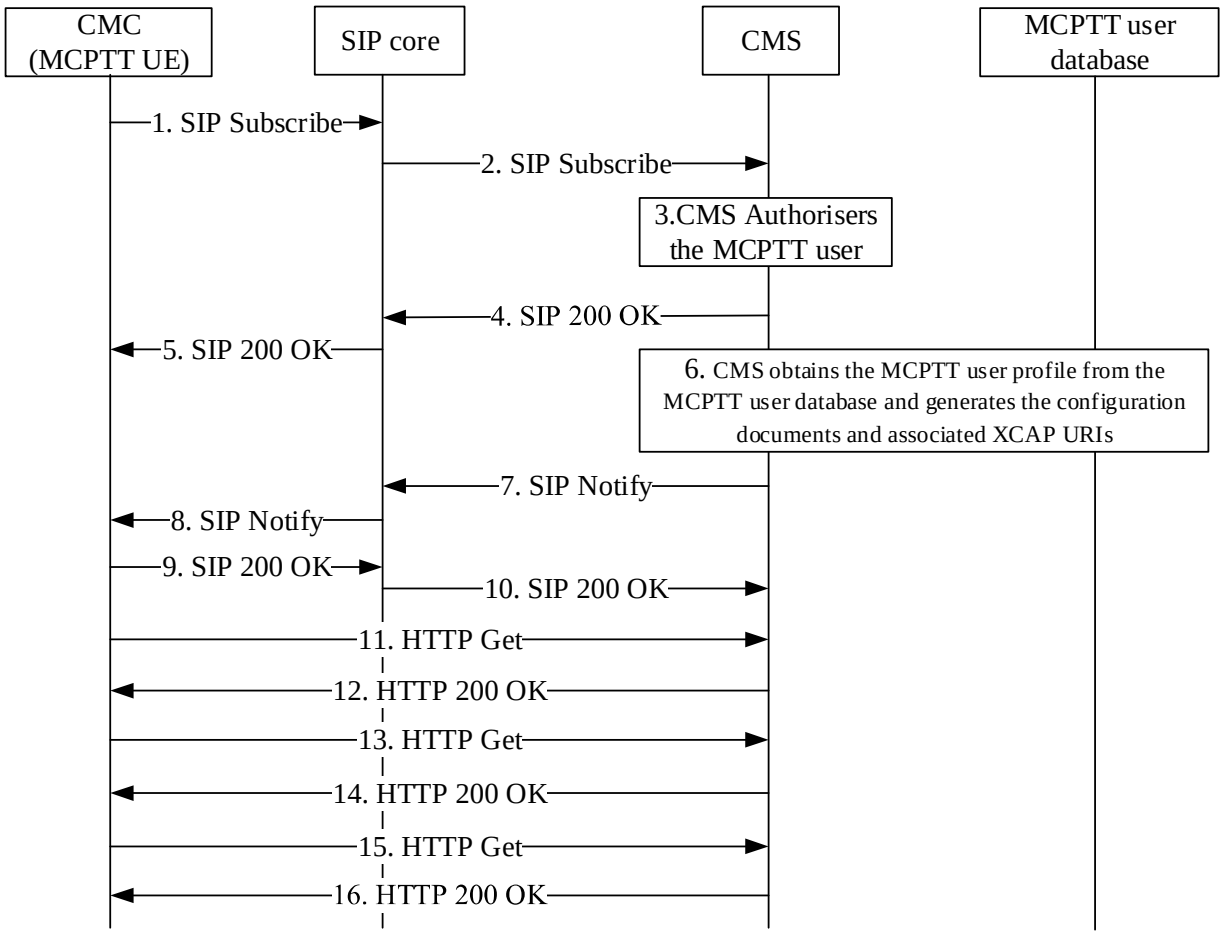

Figure A.2.2-1: CMC subscribing to and obtaining MCPTT configuration documents

Figure A.2.2-1 shows a CMC subscribing to and obtaining MCPTT configuration documents. The details of the flow are as follows:

1. SIP **SUBSCRIBE request (CMC in MCPTT UE to SIP Core) – see example in table A.2.2-1**

A CMC in a MCPTT UE wishes to obtain and get a notification when his configuration management documents are modified. In order to initiate a subscription to XCAP document changes in the CMS, the MCPTT UE generates a SIP SUBSCRIBE request indicating support for "xcap-diff", together with "message/external-body". The Content-Type of the body is "multipart/mixed" since two MIME parts are included in the body of the SIP SUBSCRIBE. One body is of application/vnd.3gpp.mcptt-info+xml containing the MCPTT access token in order that the CMS can authenticate the MCPTT user and the other is of application/resource-lists+xml containing a list of XCAP URIs of the configuration management documents being subscribed to.

Table A.2.2-1: SIP SUBSCRIBE request (CMC in MCPTT UE to SIP core)

```
SUBSCRIBE sip:cms1.example.net SIP/2.0
Via: SIP/2.0/UDP [5555::aaa:bbb:ccc:ddd]:1357;branch=z9hG4bKehuefdam
Max-Forwards: 70
P-Access-Network-Info: 3GPP-E-UTRAN-TDD; utran-cell-id-3gpp=234151D0FCE11
Route: <sip:pcscf1.home1.net:7531;lr; >, <sip:orig@scscf1.home1.net;lr>
P-Preferred-Identity: <sip:user2_public1@home1.net>
Privacy: none
From: <sip:user2_public1@home1.net>;tag=31415
To: <sip:cms1.example.nett>
Call-ID: b89rjhnedlrfjflslj40a222
CSeq: 123 SUBSCRIBE
Require: sec-agree
Proxy-Require: sec-agree
Security-Verify: ipsec-3gpp; q=0.1; alg=hmac-sha-1-96; spi-c=98765432; spi-s=87654321; port-
      c=8642; port-s=7531
P-Preferred-Service:urn:urn-7:3gpp-service.ims.icsi.mcptt
Event: xcap-diff;diff-processing=aggregate
Expires: 7200
Accept: application/xcap-diff+xml, message/external-body
Contact: <sip:user2_public1@home1.net;gr=urn:uuid:f81d4fae-7dec-11d0-a765-00a0c91e6bf6">;
      +g.3gpp.icsi-ref="urn:urn-7:3gpp-service.ims.icsi.mcptt"
Content-Type: multipart/mixed; boundary=boundaryMCPTT
Content-Length: (…)


--boundaryMCPTT
Content-Type:  application/vnd.3gpp.mcptt-info+xml

<?xml version="1.0" encoding="UTF-8"?>
  <mcpttinfo xmlns="urn:3gpp:ns:mcpttInfo:1.0">
    <mcptt-Params>
      <mcptt-access-token>
eyJhbGciOiJSUzI1NiJ9.eyJtY3B0dF9pZCI6ImFsaWNlQG9yZy5jb20iLCJleHAiOjE0NTM1MDYxMjEsInNjb3BlIjpbI
m9wZW5pZCIsIjNncHA6bWNwdHQ6cHR0X3NlcnZlciJdLCJjbGllbnRfaWQiOiJtY3B0dF9jbGllbnQifQ.XYIqai4YKSZC
KRNMLipGC_5nV4BE79IJpvjexWjIqqcqiEx6AmHHIRo0mhcxeCESrXei9krom9e8Goxr_hgF3szvgbwl8JRbFuv97XgepD
LjEq4jL3Cbu41Q9b0WdXAdFmeEbiB8wo_xggiGwv6IDR1b3TgAAsdjkRxSK4ctIKPaOJSRmM7MKMcKhIug3BEkSC9-
aXBTSIv5fAGN-ShDbPvHycBpjzKWXBvMIR5PaCg-9fwjELXZXdRwz8C6JbRM8aqzhdt4CVhQ3-Arip-S9CKd0tu-
qhHfF2rvJDRlg8ZBiihdPH8mJs-qpTFep_1-kON3mL0_g54xVmlMwN0XQA</mcptt-access-token>
    </mcptt-Params>
  </mcpttinfo>


--boundaryMCPTT
Content-Type: application/resource-lists+xml

<?xml version="1.0" encoding="UTF-8"?>
  <resource-lists xmlns="urn:ietf:params:xml:ns:resource-lists">
      <entry uri="org.3gpp.mcptt.ue-config/users/user1@example.com/"/>
      <entry uri="org.3gpp.mcptt.user-profile/users/user1@example.com/"/>
      <entry uri="org.3gpp.mcptt.service-config/global/"/>
    </list>
  </resource-lists>
```

Request-URI: The public service identity of CMS-1 (sip:cms1.example.net).

Event: This header field is populated with the value "xcap-diff" to specify the use of the xcap-diff package to get notified of changes to XCAP configuration management documents.

Accept: This header field is populated with the value "application/xcap-diff+xml" indicating that the MCPTT UE supports the XCAP-diff MIME type and also the value "message/external-body" indicating that the MCPTT UE supports content indirection (to avoid XCAP content that contains sensitive information being included in a SIP NOTIFY request).

To: Same as the Request-URI.

Contact: The contact URI and the feature tag g.3gpp.icsi-ref set to the MCPTT feature tag "urn:urn-7:3gpp-service.ims.icsi.mcptt"

Content-Type: Set to multipart/mixed as there are multiple body parts in the body of the SIP SUBSCRIBE request.

<mcptt-access-token>: The access token received from the Identity management Server included within the application/vnd.3gpp.mcptt-info+xml body part.

