PoC Interworking Service

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Open Mobile Alliance

OMA-TS-PoC_Interworking_Service-V2_0-20080226-C

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1. Scope

The present document provides the PoC Service Interworking specification by means of endorsement of the OMA-TS-POC-ControlPlane-V2 “OMA PoC Control Plane”, OMA-TS-POC-UserPlane-V2 “OMA PoC User Plane” and OMA-TS-XDM_Core-V2 “XML Document Management (XDM) Specification” and documentation of applicability and exception thereof in line with the requirements for PoC Interworking Service [OMA-POC-RD].

The present document is applicable to the PoC Interworking Function and PoC Interworking Agent providing PoC Interworking Service functionality.

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2. References

2.1 Normative References

[OMA-POC-AD] "Push to talk over Cellular (PoC) – Architecture", Version 2.0, Open Mobile Alliance™, OMA-AD-PoC-V2_0,
URL: http://www.openmobilealliance.org/

[OMA-POC-CP] "OMA PoC Control Plane", Version 2.0, Open Mobile Alliance™, OMA-TS-PoC_ControlPlane-V2_0,
URL: http://www.openmobilealliance.org/

[OMA-POC-RD] "Push to talk over Cellular 2 Requirements", Version 2.0, Open Mobile Alliance™, OMA-RD-PoC-V2_0,
URL: http://www.openmobilealliance.org/

[OMA-POC-SD] "OMA PoC System Description", Version 2.0, Open Mobile Alliance™, OMA-TS-PoC_System_Description-V2_0,
URL: http://www.openmobilealliance.org/

[OMA-POC-UP] "PoC User Plane", Version 2.0, Open Mobile Alliance™, OMA-TS-PoC_UserPlane-V2_0,
URL: http://www.openmobilealliance.org/

[RFC3489bis] IETF draft-ietf-behave-rfc3489bis (August 2007), "Session Traversal Utilities for (NAT) (STUN)", URL: http://www.ietf.org/internet-drafts/draft-ietf-behave-rfc3489bis-13.txt

NOTE: The referenced IETF draft is a work in progress.

[RFC4145] IETF RFC 4145 (September 2005), "TCP-Based Media Transport in the Session Description Protocol (SDP)",
URL: http://www.ietf.org/rfc/rfc4145.txt

[XDMSPEC] "XML Document Management (XDM) Specification", Version 2.0, Open Mobile Alliance™, OMA-TS-XDM_CORE-V2_0,
URL: http://www.openmobilealliance.org/

2.2 Informative References

None

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3. Terminology and Conventions

3.1 Conventions

The key words “MUST”, “MUST NOT”, “REQUIRED”, “SHALL”, “SHALL NOT”, “SHOULD”, “SHOULD NOT”, “RECOMMENDED”, “MAY”, and “OPTIONAL” in this document are to be interpreted as described in [RFC2119].

All sections and appendixes, except “Scope” and “Introduction”, are normative, unless they are explicitly indicated to be informative.

3.2 Definitions

For the purposes of the present document, beyond the terms and definitions in the endorsed specifications [OMA-POC-CP], [OMA-POC-UP], [XDMSPEC] the following terms and definitions from [OMA-POC-AD] and [OMA-POC-SD] apply:

