

3GPP TS 24.216 V11.1.0 (2012-12)

Technical Specification

3rd Generation Partnership Project; Technical Specification Group Core Network and Terminals; Communication Continuity Management Object (MO) (Release 11)



The present document has been developed within the 3rd Generation Partnership Project (3GPP™) and may be further elaborated for the purposes of 3GPP.

The present document has not been subject to any approval process by the 3GPP Organizational Partners and shall not be implemented. This Specification is provided for future development work within 3GPP only. The Organizational Partners accept no liability for any use of this Specification. Specifications and reports for implementation of the 3GPP™ system should be obtained via the 3GPP Organizational Partners' Publications Offices.

Keywords

UMTS, IMS, SIP, Multimedia, Management,
GSM, LTE

3GPP

Postal address

3GPP support office address

650 Route des Lucioles - Sophia Antipolis
Valbonne - FRANCE
Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Internet

<http://www.3gpp.org>

Copyright Notification

No part may be reproduced except as authorized by written permission.
The copyright and the foregoing restriction extend to reproduction in all media.

© 2012, 3GPP Organizational Partners (ARIB, ATIS, CCSA, ETSI, TTA, TTC).
All rights reserved.

UMTS™ is a Trade Mark of ETSI registered for the benefit of its members
3GPP™ is a Trade Mark of ETSI registered for the benefit of its Members and of the 3GPP Organizational Partners
LTE™ is a Trade Mark of ETSI currently being registered for the benefit of its Members and of the 3GPP Organizational Partners
GSM® and the GSM logo are registered and owned by the GSM Association

Contents

Foreword	4
1 Scope	5
2 References.....	5
3 Definitions and abbreviations	5
3.1 Definitions	5
3.2 Abbreviations	5
4 Communication Continuity Management Object	6
5 Management Object parameters	7
5.1 General	7
5.2 Node: /<X>	7
5.3 /<X>/Name	8
5.4 /<X>/VDI/	8
5.5 /<X>/VDN/	8
5.6 /<X>/Preferred_domain/	8
5.7 /<X>/Immediate_DT/	9
5.8 /<X>/DT_CS-to-IM_CN_direction /	9
5.9 /<X>/DT_IM_CN-to-CS_direction /	9
5.10 /<X>/DT_in_held_waiting_calls/	10
5.11 /<X>/STI/	10
5.12 /<X>/STN/	10
5.13 /<X>/OperatorPolicy	10
5.14 /<X>/OperatorPolicy/<X>	11
5.15 /<X>/OperatorPolicy/<X>/MediaPref	11
5.16 /<X>/OperatorPolicy/<X>/MediaPref/MediaPrefId	11
5.17 /<X>/OperatorPolicy/<X>/MediaPref/MediaorGroups	11
5.18 /<X>/OperatorPolicy/<X>/MediaPref/MediaorGroups/<X>/	11
5.19 /<X>/OperatorPolicy/<X>/MediaPref/MediaorGroups/<X>/Media	12
5.20 /<X>/OperatorPolicy/<X>/MediaPref/RestrictedAccessNetworkType	12
5.21 /<X>/OperatorPolicy/<X>/MediaPref/RestrictedAccessNetworkType/<X>	12
5.22 /<X>/OperatorPolicy/<X>/MediaPref/RestrictedAccessNetworkType /<X>/AccessNetworkType	13
5.23 /<X>/OperatorPolicy/<X>/MediaPref/PreferredAccessNetworks	13
5.24 /<X>/OperatorPolicy/<X>/MediaPref/ PreferredAccessNetworks/<X>	13
5.25 /<X>/OperatorPolicy/<X>/MediaPref/ PreferredAccessNetworks/<X>/AccessNetworkType	13
5.26 /<X>/OperatorPolicy/<X>/MediaPref/SC_media_transfer	14
5.27 /<X>/OperatorPolicy/<X>/MediaPref/ SC_non_transferable_media /	14
5.28 /<X>/InterUETransferSCCASURI/	14
5.29 /<X>/Ext/	15
5.30 /<X>/PStoPSSTIURI/	15
Annex A (informative): Management Object DDF	16
Annex B (informative): Change history.....	26

Foreword

This Technical Specification has been produced by the 3rd Generation Partnership Project (3GPP).