<entry uri>: Contains the XCAP request URIs for the documents being subscribed to,. Relative paths (excluding the "CMSXCAPRootURI") may be used.

2. SIP **SUBSCRIBE request (SIP core to CMS) - see example in table A.2.2-2**

The SIP core forwards the SIP SUBSCRIBE request to the CMS.

Table A.2.2-2 SIP SUBSCRIBE request (SIP core to CMS)

```
SUBSCRIBE sip:cms1.example.net SIP/2.0
Via: SIP/2.0/UDP scscf1.home1.net;branch=z9hG4bK344a65.1, SIP/2.0/UDP
      pcscf1.home1.net;branch=z9hG4bK120f34.1, SIP/2.0/UDP
      [5555::aaa:bbb:ccc:ddd]:1357;branch=z9hG4bKehuefdam
Max-Forwards: 68
P-Access-Network-Info:
P-Asserted-Identity: <sip:user2_public1@home1.net>, <tel:+1-212-555-1111>
P-Charging-Vector: icid-value="AyretyU0dm+6O2IrT5tAFrbHLso=223551024"; orig-ioi=home1.net
P-Charging-Function-Addresses: ccf=[5555::b99:c88:d77:e66]; ccf=[5555::a55:b44:c33:d22];
      ecf=[5555::1ff:2ee:3dd:4ee]; ecf=[5555::6aa:7bb:8cc:9dd]
Privacy:
Record-Route: <sip:orig@scscf1.home1.net;lr>, <sip:pcscf1.home1.net;lr>
Route: <sip:cms1.home1.net;lr>, <sip:orig@scscf1.home1.net;lr>
From:
To:
Call-ID:
CSeq:
P-Asserted-Service: urn:urn-7:3gpp-service.ims.icsi.mcptt
Event:
Supported:
Expires:
Accept:
Contact:
Content-Type:
Content-Length:

(…)
```

3. **Authorization**

The CMS performs the MCPTT user authorization based on the MCPTT access token in the application/vnd.3gpp.mcptt-info+xml MIME body in the SIP SUBSCRIBE request to identify the MCPTT user and ensure that he/she is authorized to subscribe to configuration managment document changes and to identify the MCPTT user profile configuration document(s) of the MCPTT user.

- In this example authorisation is sucessful, so the CMS sends a SIP 200 (OK) response to the SIP core.

4. SIP **200 (OK) response (CMS to SIP core) - see example in table A.2.2-4**

The CMS sends a SIP 200(OK) response to the SIP core.

Table A.2.2-4: SIP 200 (OK) response (CMS to SIP core)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP scscf1.home1.net;branch=z9hG4bK344a65.1, SIP/2.0/UDP
      pcscf1.home1.net;branch=z9hG4bK120f34.1, SIP/2.0/UDP
      [5555::aaa:bbb:ccc:ddd]:1357;branch=z9hG4bKehuefdam
P-Charging-Vector: icid-value="AyretyU0dm+6O2IrT5tAFrbHLso=223551024"; orig-ioi=home1.net;
      term-ioi=home1.net
Record-Route:
From:
To: <sip:cms1.example.net>;tag=151170
Call-ID:
CSeq:
Expires:
Contact: <sip:cms1.example.net;gr>
Content-Length: 0
```

5. SIP **200 (OK) response (S-CSCF to CMC in MCPTT UE) - see example in table A.2.2-5**

The SIP core forwards the SIP 200(OK) response to the CMC in the MCPTT UE.

Table A.2.2-5: SIP 200 (OK) response (SIP core to CMC in MCPTT UE)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP [5555::aaa:bbb:ccc:ddd]:1357;branch=z9hG4bKehuefdam
Record-Route: <sip:orig@scscf1.home1.net;lr>, <sip:pcscf1.home1.net:7531;lr>
From:
To:
Call-ID:
CSeq:
Expires:
Contact:
Content-Length:
```

6. **Obtaining and generating the configuration management document**

The CMS obtains the MCPTT user profile for the MCPTT user from the MCPTT user database (see 3GPP TS 29.283 [7]), The MCPTT service configuration document is identified solely by the entry uri="/MissionCriticalOrg/MCO-12345/;/org.3gpp.mcptt.service-config/global/service-config.xml" and an off network MCPTT service configurstion document is generated that contains the <common> and <off-network> elements. The CMS mints XCAP URIs for each of these configuration management documents.

7. SIP **NOTIFY request (CMS to SIP core) – see example in table A.2.2-7**

The CMS generates a SIP NOTIFY request including the xcap-diff document as a result of the SIP SUBSCRIBE request. As this is the initial SIP NOTIFY it contains only the new-etag, a previous etag and sel attributes for the MCPTT UE configuration document, MCPTT user profile configuration document and the off network MCPTT service configuration document.

Table A.2.3-7 SIP NOTIFY request (CMS to SIP core)

```
NOTIFY sip:user2_public1@home1.net;gr=urn:uuid:f81d4fae-7dec-11d0-a765-00a0c91e6bf6 SIP/2.0
Via: SIP/2.0/UDP cms1.example.com;branch=z9hG4bK240f34.1
Max-Forwards: 70
P-Charging-Vector: icid-value="AyretyU0dm+6O2IrT5tAFrbHLso=323551024"; orig-ioi=home1.net
P-Charging-Function-Addresses: ccf=[5555::b99:c88:d77:e66]; ccf=[5555::a55:b44:c33:d22];
      ecf=[5555::1ff:2ee:3dd:4ee]; ecf=[5555::6aa:7bb:8cc:9dd]
Route: <sip:scscf1.home1.net;lr>, <sip:pcscf1.home1.net;lr>
From: <sip:cms1.example.com>;tag=151170
To: <sip:user2_public1@home1.net>;tag=31415
Call-ID: b89rjhnedlrfjflslj40a222
CSeq: 89 NOTIFY
P-Asserted-Service: urn:urn-7:3gpp-service.ims.icsi.mcptt
Subscription-State: active;expires=7200
Event: xcap-diff
Contact: <sip:cms1.example.net;gr>
Content-Type: application/xcap-diff+xml;charset="UTF-8"
Content-Length: (..)

<?xml version="1.0" encoding="UTF-8"?>

<xcap-diff xmlns="urn:ietf:params:xml:ns:xcap-diff"
           xcap-root=https://MissionCriticalOrg/MCO-12345/>
    <document sel="org.3gpp.mcptt.ue-config/users/user1@example.com/imei-90420156-025763-
      0/mcptt-ue-config.xml"
              new-etag="g8tyah7"
              previous-etag="g8tyah7">
    </document>
    <document sel="org.3gpp.mcptt.user-profile/users/user1@example.com/user-profile.xml"
              new-etag="7hahsd"
              previous-etag="7hahsd">
    </document>
    <document sel="org.3gpp.mcptt.service-config/global/service-config.xml"
              new-etag="ffds66a"
              previous-etag="ffds66a">
    </document>

</xcap-diff>
```

The content of each document element contains a new-etag and a previous etag attribute with identical value and no list of instructions. This way it is indicated that this is the reference XML diff document. This documents has only the information about the etags and the document URI's covered by that subscription

8. **SIP NOTIFY request (SIP core to CMC in MCPTT UE) - see example in table A.2.2-8**

The SIP core forwards the SIP NOTIFY request to the CMC in the MCPTT UE.

Table A.2.2-8: SIP NOTIFY request (SIP core to CMC in MCPTT UE)

```
NOTIFY sip:[5555::aaa:bbb:ccc:ddd]:1357 SIP/2.0
Via: SIP/2.0/UDP pcscf1.home1.net;branch=240f34.1, SIP/2.0/UDP
      scscf1.home1.net;branch=z9hG4bK332b23.1, SIP/2.0/UDP
      cms1.example.com;branch=z9hG4bK240f34.1
Max-Forwards: 68
Record-Route: <sip:scscf1.home1.net;lr>, <sip:pcscf1.home1.net:7531;lr>
From:
To:
Call-ID:
P-Asserted-Service:
CSeq:
Subscription-State:
Event:
Contact:
Content-Length:

(…)
```

9. SIP **200 (OK) response (CMC in MCPTT UE to SIP core) - see example in table A.2.2-9**

The CMC in MCPTT UE acknowledges the SIP NOTIFY request with a SIP 200 (OK) response to the SIP core.

Table A.2.2-9: SIP 200 (OK) response (CMC in MCPTT UE to SIP core)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP pcscf1.home1.net;branch=240f34.1, SIP/2.0/UDP
      scscf1.home1.net;branch=z9hG4bK332b23.1, SIP/2.0/UDP
      cms1.example.com;branch=z9hG4bK240f34.1
P-Access-Network-Info: 3GPP-E-UTRAN-TDD; utran-cell-id-3gpp=234151D0FCE11
From:
To:
Call-ID:
CSeq:
Content-Length: 0
```

10. SIP **200 (OK) response (SIP core to CMS) - see example in table A.2.2-10**

The SIP core forwards the SIP 200(OK) response to the CMS.

Table A.2.2-10: SIP 200 (OK) response (SIP core to CMS)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP cms1.example.com;branch=z9hG4bK240f34.1
P-Access-Network-Info:
P-Charging-Vector: icid-value="AyretyU0dm+6O2IrT5tAFrbHLso=323551024"; orig-ioi=home1.net;
      term-ioi=home1.net
From:
To:
Call-ID:
CSeq:
Content-Length:
```

11. **HTTP GET request (CMC in MCPTT UE to CMS) – see example in table A.2.2-11**

The CMC obtains the MCPTT UE configuration document by generating an HTTP GET request using the XCAP URI from the sel attribute of the <document> element in the SIP NOTIFY request.