External P2T Networks	Private or public circuit switched or packet switched network that provide push to talk services similar to PoC services.
P2T Address	A P2T Address identifying a P2T User. The P2T Address can be used by PoC Users to communicate with P2T Users. The P2T Address used in a PoC Network points to the PoC Interworking Agent of the P2T User in the PoC Interworking service.
P2T User	A P2T User is a user of the P2T service provided by an External P2T Network.
PoC Interworking Agent	Abstract entity implemented in the PoC Interworking Function, acting as a PoC Client on behalf of a PoC Remote Access User or a P2T User.
PoC Interworking Function	Part of the PoC Interworking Service, it provides conversion between PoC Network based SIP signalling, Talk Burst Control and Media Burst Control Protocol, and Media packet transport, and External P2T Network based session signaling, floor control, and Media transport protocol.
PoC Interworking Service	A means to extend the PoC User experience beyond the OMA defined PoC service and PoC Network boundaries, accomplished by interworking with other networks and systems, while not PoC compliant, being able to provide a reasonably comparable capability, involving simplex Media based conferencing.
PoC Remote Access	A method of providing a compliant PoC User access to a SIP/IP Core and PoC Network via an potentially non-SIP/IP based network.
PoC Remote Access User	A user of the PoC service accessing the service potentially via a non IMS enabled SIP/IP based network, not necessarily using a PoC Client (e.g. a PoC User, with a valid subscription, accessing PoC services via a PSTN terminal).
Push To Talk Service (P2T)	Non OMA PoC “walkie-talkie” service.

3.3 Abbreviations

NAT	Network Address Translation
OMA	Open Mobile Alliance
P2T	Push To Talk
PoC	Push to talk over Cellular
XDM	XML Document Management
XML	Extensible Markup Language

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4. Introduction

PoC Interworking Service supports three different topologies based on the following basic usage scenarios:

1. P2T Users participate in the PoC Session and PoC Session control is in the PoC Network;
2. PoC Users participate in the PoC Session and PoC Session control is in the P2T Network; and
3. PoC Remote Access User(s) participates in the PoC Session.

In support of usage scenario 1 the PoC Interworking Function performs the Participating PoC Function as shown in Figure 1

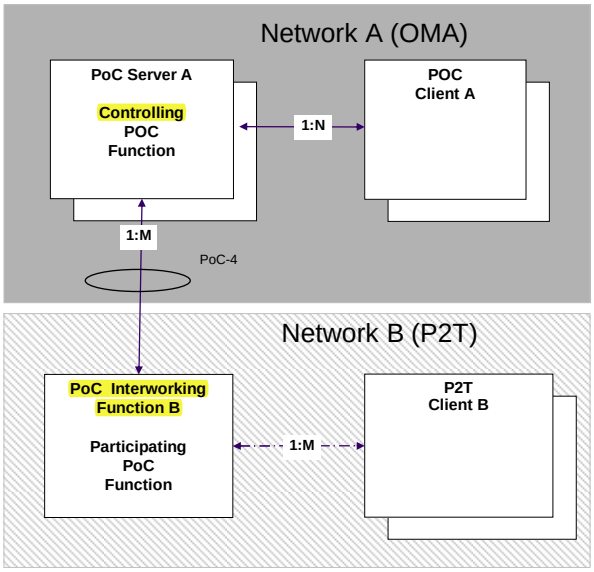

Figure 1: Usage scenario 1 with PoC Interworking Function performing the Participating PoC Function.

The rule to be applied to the endorsed specifications in support usage scenario 1 is a general replacement of the "PoC Server performing the Participating PoC Function" with the "PoC Interworking Function performing the Participating PoC Function".

In support of usage scenario 2 the PoC Interworking Function performs the Controlling PoC Function as shown in Figure 2.

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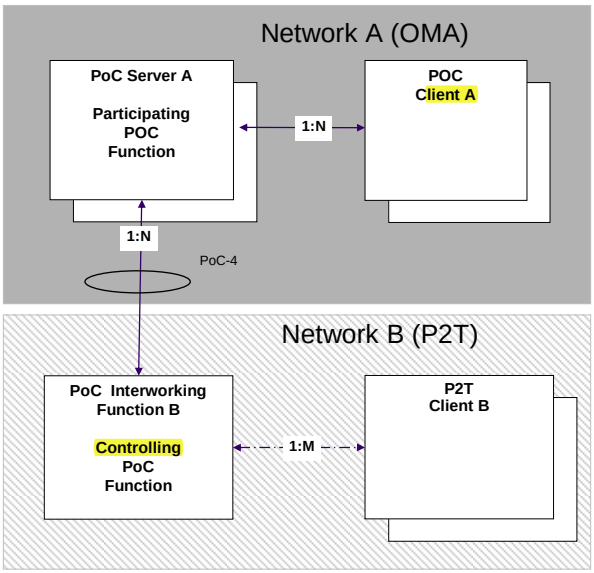

Figure 2: Usage scenario 2 with PoC Interworking Function performing the Controlling PoC Function.