The contents of the present document are subject to continuing work within the TSG and may change following formal TSG approval. Should the TSG modify the contents of the present document, it will be re-released by the TSG with an identifying change of release date and an increase in version number as follows:

Version x.y.z

where:

- x the first digit:
 - 1 presented to TSG for information;
 - 2 presented to TSG for approval;
 - 3 or greater indicates TSG approved document under change control.
- y the second digit is incremented for all changes of substance, i.e. technical enhancements, corrections, updates, etc.
- z the third digit is incremented when editorial only changes have been incorporated in the document.

1 Scope

This document defines the Communication Continuity Management Object. The management object is compatible with OMA Device Management protocol specifications, version 1.2 and upwards, and is defined using the OMA DM Device Description Framework as described in the Enabler Release Definition OMA-ERELED_DM-V1_2 [4].

The Communication Continuity Management Object consists of relevant parameters that can be managed for Communication Continuity capabilities.

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the Communication Continuity Management Object 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] 3GPP TS 23.003: "Numbering, addressing and identification".
- [3] 3GPP TS 24.206: "Voice call continuity between Circuit Switched (CS) and IP Multimedia Subsystem (IMS); Stage 3".
- [4] OMA-ERELED-DM-V1_2-20060602-C: "Enabler Release Definition for OMA Device Management, Candidate Version 1.2".
- [5] 3GPP TS 24.237: "IP Multimedia Subsystem (IMS) Service Continuity ; Stage 3".
- [6] 3GPP TS 24.229: "IP multimedia call control protocol based on Session Initiation Protocol (SIP) and Session Description Protocol (SDP); Stage 3".
- [7] IETF RFC 4566 (July 2006): "SDP: Session Description Protocol".

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] apply.

For the purposes of the present document, the following terms and definitions given in 3GPP TS 23.003 [2] apply:

VCC Domain Transfer Number (VDN)
VCC Domain Transfer URI (VDI)

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

CN Core Network
DDF Device Description Framework

DM	Device Management
DT	Domain Transfer
IMS	IP Multimedia core network Subsystem
IP	Internet Protocol
MO	Management Object
OMA	Open Mobile Alliance
SC	Service Continuity
SIP	Session Initiation Protocol
ST	Session Transfer
STI	SC Transfer URI
STN	SC Transfer Number
UE	User Equipment
VCC	Voice Call Continuity
VDI	VCC Domain Transfer URI
VDN	VCC Domain Transfer Number

4 Communication Continuity Management Object

The Communication Continuity Management Object is used to manage settings of the UE for communication continuation capabilities. The Management Object covers parameters for communication continuation related capabilities. The Management Object enables the management of the settings on behalf of the end user.

The Communication Continuity MO covers settings of the UE for the following capabilities:

- Voice Call Continuity (VCC) as specified in 3GPP TS 24.206 [3];
- Service Continuity (SC) as specified in 3GPP TS 24.237 [5];
- inter UE transfer as specified in 3GPP TS 24.237 [5].

NOTE: The Communication Continuity MO can be expanded to cover settings of further communication continuity capabilities.

The Management Object Identifier is: urn:oma:mo:ext-3gpp-communication-continuity:1.0.

Protocol compatibility: This MO is compatible with OMA DM 1.2.

The following nodes and leaf objects are possible under the Communication Continuity node:

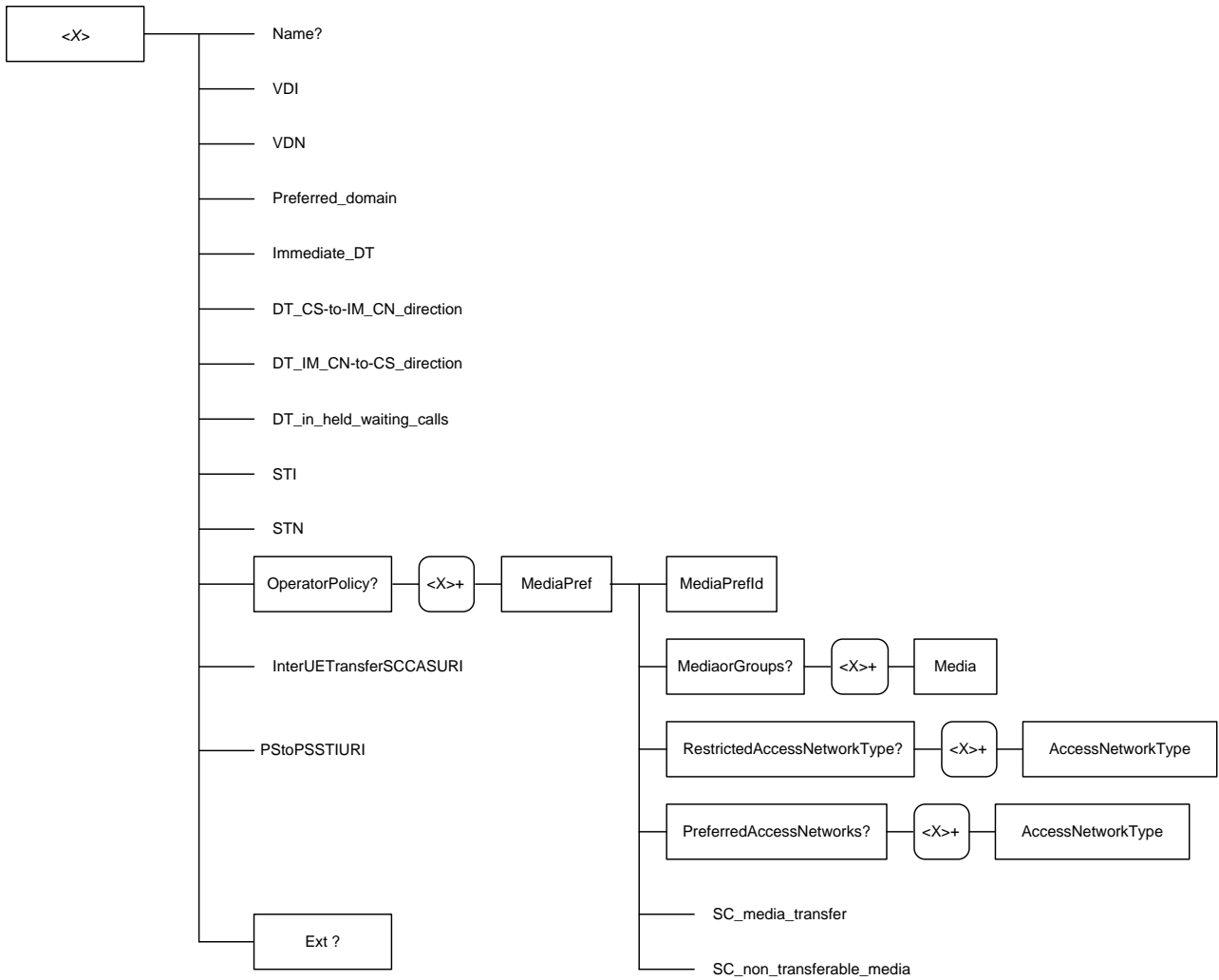


Figure 1: The Communication Continuity Object

5 Management Object parameters

5.1 General

This clause describes the parameters for the Communication Continuity Management Object.

5.2 Node: /<X>

This interior node acts as a placeholder for one or more accounts for a fixed node.

- Occurrence: OneOrMore
- Format: node
- Access Types: Get
- Values: N/A

The interior node is mandatory if the UE supports one or more Communication Continuity capabilities. Support for a UE is defined by the related roles as defined by the related communication continuity service, as listed in clause 4 of this specification.

NOTE: One node is normally used.

5.3 /<X>/Name

The Name leaf is a name for the Communication Continuity settings.

- Occurrence: ZeroOrOne
- Format: chr
- Access Types: Get
- Values: <User displayable name>

5.4 /<X>/VDI/

The VDI leaf is the VCC Transfer URI that the user includes in SIP INVITE requests to initiate domain transfer.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: < A VCC VDI >

The format of the VCC VDI is defined by 3GPP TS 23.003 [2].

EXAMPLE: sip:domain.xfer@dtf1.home1.net

5.5 /<X>/VDN/

The VDN leaf is the VCC Transfer Number that the user includes in a circuit switched call setup to initiate domain transfer.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: < A VCC VDN >

The format of the VCC VDN is defined by 3GPP TS 23.003 [2].

EXAMPLE: +12125555555

5.6 /<X>/Preferred_domain/

The Preferred domain leaf represents the operator's preferred domain for UE originated calls/sessions.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: 0, 1, 2, 3
 - 0 – Indicates the preference for CS domain.
 - 1 – Indicates the preference for IM CN subsystem.

- 2 – Indicates the preference for CS domain only.
- 3 – Indicates the preference for IM CN subsystem only.

5.7 /<X>/Immediate_DT/

The Immediate Domain Transfer leaf indicates whether to initiate a VCC domain transfer immediately to the operator's preferred domain when that domain becomes available. This operator policy only affects ongoing sessions.