Table A.2.2-11: HTTP GET request (CMC in MCPTT UE to CMS)

```
GET https://MissionCriticalOrg/MCO-12345/org.3gpp.mcptt.ue-
config/users/user1@example.com/imei-90420156-025763-0/mcptt-ue-config.xml HTTP/1.1
Host: cms1.example.com
Authorization: Bearer
eyJhbGciOiJSUzI1NiJ9.eyJtY3B0dF9pZCI6ImFsaWNlQG9yZy5jb20iLCJleHAiOjE0NTM1MDYxMjEsInNjb3BlIjpbI
m9wZW5pZCIsIjNncHA6bWNwdHQ6cHR0X3NlcnZlciJdLCJjbGllbnRfaWQiOiJtY3B0dF9jbGllbnQifQ.XYIqai4YKSZC
KRNMLipGC_5nV4BE79IJpvjexWjIqqcqiEx6AmHHIRo0mhcxeCESrXei9krom9e8Goxr_hgF3szvgbwl8JRbFuv97XgepD
LjEq4jL3Cbu41Q9b0WdXAdFmeEbiB8wo_xggiGwv6IDR1b3TgAAsdjkRxSK4ctIKPaOJSRmM7MKMcKhIug3BEkSC9-
aXBTSIv5fAGN-ShDbPvHycBpjzKWXBvMIR5PaCg-9fwjELXZXdRwz8C6JbRM8aqzhdt4CVhQ3-Arip-S9CKd0tu-
qhHfF2rvJDRlg8ZBiihdPH8mJs-qpTFep_1-kON3mL0_g54xVmlMwN0XQA
Content-Length: 0
```

12. **HTTP 200 (OK) response (CMC in MCPTT UE to CMS) - see example in table A.2.2-12**

After the CMS has performed the authorization check on the access token in the Authorization header field to ensure that the MCPTT user is allowed to fetch the MCPTT UE configuration document, the CMS sends a HTTP 200 (OK) response to the CMC including the MCPTT UE configuration document in the body of the response.

Table A.2.2-12: HTTP 200 (OK) response (CMS to CMC in MCPTT UE)

```
HTTP/1.1 200 OK
Etag: "g8tyah7"
Content-Type: application/org.3gpp.mcptt-ue-config+xml; charset="utf-8"
Content-Length: (…)

<?xml version="1.0" encoding="UTF-8"?>
```

```
<mcptt-UE-configuration xmlns="urn:3gpp:mcptt:mcpttUEConfig:1.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:3gpp:mcptt:ue-
config:1.0 ue-config.xsd"XUI-URI="sip:User2@example.com" domain="example.com">
  <name xml:lang="en-GB">Default Duty Shift Profile of Officer 12345</name>
    <common index="0">
      <private-call>
        <Max-Simul-Call-N10>3</Max-Simul-Call-N10>
      </private-call>
      <MCPTT-Group-Call>
        <Max-Simul-Call-N4>2</Max-Simul-Call-N4>
        <Max-Simul-Trans-N5>1</Max-Simul-Trans-N5>
        <Prioritized-MCPTT-Group>
          <MCPTT-Group-Priority index="0">
            <MCPTT-Group-ID>sip:MCPTTGroupEmergency@example.com</MCPTT-Group-ID>
            <group-priority-hierarchy>7</group-priority-hierarchy>
          </MCPTT-Group-Priority>
          <MCPTT-Group-Priority index="1">
             <MCPTT-Group-ID>sip:MCPTTGroup-A@example.com</MCPTT-Group-ID>
             <group-priority-hierarchy>4</group-priority-hierarchy>
          </MCPTT-Group-Priority>
          <MCPTT-Group-Priority index="2">
             <MCPTT-Group-ID>sip:MCPTTGroup-B@example.com</MCPTT-Group-ID>
             <group-priority-hierarchy>3</group-priority-hierarchy>
          </MCPTT-Group-Priority>
          <MCPTT-Group-Priority index="3">
             <MCPTT-Group-ID>sip:MCPTTGroup-C@example.com</MCPTT-Group-ID>
             <group-priority-hierarchy>2</group-priority-hierarchy>
          </MCPTT-Group-Priority>
          <MCPTT-Group-Priority index="4">
             <MCPTT-Group-ID>sip:MCPTTGroup-C@example.com</MCPTT-Group-ID>
             <group-priority-hierarchy>1</group-priority-hierarchy>
          </MCPTT-Group-Priority>
        </Prioritized-MCPTT-Group>
      </MCPTT-Group-Call>
      <anyExt />
    </common>
    <on-network index="0">
      <IPv6Preferred>true</IPv6Preferred>
    <Relay-Service>true</Relay-Service>
    <Relayed-MCPTT-Group index="0">
      <MCPTT-Group-ID>sip:MCPTTGroupEmergency@example.com</MCPTT-Group-ID>
      <Relay-Service-Code>"71abcde"</Relay-Service-Code>
      <anyExt />
    </Relayed-MCPTT-Group>
    <Relayed-MCPTT-Group index="1">
      <MCPTT-Group-ID>sip:MCPTTGroup-A@example.com</MCPTT-Group-ID>
      <Relay-Service-Code>"491Fac4"</Relay-Service-Code>
      <anyExt />
    </Relayed-MCPTT-Group>
    <Relayed-MCPTT-Group index="2">
      <MCPTT-Group-ID>sip:MCPTTGroup-B@example.com</MCPTT-Group-ID>
      <Relay-Service-Code>"3912cd"</Relay-Service-Code>
      <anyExt />
    </Relayed-MCPTT-Group>
    <anyExt />
  </on-network>
  <anyExt />
</mcptt-UE-configuration>
```

13. **HTTP GET request (CMC in MCPTT UE to CMS) – see example in table A.2.2-13**

The CMC obtains the MCPTT user profile configuration document by generating an HTTP GET request using the XCAP URI from the sel attribute of the <document> element in the SIP NOTIFY request.

Table A.2.2-13: HTTP GET request (CMC in MCPTT UE to CMS)

```
GET https://MissionCriticalOrg/MCO-12345/org.3gpp.mcptt.user-profile/users/user1@example.com
/user-profile.xml HTTP/1.1
Host: cms1.example.com
Authorization: Bearer
eyJhbGciOiJSUzI1NiJ9.eyJtY3B0dF9pZCI6ImFsaWNlQG9yZy5jb20iLCJleHAiOjE0NTM1MDYxMjEsInNjb3BlIjpbI
m9wZW5pZCIsIjNncHA6bWNwdHQ6cHR0X3NlcnZlciJdLCJjbGllbnRfaWQiOiJtY3B0dF9jbGllbnQifQ.XYIqai4YKSZC
KRNMLipGC_5nV4BE79IJpvjexWjIqqcqiEx6AmHHIRo0mhcxeCESrXei9krom9e8Goxr_hgF3szvgbwl8JRbFuv97XgepD
LjEq4jL3Cbu41Q9b0WdXAdFmeEbiB8wo_xggiGwv6IDR1b3TgAAsdjkRxSK4ctIKPaOJSRmM7MKMcKhIug3BEkSC9-
```

```
aXBTSIv5fAGN-ShDbPvHycBpjzKWXBvMIR5PaCg-9fwjELXZXdRwz8C6JbRM8aqzhdt4CVhQ3-Arip-S9CKd0tu-
qhHfF2rvJDRlg8ZBiihdPH8mJs-qpTFep_1-kON3mL0_g54xVmlMwN0XQA
Content-Length: 0
```

14. **HTTP 200 (OK) response (CMS to CMC in MCPTT UE) - see example in table A.2.2-14**

After the CMS has performed the authorization check on the access token in the Authorization header field to ensure that the MCPTT user is allowed to fetch the MCPTT user profile configuration document, the CMS sends a HTTP 200 (OK) response to the CMC including the MCPTT user profile configuration document in the body of the response.