The rule to be applied to the endorsed specifications in support usage scenario 2 is a general replacement of the "PoC Server performing the Controlling PoC Function" with the "PoC Interworking Function performing the Controlling PoC Function".

In support of usage scenario 3 the PoC Interworking Agent is used to connect to the PoC Server performing the Participating PoC Function as shown in Figure 3

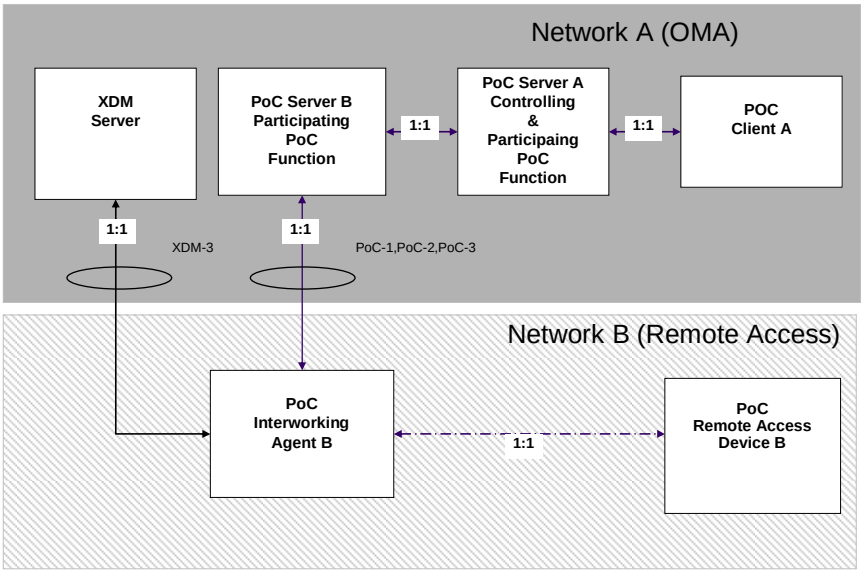

Figure 3: Usage scenario 3 with PoC Interworking Agent supporting PoC Remote Access.

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The PoC Interworking Agent behaves towards the PoC Network A like a PoC Client and XDM Client. The rule to be applied to the endorsed specifications in support usage scenario 3 is a general replacement of the “PoC Client” and “XDM Client” with the “PoC Interworking Agent”.

The document is structured in the following way:

Clause 5: "*Endorsement of OMA PoC Control Plane*" contains the endorsement of [OMA-POC-CP] document.

Clause 6: "*Endorsement of OMA PoC User Plane*" contains the endorsement of [OMA-POC-UP] document.

Clause 7: "*Endorsement of XML Document Management (XDM) Specification*" contains the endorsement of [XDMSPEC] document.

Appendix A: "*Change History*" describes the document version history.

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5. Endorsement of OMA PoC Control Plane

This clause provides an endorsement of "*OMA PoC Control Plane*" [OMA-POC-CP].

The elements of "*OMA PoC Control Plane*" [OMA-POC-CP] apply, with the following qualifications:

The following rules are valid through the whole document.

Apply the general statements referring to the PoC Client also for the PoC Interworking Agent.

Apply the general statements referring to the PoC Server also for the PoC Interworking Function.

In order to support usage scenario 1 as described in clause 4 "*Introduction*" in the present document replace "PoC Server performing the Participating PoC Function" with "PoC Interworking Function performing the Participating PoC Function" in all requirements.

In order to support usage scenario 2 as described in clause 4 "*Introduction*" in the present document replace "PoC Server performing the Controlling PoC Function" with "PoC Interworking Function performing the Controlling PoC Function" in all requirements.