- Occurrence: One
 - Format: bool
 - Access Types: Get, Replace
 - Values: 0, 1
- 0 – Indicates the preference to not initiate domain transfer immediately to the preferred domain when that domain becomes available.
- 1 – Indicates the preference to initiate domain transfer immediately to the preferred domain when that domain becomes available.

NOTE 1: If the Immediate Domain Transfer operator policy indicates that the domain transfer is not immediately required then it is up to the VCC UE to decide when to perform the domain transfer if the preferred domain is available.

5.8 /<X>/ DT_CS-to-IM_CN_direction /

The Domain Transfer CS-to-IM CN direction leaf indicates if a VCC domain transfer from CS domain to IMS is restricted.

- Occurrence: One
 - Format: bool
 - Access Types: Get, Replace
 - Values: 0, 1
- 0 – Indicates that the network operator prefers the domain transfer in the CS to IM CN subsystem direction can occur.
- 1 – Indicates that the network operator prefers the domain transfer in the CS to IM CN subsystem direction cannot occur.

5.9 /<X>/ DT_IM_CN-to-CS_direction /

The Domain Transfer IM CN-to-CS direction leaf indicates if a VCC domain transfer from IM CN subsystem to CS domain is restricted.

- Occurrence: One
 - Format: bool
 - Access Types: Get, Replace
 - Values: 0, 1
- 0 – Indicates that the network operator prefers the domain transfer in the IM CN subsystem to CS direction can occur.

- 1 – Indicates that the network operator prefers the domain transfer in the IM CN subsystem to CS direction cannot occur.

5.10 /<X>/DT_in_held_waiting_calls/

The Domain Transfer in held_waiting calls leaf indicates whether a VCC domain transfer is restricted when the VCC UE is engaged in an active and a held/waiting call/session on the transferring-out domain (the restriction doesn't apply in the case the VCC UE is losing coverage in the transferring-out domain). If the operator policy requires restriction in the Domain Transfer in held_waiting calls then the VCC UE should not consider other operator policy for the domain transfer.

- Occurrence: One
- Format: bool
- Access Types: Get, Replace
- Values: 0, 1

0 – Indicates that the network operator prefers the domain transfer can occur when the VCC UE is engaged in an active and a held/waiting call/session on the transferring-out domain.

1 – Indicates that the network operator prefers the domain transfer cannot occur when the VCC UE is engaged in an active and a held/waiting call/session on the transferring-out domain.

5.11 /<X>/STI/

The STI leaf is the SC Transfer URI that the user includes in SIP INVITE requests to initiate session transfer.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: < A SC STI >

The format of the SC STI is defined by 3GPP TS 23.003 [2].

EXAMPLE: sip:domain.xfer@dtf1.home1.net

5.12 /<X>/STN/

The STN leaf is the SC Transfer Number that the user includes in a circuit switched call setup to initiate session transfer.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: < A SC STN >

The format of the SC STN is defined by 3GPP TS 23.003 [2].

EXAMPLE: +12125555555

5.13 /<X>/OperatorPolicy

This interior node indicates the presence of an operator policy list used to allow the session transfer of the media on the specified access networks.

- Occurrence: ZeroOrOne
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.14 /<X>/OperatorPolicy/<X>

This run-time node acts as a placeholder for one or more OperatorPolicy to allow the session transfer of the media on the specified access networks.

- Occurrence: OneOrMore
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.15 /<X>/OperatorPolicy/<X>/MediaPref

This interior node indicates one or more operator media preferences; each preference contains the operator preferences associated to each media or a group of media.

- Occurrence: One
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.16 /<X>/OperatorPolicy/<X>/MediaPref/MediaPrefId

The MediaPrefId leaf is a name for the operator media preference.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: < preference number X >

5.17 /<X>/OperatorPolicy/<X>/MediaPref/MediaorGroups

This interior node indicates one or more media or group of media access networks that are subject to the operator preferences.

- Occurrence: OneOrMore
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.18 /<X>/OperatorPolicy/<X>/MediaPref/MediaorGroups/<X>/

This run-time node acts as a placeholder for one or more media to which the operator preferences are applicable.

- Occurrence: OneOrMore
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.19

`/<X>/OperatorPolicy/<X>/MediaPref/MediaorGroups/<X>/Media`

This leaf indicates the media, for which the operator policy are applicable by the UE with SC capabilities for session transfer

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: one or more of the value coded according to the IETF RFC 4566 [7].