Table A.2.2-14: HTTP 200 (OK) response (CMS to CMC in MCPTT UE)

```
HTTP/1.1 200 OK
Etag: "7hahsd"
Content-Type: application/org.3gpp.mcptt.user-profile+xml; charset="utf-8"
Content-Length: (…)

<?xml version="1.0" encoding="UTF-8"?>

<mcptt-user-profile xmlns:cp="urn:ietf:params:xml:ns:common-policy" xmlns
="urn:3gpp:mcptt:user-profile:1.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="urn:3gpp:mcptt:user-profile:1.0 mcptt-user-profile.xsd" XUI-
URI="sip:User2@example.com" user-profile-index="0">

  <Name xml:lang="en-GB">Default Duty Shift Profile of Officer 12345</Name>
  <Status>true</Status>
  <ProfileName xml:lang="en-GB">Default Duty Shift Profile of Officer 12345</ProfileName>
  <Pre-selected-indication />
  <Common index="0">
    <UserAlias>
      <alias-entry index="0" xml:lang="en-GB">Officer 12345</alias-entry>
      <anyExt />
    </UserAlias>
    <MCPTTUserID>
      <uri-entry>sip:user2@example.com</uri-entry>
      <display-name xml:lang="en-GB">User 2</display-name>
      <anyExt />
    </MCPTTUserID>
    <PrivateCall>
      <PrivateCallList index="0">
        <PrivateCallURI index="0">
          <uri-entry>sip:user1@example.com</uri-entry>
          <display-name xml:lang="en-GB">User 1</display-name>
          <anyExt />
        </PrivateCallURI>
        <PrivateCallURI index="1">
          <uri-entry>sip:user3@example.com</uri-entry>
          <display-name xml:lang="en-GB">User 3</display-name>
          <anyExt />
        </PrivateCallURI>
        <PrivateCallURI index="2">
          <uri-entry>sip:user4@example.com</uri-entry>
          <display-name xml:lang="en-GB">User 4</display-name>
          <anyExt />
        </PrivateCallURI>
        <PrivateCallProSeUser index="0">
          <DiscoveryGroupID>123abc87</DiscoveryGroupID>
          <User-Info-ID>1234afcd5521</User-Info-ID>
          <anyExt />
        </PrivateCallProSeUser>
        <PrivateCallProSeUser index="1">
          <DiscoveryGroupID>123abd01</DiscoveryGroupID>
          <User-Info-ID>1234afcd4567</User-Info-ID>
          <anyExt />
        </PrivateCallProSeUser>
        <PrivateCallProSeUser index="2">
          <DiscoveryGroupID>123abc84</DiscoveryGroupID>
          <User-Info-ID>1234afcd591f</User-Info-ID>
          <anyExt />
        </PrivateCallProSeUser>
        <anyExt>
          <PrivateCallKMSURI>
            <PrivateCallKMSURI>
              <uri-entry>https://KMS.example.com</uri-entry>
```

```
              <anyExt />
            </PrivateCallKMSURI>
          </PrivateCallKMSURI>
        </anyExt>
      </PrivateCallList>
      <EmergencyCall>
        <MCPTTPrivateRecipient>
          <entry entry-info="UsePreConfigured" index="0">
            <uri-entry>sip:user1@example.com</uri-entry>
            <display-name>User 1</display-name>
            <anyExt />
          </entry>
          <ProSeUserID-entry index="0">
            <DiscoveryGroupID>123abc87</DiscoveryGroupID>
            <User-Info-ID>1234afcd5521</User-Info-ID>
            <anyExt />
          </ProSeUserID-entry>
          <anyExt />
        </MCPTTPrivateRecipient>
      </EmergencyCall>
      <anyExt />
    </PrivateCall>
    <MCPTT-group-call>
      <MaxSimultaneousCallsN6>3</MaxSimultaneousCallsN6>
      <EmergencyCall>
        <MCPTTGroupInitiation>
          <entry entry-info="DedicatedGroup" index="0">
            <uri-entry>sip:MCPTTGroupEmergency@example.com</uri-entry>
            <display-name>Emergency MCPTT Group</display-name>
            <anyExt />
          </entry>
        </MCPTTGroupInitiation>
      </EmergencyCall>
      <ImminentPerilCall>
        <MCPTTGroupInitiation>
          <entry entry-info="DedicatedGroup" index="0">
            <uri-entry>sip:MCPTTGroupEmergency@example.com</uri-entry>
            <display-name>Emergency MCPTT Group</display-name>
            <anyExt />
          </entry>
        </MCPTTGroupInitiation>
        <anyExt />
      </ImminentPerilCall>
      <EmergencyAlert>
        <entry entry-info="UsePreConfigured" index="0">
          <uri-entry>sip:user1@example.com</uri-entry>
          <display-name>User 1</display-name>
          <anyExt />
        </entry>
        <anyExt />
      </EmergencyAlert>
      <Priority>56</Priority>
      <anyExt />
    </MCPTT-group-call>
    <ParticipantType>First Responder</ParticipantType>
    <MissionCriticalOrganization>Gotham PD</MissionCriticalOrganization>
    <anyExt />
  </Common>
  <OnNetwork index="0">
    <MCPTTGroupInfo xml:lang="en-GB" index="0">
      <entry index="0">
        <uri-entry>sip:MCPTTGroup-A@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group A</display-name>
        <anyExt />
      </entry>
      <entry index="1">
        <uri-entry>sip:MCPTTGroup-B@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group B</display-name>
        <anyExt />
      </entry>
      <entry index="2">
        <uri-entry>sip:MCPTTGroup-C@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group C</display-name>
        <anyExt />
      </entry>
      <entry index="3">
        <uri-entry>sip:MCPTTGroup-D@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group D</display-name>
```

```
        <anyExt />
      </entry>
      <anyExt />
    </MCPTTGroupInfo>
    <MaxAffiliationsN2>3</MaxAffiliationsN2>
    <ImplicitAffiliations xml:lang="en-GB" index="0">
      <entry index="0">
        <uri-entry>sip:MCPTTGroup-A@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group A</display-name>
        <anyExt />
      </entry>
      <entry index="1">
        <uri-entry>sip:MCPTTGroup-B@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group B</display-name>
        <anyExt />
      </entry>
      <anyExt />
    </ImplicitAffiliations>
    <MaxSimultaneousTransmissionsN7>1</MaxSimultaneousTransmissionsN7>
    <PrivateEmergencyAlert>
      <entry entry-info="UsePreConfigured" index="0">
        <uri-entry>sip:user1@example.com</uri-entry>
        <display-name xml:lang="en-GB">User 1</display-name>
        <anyExt />
      </entry>
    </PrivateEmergencyAlert>
    <anyExt>
      <RemoteGroupSelectionURIList>
        <entry index="0">
          <uri-entry>sip:user3@example.com</uri-entry>
          <display-name xml:lang="en-GB">User 3</display-name>
          <anyExt />
        </entry>
        <anyExt />
      </RemoteGroupSelectionURIList>
      <GroupServerInfo>
        <GMS-Serv-Id index="0">
          <entry index="0">
            <uri-entry>https://GMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </GMS-Serv-Id>
        <IDMS-token-endpoint index="0">
          <entry index="0">
            <uri-entry>https://IDMS.example.com</uri-entry>
           <anyExt />
          </entry>
          <anyExt />
        </IDMS-token-endpoint>
        <KMS-URI index="0">
          <entry index="0">
            <uri-entry>https://KMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </KMS-URI>
        <anyExt />
      </GroupServerInfo>
    </anyExt>
  </OnNetwork>
  <OffNetwork index="0">
    <MCPTTGroupInfo index="0">
      <entry entry-info="DedicatedGroup" index="0">
        <uri-entry>sip:MCPTTGroup-A@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group A</display-name>
        <anyExt />
      </entry>
      <entry entry-info="DedicatedGroup" index="1">
        <uri-entry>sip:MCPTTGroup-B@example.com</uri-entry>
        <display-name xml:lang="en-GB">MCPTT Group B</display-name>
        <anyExt />
      </entry>
    </MCPTTGroupInfo>
    <User-Info-ID>5ff37ab2c103</User-Info-ID>
    <anyExt>
      <OffNetworkGroupServerInfo>
        <GMS-Serv-Id index="0">
```

```
          <entry index="0">
            <uri-entry>https://GMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </GMS-Serv-Id>
        <IDMS-token-endpoint index="0">
          <entry index="0">
            <uri-entry>https://IDMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </IDMS-token-endpoint>
        <KMS-URI index="0">
          <entry index="0">
            <uri-entry>https://KMS.example.com</uri-entry>
            <anyExt />
          </entry>
          <anyExt />
        </KMS-URI>
        <anyExt />
      </OffNetworkGroupServerInfo>
    </anyExt>
  </OffNetwork>
  <cp:ruleset>
    <cp:rule id="f3g44r0">
      <cp:conditions>
        <identity>
          <one id="sip:user2@example.com" />
        </identity>
      </cp:conditions>
      <cp:actions>
        <allow-presence-status>false</allow-presence-status>
        <allow-request-presence>false</allow-request-presence>
        <allow-query-availability-for-private-calls>false</allow-query-availability-for-
private-calls>
        <allow-enable-disable-user>false</allow-enable-disable-user>
        <allow-enable-disable-UE>false</allow-enable-disable-UE>
        <allow-create-delete-user-alias>false</allow-create-delete-user-alias>
        <allow-private-call>true</allow-private-call>
        <allow-manual-commencement>true</allow-manual-commencement>
        <allow-automatic-commencement>true</allow-automatic-commencement>
        <allow-force-auto-answer>false</allow-force-auto-answer>
        <allow-failure-restriction>false</allow-failure-restriction>
        <allow-emergency-group-call>true</allow-emergency-group-call>
        <allow-emergency-private-call>true</allow-emergency-private-call>
        <allow-cancel-group-emergency>true</allow-cancel-group-emergency>
        <allow-cancel-private-emergency-call>true</allow-cancel-private-emergency-call>
        <allow-imminent-peril-call>true</allow-imminent-peril-call>
        <allow-cancel-imminent-peril>true</allow-cancel-imminent-peril>
        <allow-activate-emergency-alert>true</allow-activate-emergency-alert>
        <allow-cancel-emergency-alert>true</allow-cancel-emergency-alert>
        <allow-offnetwork>true</allow-offnetwork>
        <allow-imminent-peril-change>true</allow-imminent-peril-change>
        <allow-private-call-media-protection>true</allow-private-call-media-protection>
        <allow-private-call-floor-control-protection>true</allow-private-call-floor-control-
protection>
        <allow-request-affiliated-groups>true</allow-request-affiliated-groups>
        <allow-request-to-affiliate-other-users>false</allow-request-to-affiliate-other-users>
        <allow-recommend-to-affiliate-other-users>false</allow-recommend-to-affiliate-other-
users>
        <allow-private-call-to-any-user>false</allow-private-call-to-any-user>
        <allow-regroup>true</allow-regroup>
        <allow-private-call-participation>true</allow-private-call-participation>
        <allow-override-of-transmission>false</allow-override-of-transmission>
        <allow-listen-both-overriding-and-overridden>false</allow-listen-both-overriding-and-
overridden>
        <allow-transmit-during-override>false</allow-transmit-during-override>
        <allow-off-network-group-call-change-to-emergency>true</allow-off-network-group-call-
change-to-emergency>
        <allow-revoke-transmit>false</allow-revoke-transmit>
        <allow-create-group-broadcast-group>false</allow-create-group-broadcast-group>
        <allow-create-user-broadcast-group>false</allow-create-user-broadcast-group>
        <anyExt>
          <allow-request-private-call-call-back>false</allow-request-private-call-call-back>
          <allow-cancel-private-call-call-back>false</allow-cancel-private-call-call-back>
          <allow-request-remote-initiated-ambient-listening>false</allow-request-remote-
initiated-ambient-listening>
```

```
          <allow-request-locally-initiated-ambient-listening>false</allow-request-locally-
initiated-ambient-listening>
          <allow-request-first-to-answer-call>true</allow-request-first-to-answer-call>
          <allow-request-remote-init-private-call>true</allow-request-remote-init-private-
call>
          <allow-request-remote-init-group-call>true</allow-request-remote-init-group-call>
        </anyExt>
      </cp:actions>
      <cp:transformations />
    </cp:rule>
  </cp:ruleset>
  <anyExt />
</mcptt-user-profile>
```