In order to support usage scenario 3 as described in clause 4 "*Introduction*" in the present document replace "PoC Client" with PoC Interworking Agent"

Apply the the statements referring to PoC Users also for P2T Users and PoC Remote Access Users.

Clause 1 "*Scope*" in [OMA-POC-CP] does not apply and is replaced by the clause 1 "*Scope*" in the present document.

Clause 2 "*References*" in [OMA-POC-CP] apply with modifications.

The references listed below are replaced by references applicable to PoC Interworking Service.

Reference no.	**OMA-TS-POC-ControlPlane-V2 [OMA-POC-CP]**	**Applicable reference is this document**
[OMA-PoC-UP]	OMA Push to talk over Cellular (PoC) – User Plane	This document.
[XDMSPEC]	XML Document Management (XDM) Specification.	This document.

Clause 3 "*Terminology and Conventions*" in [OMA-POC-CP] applies with the additions in the clause 3 "*Terminology and Conventions*" in this document.

Clause 4 "*Introduction*" in [OMA-POC-CP] applies.

Clause 5 "*Common procedures*" in [OMA-POC-CP] applies with following modifications:

- Subclauses related to Signalling Compression: 5.3 do not apply, and the text in each subclause is replaced with the following note:

NOTE: The use of Signalling Compression is not a requirement for the PoC Interworking Service. The use of the Signalling Compression within the PoC Network is not visible at the open interface to the PoC Interworking Service.

- Subclause 5.6. applies with following exceptions:
- Warning Header Codes related to Pre-established sessions, Simultaneous PoC Sessions and PoC Box features are not supported.

Clause 6 "*Procedures at the PoC Client*" in [OMA-POC-CP] applies with modifications and following exceptions:

- For usage scenario 3 sub-clause 6.1.3.1, 6.1.8, 6.1.9, 6.1.10, 6.2.11 apply with following addition:

The PoC Interworking Agent SHALL add the PoC feature tag '+g.poc.interworking' to the Contact header of all initial SIP requests;

- Subclauses related to Pre-established Session: 6.1.3.2, 6.1.5.2, 6.1.6.2, 6.2.3.2 do not apply and the text in each subclause is replaced with the following note:

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NOTE: The use of the Pre-established Session feature is not a requirement for the PoC Interworking Service. The use of the Pre-established Session within the PoC Network is not visible at the open interface to the PoC Interworking Service.

- Subclauses related to Simultaneous PoC Sessions: 6.1.12, 6.2.7 do not apply and the text in each subclause is replaced with the following note:

NOTE: The use of the Simultaneous PoC Sessions feature is not a requirement for the PoC Interworking Service. The use of the Simultaneous PoC Sessions feature within the PoC Network is not visible at the open interface to the PoC Interworking Service. The Simultaneous PoC Sessions feature can be used on behalf of a PoC Remote Access User if supported by the corresponding PoC Client.

Clause 7 "*Procedures at the PoC Server*" in [OMA-POC-CP] applies with following exceptions and modifications:

- For usage scenario 2 sub-clauses 7.2.1.1, 7.2.1.2, apply with following addition:

When generating a SIP response the PoC Interworking Function SHALL add the PoC feature tag '+g.poc.interworking' to the Contact header.

- For usage scenario 2 sub-clauses 7.2.1.11.2 apply with following addition:

When generating a SIP NOTIFY request the PoC Interworking Function SHALL add the PoC feature tag '+g.poc.interworking' to the Contact header.

- For usage scenario 2 sub-clauses 7.2.1.12, 7.2.2.6, 7.2.2.7 apply with following addition:

When generating a SIP reponse or a SIP MESSAGE the PoC Interworking Function SHALL add the PoC feature tag '+g.poc.interworking' to the Contact header.