5.20

`/<X>/OperatorPolicy/<X>/MediaPref/RestrictedAccessNetworkType`

The RestrictedAccessNetworkType node indicates one or more restricted access technologies according to the operator preferences related to the session origination and the session transfer of the media on the specified access networks.

- Occurrence: ZeroOrOne
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.21

`/<X>/OperatorPolicy/<X>/MediaPref/RestrictedAccessNetworkType/<X>`

This run-time node acts as a placeholder for one or more access networks, according to the operator preferences to avoid the session origination and the session transfer of the media on the specified access networks.

- Occurrence: OneOrMore
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.22

/<X>/OperatorPolicy/<X>/MediaPref/RestrictedAccessNetworkType /<X>/AccessNetworkType

The AccessNetworkType leaf indicates an access technology that should be avoided if the current rule is active, according to the operator preferences to avoid the session origination and the session transfer of the media on the specified access networks type.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: one of the following values:
 - coded according to the access-type field defined for the P-Access-Network-Info header in 3GPP TS 24.229 [6]; or
 - "CS".

5.23

/<X>/OperatorPolicy/<X>/MediaPref/PreferredAccessNetworks

The PreferredAccessNetworks node indicates one or more preferred access network technologies according to the operator preferences related to the session origination and the session transfer of the media on the specified access networks.

- Occurrence: ZeroOrOne
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.24

/<X>/OperatorPolicy/<X>/MediaPref/PreferredAccessNetworks/<X>

This run-time node acts as a placeholder for one or more access networks, according to the operator policy are preferred for the session origination and the session transfer of the media on the specified access networks.

- Occurrence: OneOrMore
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.25

/<X>/OperatorPolicy/<X>/MediaPref/PreferredAccessNetworks/<X>/AccessNetworkType

The AccessNetworkType leaf indicates an access technology that should be considered preferred if the current rule is active, for the session origination and the session transfer of the media on the specified access networks type.

- Occurrence: One

- Format: chr
- Access Types: Get, Replace
- Values: one of the following values:
 - coded according to the access-type field defined for the P-Access-Network-Info header in 3GPP TS 24.229 [6]; or
 - "CS".

5.26 /<X>/OperatorPolicy/<X>/MediaPref/SC_media_transfer

This leaf provides to the UE the indication whether the media shall/should/may transferred to target access network according to the operator preferences to allow the session transfer of the media on the specified access networks.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: <shall,should,may>

shall– Indicates that the UE shall start session transfer according to the home operator's list of preferred access networks as soon as possible;

should – Indicates that the UE start session transfer according to the home operator's list of preferred access networks, if session transfer is possible and desirable after having taken into account the Local Operating Environment Information;

may - Indicates that the UE is free to decide whether or not to start session transfer in accordance with user preferences (when configured), if session transfer is possible and desirable after having taken into account the Local Operating Environment Information.

5.27 /<X>/OperatorPolicy/<X>/MediaPref/SC_non_transferable_media /

This leaf provides to the UE the indication on the behaviour expected in case of media which cannot be transferred to other Access Networks, according to the operator preferences to allow the session transfer of the media on the specified access networks.

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Values: <keep, drop>

keep– Indicates that the UE will prevent the execution of the media transfer for those media.

drop- Indicates that the UE will perform the media transfer dropping the non transferable media.

5.28 /<X>/InterUETransferSCCASURI/

This leaf contains the inter UE transfer SCC AS URI used in 3GPP TS 24.237 [5].

- Occurrence: One
- Format: chr
- Access Types: Get, Replace

- Value: <A SIP URI>

5.29 /<X>/Ext/

The Ext is an interior node for where the vendor specific information about the Communication Continuity MO is being placed (vendor meaning application vendor, device vendor etc.). Usually the vendor extension is identified by vendor specific name under the ext node. The tree structure under the vendor identified is not defined and can therefore include one or more un-standardized sub-trees.

- Occurrence: ZeroOrOne
- Format: node
- Access Types: Get, Replace
- Values: N/A

5.30 /<X>/PStoPSSTIURI/

This leaf contains the PS to PS STI URI used in 3GPP TS 24.237 [5].