15. **HTTP GET request (CMC in MCPTT UE to CMS) – see example in table A.2.2-15**

The CMC obtains the off network MCPTT service configuration document by generating an HTTP GET request using the XCAP URI from the sel attribute of the <document> element in the SIP NOTIFY request.

Table A.2.2-15: HTTP GET request (CMC in MCPTT UE to CMS)

```
GET https://MissionCriticalOrg/MCO-12345/org.3gpp.mcptt.service-config/global/service-
config.xml HTTP/1.1
Host: cms1.example.com
Authorization: Bearer
eyJhbGciOiJSUzI1NiJ9.eyJtY3B0dF9pZCI6ImFsaWNlQG9yZy5jb20iLCJleHAiOjE0NTM1MDYxMjEsInNjb3BlIjpbI
m9wZW5pZCIsIjNncHA6bWNwdHQ6cHR0X3NlcnZlciJdLCJjbGllbnRfaWQiOiJtY3B0dF9jbGllbnQifQ.XYIqai4YKSZC
KRNMLipGC_5nV4BE79IJpvjexWjIqqcqiEx6AmHHIRo0mhcxeCESrXei9krom9e8Goxr_hgF3szvgbwl8JRbFuv97XgepD
LjEq4jL3Cbu41Q9b0WdXAdFmeEbiB8wo_xggiGwv6IDR1b3TgAAsdjkRxSK4ctIKPaOJSRmM7MKMcKhIug3BEkSC9-
aXBTSIv5fAGN-ShDbPvHycBpjzKWXBvMIR5PaCg-9fwjELXZXdRwz8C6JbRM8aqzhdt4CVhQ3-Arip-S9CKd0tu-
qhHfF2rvJDRlg8ZBiihdPH8mJs-qpTFep_1-kON3mL0_g54xVmlMwN0XQA
Content-Length: 0
```

16. **HTTP 200 (OK) response (CMS to CMC in MCPTT UE) - see example in table A.2.2-16**

After the CMS has performed the authorization check on the access token in the Authorization header field to ensure that the MCPTT user is allowed to fetch the off network MCPTT service configuration document, the CMS sends a HTTP 200 (OK) response to the CMC including the common and off network elements from the MCPTT service configuration document in the body of the response.

Table A.2.2-16: HTTP 200 (OK) response (CMS to CMC in MCPTT UE)

```
HTTP/1.1 200 OK
Etag: "ffds66a"
Content-Type: application/org.3gpp.mcptt-service-config+xml; charset="utf-8"
Content-Length: (…)

<?xml version="1.0" encoding="UTF-8"?>

<service-configuration-info xmlns="urn:3gpp:ns:mcpttServiceConfig:1.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="Servconf.xsd">
  <service-configuration-params domain="example.com">
    <common>
      <min-length-alias>5</min-length-alias>
      <broadcast-group>
        <num-levels-group-hierarchy>6</num-levels-group-hierarchy>
        <num-levels-user-hierarchy>6</num-levels-user-hierarchy>
        <anyExt />
      </broadcast-group>
      <anyExt />
    </common>
    <off-network>
      <emergency-call>
        <private-cancel-timeout>PT13S</private-cancel-timeout>
        <group-time-limit>PT1300S</group-time-limit>
        <anyExt />
      </emergency-call>
      <private-call>
        <hang-time>PT13S</hang-time>
        <max-duration-with-floor-control>PT1300S</max-duration-with-floor-control>
        <max-duration-without-floor-control>PT1300S</max-duration-without-floor-control>
        <anyExt />
```

```
      </private-call>
      <num-levels-priority-hierarchy>6</num-levels-priority-hierarchy>
      <transmit-time>
        <time-limit>PT13S</time-limit>
        <time-warning>PT1300S</time-warning>
      </transmit-time>
      <hang-time-warning>PT8S</hang-time-warning>
      <default-prose-per-packet-priority>
        <mcptt-private-call-signalling>4</mcptt-private-call-signalling>
        <mcptt-private-call-media>3</mcptt-private-call-media>
        <mcptt-emergency-private-call-signalling>7</mcptt-emergency-private-call-signalling>
        <mcptt-emergency-private-call-media>6</mcptt-emergency-private-call-media>
      </default-prose-per-packet-priority>
      <allow-log-metadata>true</allow-log-metadata>
      <anyExt />
    </off-network>
  </service-configuration-params>
  <anyExt />
</service-configuration-info>
```

A.2.3 MCPTT server subscribing to and obtaining MCPTT service configuration document

Figure A.2.3-1 shows a flow for the MCPTT server subscribing to and obtaining the MCPTT service configuration document

The hostname of CMS-1 is cms1.example.com.

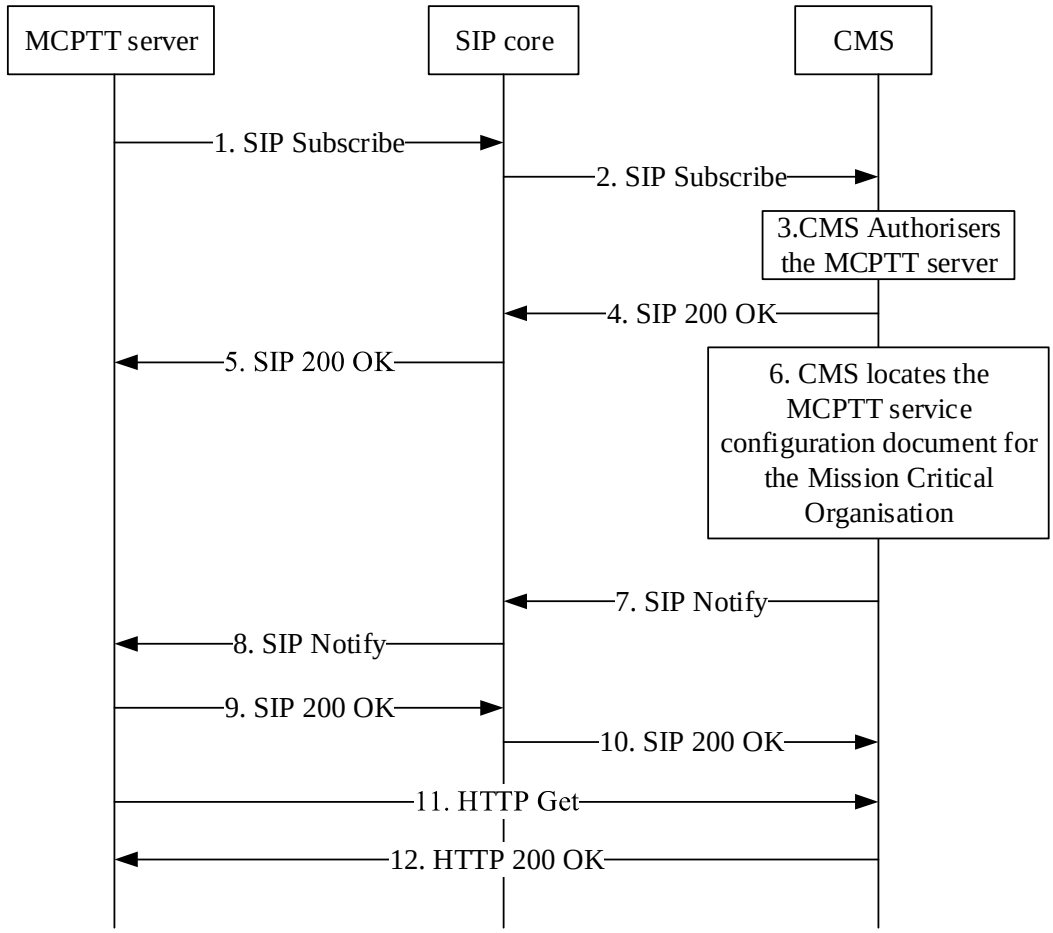

Figure A.2.3-1: MCPTT server subscribing to and obtaining the MCPTT service configuration document

Figure A.2.3-1 shows a MCPTT server subscribing to and obtaining the MCPTT service configuration document. The details of the flow are as follows:

1. SIP **SUBSCRIBE request (MCPTT server to SIP Core) – see example in table A.2.3-1**

A MCPTT server needs to obtain and get a notification when the service configuration document of a hosted mission critical organisation are modified. In order to initiate a subscription to XCAP document changes in the CMS, the MCPTT server generates a SIP SUBSCRIBE request indicating support for "xcap-diff", together with "message/external-body".

Table A.2.3-1: SIP SUBSCRIBE request (CMC in MCPTT UE to SIP core)

```
SUBSCRIBE sip:MissionCriticalOrg.MCO-12345@cms1.example.net;auid=org.3gpp.mcptt.service-config
      SIP/2.0
Via: SIP/2.0/UDP McpttServer1.home1.net;branch=z9hG4bKehuefdam
Max-Forwards: 70
Route: <sip:orig@scscf1.home1.net;lr>
P-Asserted-Identity: <sip:McpttServer1.home1.net>
Privacy: none
From: <sip:McpttServer1.home1.net>;tag=31415
To: <sip:cms1.example.nett>
Call-ID: b89rjhnedlrfjflslj40a222
CSeq: 123 SUBSCRIBE
P-Asserted-Service:urn:urn-7:3gpp-service.ims.icsi.mcptt
Event: xcap-diff;diff-processing=aggregate
Expires: 7200
Accept: application/xcap-diff+xml, message/external-body
Contact: <sip:McpttServer1.home1.net;gr>;+g.3gpp.icsi-ref="urn:urn-7:3gpp-
      service.ims.icsi.mcptt"
Content-Length: 0
```

Request-URI: The XCAP-URI for the service configuration document based on the CMS XCAP root URI configured in the MCPTT server at the public service identity of CMS-1 (sip: MissionCriticalOrg.MCO-12345@cms1.example.net).

Event: This header field is populated with the value "xcap-diff" to specify the use of the xcap-diff package to get notified of changes to XCAP configuration management documents.

Accept: This header field is populated with the value "application/xcap-diff+xml" indicating that the MCPTT UE supports the XCAP-diff MIME type and also the value "message/external-body" indicating that the MCPTT server supports content indirection (to avoid XCAP content that contains sensitive information being included in a SIP NOTIFY request).

To: Same as the Request-URI.

.

2. SIP **SUBSCRIBE request (SIP core to CMS) - see example in table A.2.3-2**

The SIP core forwards the SIP SUBSCRIBE request to the CMS.

Table A.2.3-2 SIP SUBSCRIBE request (SIP core to CMS)

```
SUBSCRIBE sip:MissionCriticalOrg.MCO-12345@cms1.example.net SIP/2.0
Via: SIP/2.0/UDP scscf1.home1.net;branch=z9hG4bK344a65.1, SIP/2.0/UDP
      McpttServer1.home1.net;branch=z9hG4bKehuefdam
Max-Forwards: 69
P-Asserted-Identity:
Privacy:
Record-Route: <sip:scscf1.home1.net;lr>,
Route: <sip:cms1.home1.net;lr>, <sip:scscf1.home1.net;lr>
From:
To:
Call-ID:
CSeq:
P-Asserted-Service:
Event:
Supported:
Expires:
Accept:
Contact:
Content-Length:
```

3. **Authorization**

   The CMS performs authorization of the MCPTT server based on the P-Asserted-Identity header field of the SIP SUBSCRIBE request to ensure that MCPTT server is authorized to subscribe to MCPTT service configuration document changes.

- In this example authorisation is sucessful, so the CMS sends a SIP 200 (OK) response to the SIP core.

4. SIP **200 (OK) response (CMS to SIP core) - see example in table A.2.3-4**

   The CMS sends a SIP 200(OK) response to the SIP core.

Table A.2.3-4: SIP 200 (OK) response (CMS to SIP core)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP scscf1.home1.net;branch=z9hG4bK344a65.1, SIP/2.0/UDP
      McpttServer1.home1.net;branch=z9hG4bKehuefdam
Record-Route:
From:
To: <sip:cms1.example.com;tag=151170
Call-ID:
CSeq:
Expires:
Contact: <sip:cms1.example.com;gr>
Content-Length: 0
```

5. SIP **200 (OK) response (S-CSCF to MCPTT server) - see example in table A.2.3-5**

   The SIP core forwards the SIP 200(OK) response to the CMC in the MCPTT UE.

Table A.2.3-5: SIP 200 (OK) response (SIP core to MCPTT server

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP McpttServer1.home1.net;branch=z9hG4bKehuefdam
Record-Route: <sip:scscf1.home1.net;lr>
From:
To:
Call-ID:
CSeq:
Expires:
Contact:
Content-Length:
```

6. **Obtaining the MCPTT service configuration document**

   The CMS obtains the MCPTT service configuration document for the Mission Critical organisation based on the Request-URI. The CMS generates a MCPTT service configuration document containing the <common> and <on-network> elements and mints an XCAP URI for the generated MCPTT service configuration document.

7. SIP **NOTIFY request (CMS to SIP core) – see example in table A.2.3-7**

   The CMS generates a SIP NOTIFY request including the xcap-diff document as a result of the SIP SUBSCRIBE request. As this is the initial SIP NOTIFY it contains only the new-etag, a previous etag and sel attributes for the MCPTT service configuration document.

Table A.2.3-7 SIP NOTIFY request (CMS to SIP core)

```
NOTIFY sip:McpttServer1.home1.net;gr SIP/2.0
Via: SIP/2.0/UDP cms1.example.com;branch=z9hG4bK240f34.1
Max-Forwards: 70
Route: sip:scscf1.home1.net;lr
From: <sip:cms1.example.com>;tag=151170
To: <sip:McpttServer1.home1.com;gr>;tag=31415
Call-ID: b89rjhnedlrfjflslj40a222
CSeq: 89 NOTIFY
P-Asserted-Service:urn:urn-7:3gpp-service.ims.icsi.mcptt
Subscription-State: active;expires=7200
Event: xcap-diff
Contact: <sip:cms1.example.net;gr>
Content-Type: application/xcap-diff+xml;charset="UTF-8"
Content-Length: (..)

<?xml version="1.0" encoding="UTF-8"?>
<xcap-diff xmlns="urn:ietf:params:xml:ns:xcap-diff">
    <document sel="service-coinfig.xml"
              new-etag="ffds66a"
              previous-etag="ffds66a">
    </document>
</xcap-diff>
```

The content of the document element contains a new-etag and a previous etag attribute with identical value and no list of instructions. This way it is indicated that this is the reference XML diff document. This document has only the information about the etags and the document URI's covered by that subscription

8. **SIP NOTIFY request (SIP core to MCPTT server) - see example in table A.2.3-8**

The SIP core forwards the SIP NOTIFY request to the MCPTT server.

Table A.2.3-8: SIP NOTIFY request (SIP core to MCPTT server)

```
NOTIFY sip:McpttServer1.home1.net;gr SIP/2.0
Via: SIP/2.0/UDP scscf1.home1.net;branch=240f34.1, SIP/2.0/UDP McpttServer1.home1.net
Max-Forwards: 69
Record-Route: <sip:scscf1.home1.net;lr>
From:
To:
Call-ID:
P-Asserted-Service:
CSeq:
Subscription-State:
Event:
Contact:
Content-Length:

(…)
```

9. SIP **200 (OK) response (MCPTT server to SIP core) - see example in table A.2.3-9**

The MCPTT server acknowledges the SIP NOTIFY request with a SIP 200 (OK) response to the SIP core.

Table A.2.3-9: SIP 200 (OK) response (MCPTT server to SIP core)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP scscf1.home1.net;branch=z9hG4bK332b23.1, SIP/2.0/UDP
      cms1.example.com;branch=z9hG4bK240f34.1
From:
To:
Call-ID:
CSeq:
Content-Length: 0
```

10. SIP **200 (OK) response (SIP core to CMS) - see example in table A.2.3-10**

The SIP core forwards the SIP 200(OK) response to the CMS.

Table A.2.3-10: SIP 200 (OK) response (SIP core to CMS)

```
SIP/2.0 200 OK
Via: SIP/2.0/UDP cms1.example.com;branch=z9hG4bK240f34.1
From:
To:
Call-ID:
CSeq:
Content-Length:
```

11. **HTTP GET request (MCPTT server to CMS) – see example in table A.23-11**

The MCPTT server obtains the MCPTT service configuration document by generating an HTTP GET request using the XCAP URI from the sel attribute of the <document> element in the SIP NOTIFY request.

Table A.2.3-11: HTTP GET request (MCPTT server to CMS)

```
GET https://MissionCriticalOrg/MCO-12345/service-coinfig.xml HTTP/1.1
Host: cms1.example.com
X-3GPP-Asserted-Identity: cms1.example.com
Content-Length: 0
```

12. **HTTP GET request (MCPTT server to CMS) – see example in table A.2.3-12**

After the CMS has authenticated the MCPTT server based on the X-3GPP-Asserted-Identity header field to ensure that the MCPTT server is allowed to fetch the MCPTT service configuration document, the CMS sends a HTTP 200 (OK) response to the CMC including the MCPTT sevice configuration document in the body of the response.

Table A.2.3-12: HTTP 200 (OK) response (CMS to MCPTT server)