- Occurrence: One
- Format: chr
- Access Types: Get, Replace
- Value: <A SIP URI>

Annex A (informative): Management Object DDF

This DDF is the standardized minimal set. A vendor can define its own DDF for the complete device. This DDF can include more features than this minimal standardized version.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE MgmtTree PUBLIC "-//OMA//DTD-DM-DDF 1.2//EN"
"http://www.openmobilealliance.org/tech/DTD/dm_ddf-v1_2.dtd">
<MgmtTree>
  <VerDTD>1.2</VerDTD>
  <Man>--The device manufacturer--</Man>
  <Mod>--The device model--</Mod>

  <Node>
    <NodeName>Communication_Continuity</NodeName>
    <DFProperties>
      <AccessType>
        <Get/>
      </AccessType>
      <Description>Communication Continuity settings</Description>
      <DFFormat>
        <node/>
      </DFFormat>
      <Occurrence>
        <OneOrMore/>
      </Occurrence>
      <DFTitle>The Communication Continuity Management Object.</DFTitle>
      <DFType>
        <DDFName/>
      </DFType>
    </DFProperties>

    <Node>
      <NodeName>Name</NodeName>
      <DFProperties>
        <AccessType>
          <Get/>
        </AccessType>
        <DFFormat>
          <chr/>
        </DFFormat>
        <Occurrence>
          <ZeroOrOne/>
        </Occurrence>
        <DFTitle>User displayable name for the node.</DFTitle>
        <DFType>
          <MIME>text/plain</MIME>
        </DFType>
      </DFProperties>
    </Node>

    <Node>
      <NodeName>VDI</NodeName>
      <DFProperties>
        <AccessType>
          <Get/>
          <Replace/>
        </AccessType>
        <DFFormat>

```



```

    <chr/>
  </DFFormat>
  <Occurrence>
    <One/>
  </Occurrence>
  <DFTitle>The VCC Transfer URI.</DFTitle>
  <DFType>
    <DDFName/>
  </DFType>
</DFProperties>
</Node>

<Node>
  <NodeName>VDN</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <chr/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <DFTitle>The VCC Transfer Number.</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>
</Node>

<Node>
  <NodeName>Preferred_domain</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <chr/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <DFTitle> Preferred_domain </DFTitle>
    <DFType>
      <MIME>text/plain</MIME>
    </DFType>
  </DFProperties>
</Node>

<Node>
  <NodeName>Immediate_DT</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <bool/>
    </DFFormat>

```

```

    <Occurrence>
      <One/>
    </Occurrence>
    <DFTitle>Immediate_DT</DFTitle>
    <DFType>
      <MIME>text/plain</MIME>
    </DFType>
  </DFProperties>
</Node>

<Node>
  <NodeName>DT_CS-to-IM_CN_direction</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <bool/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <DFTitle> DT_CS-to-IM_CN_direction </DFTitle>
    <DFType>
      <MIME>text/plain</MIME>
    </DFType>
  </DFProperties>
</Node>

<Node>
  <NodeName>DT_IM_CN-to-CS_direction</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <bool/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <DFTitle> DT_IM_CN-to-CS_direction </DFTitle>
    <DFType>
      <MIME>text/plain</MIME>
    </DFType>
  </DFProperties>
</Node>

<Node>
  <NodeName>DT_in_held_waiting_calls</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <bool/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
  </DFProperties>
</Node>

```

```

    </Occurrence>
    <DFTitle>DT_in_held_waiting_calls </DFTitle>
    <DFType>
      <MIME>text/plain</MIME>
    </DFType>
  </DFProperties>
</Node>

```

```

<Node>
  <NodeName>STI</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <chr/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <DFTitle>The SC Transfer URI.</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>
</Node>

```

```

<Node>
  <NodeName>STN</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <chr/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <DFTitle>The SC Transfer Number.</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>
</Node>

```

```

<Node>
  <NodeName>OperatorPolicy</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <node/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
  </DFProperties>
</Node>

```

```

</Occurrence>
<Scope>
  <Permanent/>
</Scope>
<DFTitle>A collection of Operator Policy</DFTitle>
<DFType>
  <DDFName/>
</DFType>
</DFProperties>

<Node>
  <NodeName/>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <node/>
    </DFFormat>
    <Occurrence>
      <OneOrMore/>
    </Occurrence>
    <Scope>
      <Dynamic/>
    </Scope>
    <DFTitle>The "name" node for the MediaPref object.</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>

<Node>
  <NodeName>MediaPref</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <node/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <Scope>
      <Permanent/>
    </Scope>
    <DFTitle>A collection of MediaPreferences</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>

<Node>
  <NodeName>MediaPrefId</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>

```