```
HTTP/1.1 200 OK
Etag: "ffds66a"
Content-Type: application/org.3gpp.mcptt-service-config+xml; charset="utf-8"
Content-Length: (…)

<?xml version="1.0" encoding="UTF-8"?>

<service-configuration-info xmlns="urn:3gpp:ns:mcpttServiceConfig:1.0"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="Servconf.xsd">
  <service-configuration-params domain="example.com">
    <common>
      <min-length-alias>12</min-length-alias>
      <broadcast-group>
        <num-levels-group-hierarchy>6</num-levels-group-hierarchy>
        <num-levels-user-hierarchy>6</num-levels-user-hierarchy>
        <anyExt />
      </broadcast-group>
      <anyExt />
    </common>
    <on-network>
      <emergency-call>
        <private-cancel-timeout>PT13S</private-cancel-timeout>
        <group-time-limit>PT1300S</group-time-limit>
        <anyExt />
      </emergency-call>
      <private-call>
        <hang-time>PT13S</hang-time>
        <max-duration-with-floor-control>PT1300S</max-duration-with-floor-control>
        <max-duration-without-floor-control>PT1300S</max-duration-without-floor-control>
        <anyExt />
      </private-call>
      <num-levels-priority-hierarchy>6</num-levels-priority-hierarchy>
      <transmit-time>
        <time-limit>PT13S</time-limit>
        <time-warning>PT1300S</time-warning>
        <anyExt />
      </transmit-time>
      <hang-time-warning>PT8S</hang-time-warning>
      <floor-control-queue>
        <depth>4</depth>
```