```

    <chr/>
  </DFFormat>
  <Occurrence>
    <One/>
  </Occurrence>
  <DFTitle>Media Preference Id</DFTitle>
  <DFType>
    <MIME>text/plain</MIME>
  </DFType>
</DFProperties>
</Node>

<Node>
  <NodeName>MediaorGroups</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <node/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <Scope>
      <Permanent/>
    </Scope>
    <DFTitle>A collection of Media or group of media</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>

  <Node>
    <NodeName/>
    <DFProperties>
      <AccessType>
        <Get/>
        <Replace/>
      </AccessType>
      <DFFormat>
        <node/>
      </DFFormat>
      <Occurrence>
        <OneOrMore/>
      </Occurrence>
      <Scope>
        <Dynamic/>
      </Scope>
      <DFTitle> Media</DFTitle>
      <DFType>
        <DDFName/>
      </DFType>
    </DFProperties>

    <Node>
      <NodeName>Media</NodeName>
      <DFProperties>
        <AccessType>
          <Get/>
          <Replace/>
        </AccessType>

```

```

        </AccessType>
        <DFFormat>
            <chr/>
        </DFFormat>
        <Occurrence>
            <One/>
        </Occurrence>
        <Scope>
            <Permanent/>
        </Scope>
        <DFTitle>A collection of Media</DFTitle>
        <DFType>
            <MIME>text/plain</MIME>
        </DFType>
    </DFProperties>
</Node>
</Node>
</Node>

<Node>
    <NodeName>RestrictedAccessNetworkType</NodeName>
    <DFProperties>
        <AccessType>
            <Get/>
            <Replace/>
        </AccessType>
        <DFFormat>
            <node/>
        </DFFormat>
        <Occurrence>
            <One/>
        </Occurrence>
        <Scope>
            <Permanent/>
        </Scope>
        <DFTitle>A collection of Access Network Types</DFTitle>
        <DFType>
            <DDFName/>
        </DFType>
    </DFProperties>

    <Node>
        <NodeName/>
        <DFProperties>
            <AccessType>
                <Get/>
                <Replace/>
            </AccessType>
            <DFFormat>
                <node/>
            </DFFormat>
            <Occurrence>
                <OneOrMore/>
            </Occurrence>
            <Scope>
                <Dynamic/>
            </Scope>
            <DFTitle> Access NetworkType</DFTitle>
            <DFType>
                <DDFName/>
            </DFType>
        </DFProperties>
    </Node>

```

```

<Node>
  <NodeName>AccessNetworkType</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <node/>
    </DFFormat>
    <Occurrence>
      <ZeroOrOne/>
    </Occurrence>
    <Scope>
      <Permanent/>
    </Scope>
    <DFTitle>A collection of access network type</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>
</Node>
</Node>
</Node>

<Node>
  <NodeName>PreferredAccessNetworks</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <node/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <Scope>
      <Permanent/>
    </Scope>
    <DFTitle>A collection of Access Network Types</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>

  <Node>
    <NodeName/>
    <DFProperties>
      <AccessType>
        <Get/>
        <Replace/>
      </AccessType>
      <DFFormat>
        <node/>
      </DFFormat>
      <Occurrence>
        <OneOrMore/>
      </Occurrence>
      <Scope>

```

```

        <Dynamic/>
    </Scope>
    <DFTitle> Access Network Type</DFTitle>
    <DFType>
        <DDFName/>
    </DFType>
</DFProperties>

<Node>
    <NodeName>AccessNetworkType</NodeName>
    <DFProperties>
        <AccessType>
            <Get/>
            <Replace/>
        </AccessType>
        <DFFormat>
            <node/>
        </DFFormat>
        <Occurrence>
            <ZeroOrOne/>
        </Occurrence>
        <Scope>
            <Permanent/>
        </Scope>
        <DFTitle>A collection of access network type</DFTitle>
        <DFType>
            <DDFName/>
        </DFType>
    </DFProperties>
</Node>
</Node>
</Node>

```

```

<Node>
    <NodeName>SC_media_transfer</NodeName>
    <DFProperties>
        <AccessType>
            <Get/>
            <Replace/>
        </AccessType>
        <DFFormat>
            <chr/>
        </DFFormat>
        <Occurrence>
            <One/>
        </Occurrence>
        <DFTitle>SC_media_transfer </DFTitle>
        <DFType>
            <MIME>text/plain</MIME>
        </DFType>
    </DFProperties>
</Node>

```

```

<Node>
    <NodeName>SC_non_transferable_media</NodeName>
    <DFProperties>
        <AccessType>
            <Get/>
            <Replace/>
        </AccessType>

```



```

        <DFFormat>
          <bool/>
        </DFFormat>
      <Occurrence>
        <One/>
      </Occurrence>
    <DFTitle> SC_non_transferable_media </DFTitle>
    <DFType>
      <MIME>text/plain</MIME>
    </DFType>
  </DFProperties>
</Node>
</Node>
</Node>
</Node>

```

```

<Node>
  <NodeName>InterUETransferSCCASURI</NodeName>
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <chr/>
    </DFFormat>
    <Occurrence>
      <One/>
    </Occurrence>
    <DFTitle>the inter UE transfer SCC AS URI</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>
</Node>

```

```

<Node>
  <NodeName>Ext</NodeName>
  <!-- The Extension node starts here. -->
  <DFProperties>
    <AccessType>
      <Get/>
      <Replace/>
    </AccessType>
    <DFFormat>
      <node/>
    </DFFormat>
    <Occurrence>
      <ZeroOrOne/>
    </Occurrence>
    <DFTitle>A collection of all Extension objects.</DFTitle>
    <DFType>
      <DDFName/>
    </DFType>
  </DFProperties>
</Node>

```

```

</Node>

```

```

<Node>

```

```

<NodeName>PStoPSSTIURI</NodeName>
<DFProperties>
  <AccessType>
    <Get/>
    <Replace/>
  </AccessType>
  <DFFormat>
    <chr/>
  </DFFormat>
  <Occurrence>
    <One/>
  </Occurrence>
  <DFTitle>the PS to PS STI URI</DFTitle>
  <DFType>
    <DDFName/>
  </DFType>
</DFProperties>
</Node>

</MgmtTree>

```

Annex B (informative): Change history

Change history								
Date	TSG #	TSG Doc.	CR	Rev	Subject/Comment	Old	New	WG doc
2007-01					Version 0.0.0: Preliminary proposal		0.0.0	
2007-01					Version 0.0.1: Version after CT1#45	0.0.0	0.0.1	
2007-02					Version 2.0.0: Editor introduced TS number, sent to TSG CT 35 for information and approval	0.0.1	1.0.0	
2007-03					Version 1.0.0 approved by CT#35 in CP-070128 and version 7.0.0 created by MCC	1.0.0	7.0.0	
2007-06	CT#36	CP-070377	0001	1	Corrections to parameters in 24.216	7.0.0	7.1.0	C1-070942
2007-06	CT#36	CP-070377	0002	1	Introduction of operator policies	7.0.0	7.1.0	C1-071341
2007-09	CT-37	CP-070593	0003		Editorial modification of the CC object	7.1.0	7.2.0	C1-071541
2008-12	CT-42	CP-080874	0008		CC MO URN	7.2.0	7.3.0	C1-085083
2008-12	CT-42	CP-080968	0009		Introduction of STI, STN in SC MO and IMS SC Operator Policy coding	7.3.0	8.0.0	
2008-12	CT-42				Editorial cleanup by MCC	7.3.0	8.0.0	
2009-03	CT-43	CP-090119	0011	1	MO syntax correction	8.0.0	8.1.0	C1-091022
2009-03	CT-43	CP-090147	0012	1	IMS SC Operator Policy coding	8.0.0	8.1.0	C1-090917
2009-03	CT-43	CP-090119	0014		MO DDF XML bug fix	8.0.0	8.1.0	C1-090291
2009-09	CT-45	CP-090669	0016	2	Alignment with stage 2	8.1.0	8.2.0	C1-093020
2009-12	CT-46				Upgrade to Rel-9	8.2.0	9.0.0	
2010-03	CT-47	CP-100142	0019		Inter UE Transfer SCC AS URI	9.0.0	9.1.0	C1-100706
2010-06	CT-48	CP-100344	0021	1	Update scope of TS to correctly cover functionality specified.	9.1.0	9.2.0	C1-101898
2010-09	CT-49	CP-100493	0023	1	Correcting DDF and Description of Communication Continuity MO	9.2.0	9.3.0	C1-102698
2010-09	CT-49	CP-100519	0029	2	Insertion of missing requirement to prohibit PS-CS continuity	9.3.0	10.0.0	C1-103505
2012-09	CT-57				Upgrade to Rel-11	10.0.0	11.0.0	
2012-12	CT-58	CP-120793	0030	1	PS to PS STI URI configuration	11.0.0	11.1.0	C1-124870