```
        <max-user-request-time>PT30S</max-user-request-time>
        <anyExt />
      </floor-control-queue>
      <fc-timers-counters>
        <T1-end-of-rtp-media>PT4S</T1-end-of-rtp-media>
        <T3-stop-talking-grace>PT3S</T3-stop-talking-grace>
        <T7-floor-idle>PT4S</T7-floor-idle>
        <T8-floor-revoke>PT1S</T8-floor-revoke>
        <T11-end-of-RTP-dual>PT4S</T11-end-of-RTP-dual>
        <T12-stop-talking-dual>PT30S</T12-stop-talking-dual>
        <T15-conversation>PT30S</T15-conversation>
        <T16-map-group-to-bearer>PT0.5S</T16-map-group-to-bearer>
        <T17-unmap-group-to-bearer>PT0.2S</T17-unmap-group-to-bearer>
        <T20-floor-granted>PT1S</T20-floor-granted>
        <T55-connect>PT2S</T55-connect>
        <T56-disconnect>PT2S</T56-disconnect>
        <C7-floor-idle>10</C7-floor-idle>
        <C17-unmap-group-to-bearer>3</C17-unmap-group-to-bearer>
        <C20-floor-granted>3</C20-floor-granted>
        <C55-connect>3</C55-connect>
        <C56-disconnect>3</C56-disconnect>
        <anyExt />
      </fc-timers-counters>
      <signalling-protection>
        <confidentiality-protection>true</confidentiality-protection>
        <integrity-protection>true</integrity-protection>
        <anyExt />
      </signalling-protection>
      <protection-between-mcptt-servers>
        <allow-signalling-protection>true</allow-signalling-protection>
        <allow-floor-control-protection>true</allow-floor-control-protection>
        <anyExt />
      </protection-between-mcptt-servers>
      <emergency-resource-priority>
        <resource-priority-namespace>"mcpttq.12"</resource-priority-namespace>
        <resource-priority-priority>"mcpttq.12"</resource-priority-priority>
        <anyExt />
      </emergency-resource-priority>
      <imminent-peril-resource-priority>
        <resource-priority-namespace>"mcpttq.10"</resource-priority-namespace>
        <resource-priority-priority>"mcpttq.10"</resource-priority-priority>
        <anyExt />
      </imminent-peril-resource-priority>
      <normal-resource-priority>
        <resource-priority-namespace>"mcpttq.7"</resource-priority-namespace>
        <resource-priority-priority>"mcpttq.7"</resource-priority-priority>
        <anyExt />
      </normal-resource-priority>
      <anyExt />
    </on-network>
    <anyExt />
  </service-configuration-params>
  <anyExt />
</service-configuration-info>
```

Annex B (informative): IANA registration templates

B.1 IANA registration templates for MIME types

B.1.1 application/vnd.3gpp.mcptt-ue-init-config+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcptt-ue-init-config+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification" version 13.3.0, available via http://www.3gpp.org/specs/numbering.htm.

Applications which use this media type:

Applications supporting the MCPTT UE initial configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none
3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:
  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG
  ii) Change controller: <MCC name>/<MCC email address>

B.1.2 application/vnd.3gpp.mcptt-ue-config+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcptt-ue-config+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification" version 13.3.0, available via http://www.3gpp.org/specs/numbering.htm.

Applications which use this media type:

Applications supporting the MCPTT UE configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none
3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:
  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG
  ii) Change controller: <MCC name>/<MCC email address>

B.1.3 application/vnd.3gpp.mcptt-user-profile+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcptt-user-profile+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification" version 13.3.0, available via http://www.3gpp.org/specs/numbering.htm.

Applications which use this media type:

Applications supporting the MCPTT user profile configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none
3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:

  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG

  ii) Change controller: <MCC name>/<MCC email address>

B.1.4 application/vnd.3gpp.mcptt-service-config+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcptt-service-config+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification" version 13.3.0, available via http://www.3gpp.org/specs/numbering.htm.

Applications which use this media type:

Applications supporting the MCPTT service configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none

3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:
  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG
  ii) Change controller: <MCC name>/<MCC email address>

B.1.5 application/vnd.3gpp.mcdata-service-config+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcdata-service-config+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification", available via http://www.3gpp.org/specs/numbering.htm.

Application Usage:

Applications supporting the MCData service configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none
3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:
  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG
  ii) Change controller: <MCC name>/<MCC email address>

B.1.6 application/vnd.3gpp.mcvideo-service-config+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcvideo-service-config+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification", available via http://www.3gpp.org/specs/numbering.htm.

Application Usage:

Applications supporting the MCVideo service configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none
3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:

  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG

  ii) Change controller: <MCC name>/<MCC email address>

B.1.7 application/vnd.3gpp.mcvideo-ue-config+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcvideo-ue-config+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification", available via http://www.3gpp.org/specs/numbering.htm.

Applications which use this media type:

Applications supporting the MCVideo UE configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none
3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:

  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG

  ii) Change controller: <MCC name>/<MCC email address>

B.1.8 application/vnd.3gpp.mcvideo-user-profile+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcvideo-user-profile+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification", available via http://www.3gpp.org/specs/numbering.htm.

Applications which use this media type:

Applications supporting the MCVideo User Profile configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none
3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:
  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG
  ii) Change controller: <MCC name>/<MCC email address>

B.1.9 application/vnd.3gpp.mcdata-ue-config+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcdata-ue-config+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification", available via http://www.3gpp.org/specs/numbering.htm.

Applications which use this media type:

Applications supporting the MCData UE configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none
3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:

  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG

ii) Change controller: <MCC name>/<MCC email address>

B.1.10 application/vnd.3gpp.mcdata-user-profile+xml IANA registration template

Your Name:

<MCC name>

Your Email Address:

<MCC email address>

Media Type Name:

application

Subtype name:

vnd.3gpp.mcdata-user-profile+xml

Required parameters:

None

Optional parameters:

"charset" the parameter has identical semantics to the charset parameter of the "application/xml" media type as specified in section 9.1 of IETF RFC 7303.

Encoding considerations:

binary.

Security considerations:

Same as general security considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303.

The information transported in this media type does not include active or executable content.

Mechanisms for privacy and integrity protection of protocol parameters exist.

This media type does not include provisions for directives that institute actions on a recipient's files or other resources.

This media type does not include provisions for directives that institute actions that, while not directly harmful to the recipient, may result in disclosure of information that either facilitates a subsequent attack or else violates a recipient's privacy in any way.

This media type does not employ compression.

Interoperability considerations:

Same as general interoperability considerations for application/xml media type as specified in section 9.1 of IETF RFC 7303. Any unknown XML elements and any unknown XML attributes are to be ignored by recipient of the MIME body.

Published specification:

3GPP TS 24.484 "Mission Critical Services (MCS) configuration management; Protocol specification", available via http://www.3gpp.org/specs/numbering.htm.

Applications which use this media type:

Applications supporting the MCData User Profile configuration document as described in the published specification.

Fragment identifier considerations:

The handling in section 5 of IETF RFC 7303 applies.

Restrictions on usage:

None

Provisional registration? (standards tree only):

N/A

Additional information:

1. Deprecated alias names for this type: none
2. Magic number(s): none
3. File extension(s): none
4. Macintosh File Type Code(s): none
5. Object Identifier(s) or OID(s): none

Intended usage:

Common

Person to contact for further information:

- Name: <MCC name>
- Email: <MCC email address>
- Author/Change controller:
  i) Author: 3GPP CT1 Working Group/3GPP_TSG_CT_WG1@LIST.ETSI.ORG
  ii) Change controller: <MCC name>/<MCC email address>

Annex C (informative): Change history

Change history							
Date	**TSG #**	**TSG Doc.**	**CR**	**Rev**	**Subject/Comment**	**Old**	**New**
2015-12					Initial proposal to CT1	-	0.0.0
2016-01					Agreed contributions C1-160308, C1-160309, C1-160311 from CT1#95-bis.	0.0.0	0.1.0
2016-02					Agreed contributions C1ah-160054, C1ah-160060, C1ah-160089, C1ah-160090, C1ah-160091, C1ah-160092, C1ah-160106 from CT1 Ad-Hoc on MCPTT.	0.1.0	0.2.0
2016-02					Agreed contributions C1-161130, C1-161225, C1-161226, C1-161227, C1-161355, C1-161500, C1-161511, C1-161513, C1-161531 from CT1#96.	0.2.0	0.3.0
2016-03	CT-71	CP-160057			Version 1.0.0 created for presentation for information and approval	0.3.0	1.0.0
2016-03	CT-71				Version 13.0.0 created after approval	1.0.0	13.0.0
2016-03	CT-71				Rapporteur post CT clean up	13.0.0	13.0.1
2016-06	CT-72	CP-160322	0001	3	Adding floor control configuration to the Service Configuration document.	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0003	4	Service Configuration XML schema update	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0004	1	Align terminology with drafting rules	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0005	5	UE Initial Configuration document definition	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0006	3	UE Configuration document definition	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0007		Clean up reference to OMA document in 6.3.1.2	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0011	1	Update user configuration document with private call security authorisation	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0012	1	Adding security parameters to the Service Configuration document.	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0014		Modify validation rules for service configuration document	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0018		Using the AUID and default namespace	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0019	1	Removal of <Resource-Priority> Elementfrom MCPTT UE initial configuration document	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0021	2	Configuration management using OMA DM	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0022	2	Aligning User Profile terminology with TS 23.179	13.0.1	13.1.0
2016-06	CT-72	CP-160322	0024	1	Semantics for <Resource-Priority > Element	13.0.1	13.1.0

Change history							
Date	Meeting	TDoc	CR	Rev	Cat	Subject/Comment	New version
2016-09	CT-73	CP-160564	0015	6	F	User Profile schema definition	13.2.0
2016-09	CT-73	CP-160566	0020	8	F	MCPTT UE ID in UE Initial Configuration and UE configuration documents	13.2.0
2016-09	CT-73	CP-160472	0025	3	F	Resource-Priority header field configuration for MCPTT	13.2.0
2016-09	CT-73	CP-160504	0026		F	Configuring the default user profile	13.2.0
2016-09	CT-73	CP-160504	0027		F	Service configuration document missing corresponding pointers to service configuration MO in TS 24.383	13.2.0
2016-09	CT-73	CP-160504	0028	1	F	Service Config has incorrect specification of "alias" parameter	13.2.0
2016-09	CT-73	CP-160504	0029		F	Service Config missing signalling and floor-control protection configuration between MCPTT servers	13.2.0
2016-09	CT-73	CP-160567	0030	4	F	Additional MCPTT UE initial configuration document elements	13.2.0
2016-09	CT-73	CP-160568	0031	4	F	Alignment of MCPTT UE configuration document with TS 23.179 and TS 24.383	13.2.0
2016-09	CT-73	CP-160504	0032	1	F	Default document namespace correction	13.2.0
2016-09	CT-73	CP-160504	0033	1	F	Completion of CMC, CMS and MCPTT server procedures	13.2.0
2016-09	CT-73	CP-160504	0034	2	F	Correction for the corresponding pointers to MCPTT management obejects (MOs) in TS 24.383	13.2.0
2016-09	CT-73	CP-160499	0035	1	F	Addition of Mission Critical Organization to the user profile	13.2.0
2016-10	CT-73					Correct misimplementation of CR0030	24.384 13.2.1
2016-12	CT#74					Change of spec number from 24.384 to 24.484 with wider scope and changed title	24.484 13.2.2
2016-12	CT-74	CP-160734	0039	4	F	Essential corrections required to the user profile definition (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160734	0040	3	F	Service Config validations for <num-levels-priority-hierarchy> are incorrect (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160734	0041	1	F	Identity management endpoint UE initial configuration correction (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160734	0043	1	F	Reference update draft-holmberg-dispatch-mcptt-rp-namespace (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160734	0044	1	F	Correction of validation of VPLMN element (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160734	0045	1	F	Identification of pre-selected MCPTT user profile (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160734	0046		F	Fix the MCPTT UE profile schema (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160734	0047		F	Fix the MCPTT initial UE profile schema (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160734	0048	3	F	Reuse of OMA-TS-XDM_Core (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160734	0049		F	Resolve Editor's Note regarding signaling flows (CR to 24.384)	13.3.0
2016-12	CT-74	CP-160743	0050		F	Correction of the semantics description (CR to 24.384)	14.0.0
2017-03	CT-75	CP-170125	0002	1	B	Scope enhancement for MCvideo and MCdata	14.1.0
2017-03	CT-75	CP-170117	0003		A	Correction of implementation errors	14.1.0
2017-03	CT-75	CP-170125	0004		F	Correct references for release 14	14.1.0
2017-03	CT-75	CP-170125	0005	2	B	Restructure TS 24.484 for MCVideo and MCData	14.1.0
2017-03	CT-75	CP-170117	0007	1	A	Reference update draft-holmberg-dispatch-mcptt-rp-namespace	14.1.0
2017-03	CT-75	CP-170117	0009		A	Syntax error in Servconf.xsd on element max-duration-with-floor-control	14.1.0
2017-03	CT-75	CP-170117	0014	2	A	Corrections to upper limits	14.1.0
2017-03	CT-75	CP-170125	0015	1	B	Modifications to the MCPTT user profile for private call call-back	14.1.0
2017-03	CT-75	CP-170236	0011	3	A	Issues with MCPTT user profile	14.1.0
2017-03	CT-75	C1-170189	0017		A	Registration forms for MIME types defined by TS 24.484 are missing	14.1.0
2017-06	CT-76	CP-171080	0018	3	B	MCData Service Configuration	14.2.0
2017-06	CT-76	CP-171081	0019	3	B	MCVideo Service Configuration	14.2.0
2017-06	CT-76	CP-171113	0021		A	Reference update draft-holmberg-dispatch-mcptt-rp-namespace	14.2.0
2017-06	CT-76	CP-171114	0022	1	C	Genralise some MCPTT Server Procedures	14.2.0
2017-06	CT-76	CP-171080	0023		B	Updating general parts of TS 24.484 for MCData and MCVideo	14.2.0
2017-06	CT-76	CP-171081	0024	1	B	MCVideo UE Profile	14.2.0
2017-06	CT-76	CP-171081	0025	1	B	MCVideo User Profile	14.2.0
2017-06	CT-76	CP-171080	0026	1	B	MCData UE configuration document	14.2.0
2017-06	CT-76	CP-171080	0027	1	B	MCData user profile configuration document	14.2.0
2017-06	CT-76	CP-171114	0028	2	B	eMCPTT user profile updates	14.2.0
2017-06	CT-76	CP-171113	0030		A	Corrections to servconf schema	14.2.0
2017-06	CT-76	CP-171113	0032	2	A	Corrections to mcptt-user-profile schema and duplicated xsd files	14.2.0
2017-08	CT-76					Correction of implementation error	14.2.1
2017-09	CT-77	CP-172102	0034		F	Corrections to mcdata-serv-config schema	14.3.0
2017-09	CT-77	CP-172102	0035	1	F	Corrections to mcdata-ue-profile schema	14.3.0
2017-09	CT-77	CP-172102	0036		F	Corrections to mcdata-user-profile schema	14.3.0
2017-09	CT-77	CP-172104	0037		F	Corrections to mcvideo-serv-config schema	14.3.0
2017-09	CT-77	CP-172104	0038		F	Corrections to mcvideo-ue-profile schema	14.3.0
2017-09	CT-77	CP-172104	0039		F	Corrections to mcvideo-user-profile schema	14.3.0

2017-09	CT-77	CP-172096	0041		A	Corrections to ue-config schema	14.3.0
2017-09	CT-77	CP-172096	0043		A	Corrections to ue-init-config schema	14.3.0
2017-09	CT-77	CP-172101	0044	2	B	User profile additions for eMCPTT	14.3.0
2017-09	CT-77	CP-172102	0045	1	F	Clause 10.2.2.3 - XML Schema correction	14.3.0
2017-09	CT-77	CP-172102	0047	1	F	Fixing references to TS 24.483 KMSSEC and KMSURI elements for MCDATA	14.3.0
2017-09	CT-77	CP-172096	0048	1	A	Various corrections	14.3.0
2017-09	CT-77	CP-172096	0050	1	A	XML element corrections	14.3.0
2017-09	CT-77	CP-172096	0052	1	A	Include missing elements in MCPTT UE initial configuration document	14.3.0
2017-09	CT-77	CP-172118	0053	1	F	MCPTT UE subscribing to and downloading documents after MCPTT user authentication Flow	15.0.0
2017-09	CT-77	CP-172118	0054	1	F	MCPTT Server subscribing to and downloading the service configuration document Flow	15.0.0
2017-09	CT-77	CP-172118	0055	1	F	Document Creation Flow	15.0.0
2017-12	CT-78	CP-173075	0057	3	B	Response-Source header field handling completion	15.1.0
2017-12	CT-78	CP-173064	0059	1	A	File availability configurations	15.1.0
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2020-09	CT-89e	CP-202142	0151	1	A	Correct spelling of HPLMN, VPLMN	15.7.0

History

Document history		
V15.3.0	June 2018	Publication
V15.4.0	September 2018	Publication
V15.5.0	April 2019	Publication
V15.6.0	April 2019	Publication
V15.7.0	October 2020	Publication