- For usage scenario 1 sub-clauses 7.3.1.1, 7.2.1.2, apply with following addition:

When generating/forwarding a SIP request/response the PoC Interworking Function SHALL add the PoC feature tag '+g.poc.interworking' to the Contact header

- For usage scenario 1 sub-clauses 7.3.1.7 apply with following addition:

When forwarding a SIP SUBSCRIBE request the PoC Interworking Function SHALL add the PoC feature tag '+g.poc.interworking' to the Contact header.

- For usage scenario 1 sub-clauses 7.3.1.11 apply with following addition:

When generating/forwarding a SIP MESSAGE the PoC Interworking Function SHALL add the PoC feature tag '+g.poc.interworking' to the Contact header.

- For usage scenario 1 sub-clauses 7.3.2.4 apply with following addition:

When forwarding a SIP NOTIFY request the PoC Interworking Function SHALL add PoC feature tag '+g.poc.interworking' to the Contact header.

- For usage scenario 1 sub-clauses 7.3.2.7, 7.3.2.8, 7.4.1.1 apply with following addition:

When forwarding a SIP MESSAGE the PoC Interworking Function SHALL add the PoC feature tag '+g.poc.interworking' to the Contact header.

- For usage scenario 1 sub-clause 7.3.3.1 applies with following addition:

When generating a SIP SUBSCRIBE the PoC Interworking Function SHALL add PoC feature tag '+g.poc.interworking' to the Contact header.

- Subclauses related to Pre-established Session: 7.3.1.2, 7.3.1.3, 7.3.1.5, 7.3.1.10.2, 7.3.2.2.2, 7.3.2.6.2, 7.3.2.6.3 do not apply and the text in each subclause is replaced with the following notes:

NOTE: The use of the Pre-established Session feature is not a requirement for the PoC Interworking Service. The use of the Pre-established Session within the PoC Network is not visible at the open interface to the PoC Interworking Service.

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- Subclauses related to Simultaneous PoC Sessions: 7.3.1.12 does not apply and the text in each subclause is replaced with the following note:

NOTE: The use of the Simultaneous PoC Sessions feature is not a requirement for the PoC Interworking Service. The use of the Simultaneous PoC Sessions feature within the PoC Network is not visible at the open interface to the PoC Interworking Service. The Simultaneous PoC Sessions feature can be used on behalf of a PoC Remote Access User if supported by the corresponding PoC Client.

Subclause 8 "*PoC Box*" in [OMA-POC-CP] does not apply and the text in each subclause is replaced with the following note:

NOTE: The use of the PoC Box feature is not a requirement for the PoC Interworking Service. The use of the PoC Box feature within the PoC Network is not visible at the open interface to the PoC Interworking Service.

Appendix A "*Static Conformance Requirements (SCR)*" in [OMA-POC-CP] applies with following modifications:

Replace SCR Item Names "POC_CP -XXX-Y-NNN-Z" with POC_CPIW -XXX-Y-NNN-O"

Delete SCR Items referring to clauses related to Pre-established Sessions 6.1.3.2, 6.1.5.2, 6.1.6.2, 6.2.3.2, 7.3.1.2, 7.3.1.3, 7.3.1.5, 7.3.1.10.2, 7.3.2.2.2, 7.3.2.6.2, 7.3.2.6.3 and Simultaneous PoC Sessions 6.1.12, 7.3.1.12

Appendix B "*The parameters to be provisioned for PoC service*" in [OMA-POC-CP] applies with following exceptions:

Following PoC Service parameters do not apply:

- Pre-established Session support
- Support for Simultaneous PoC Sessions

Appendix C: "*Presence Information Elements and Procedures*" in [OMA-POC-CP] applies.

Appendix D: "*Initial Filter Criteria*" in [OMA-POC-CP] does not apply.

Appendix E: "*Documentation of SIP, SDP and XML extensions"* in [OMA-POC-CP] applies. Appendix F: "*Examples of Signalling Flows*" in [OMA-POC-CP] applies with following exceptions and modifications:

- Subclauses related to Pre-established Session: F.2 and F.3 do not apply and the text in each subclause is replaced with the following notes:

NOTE: The use of the Pre-established Session feature is not a requirement for the PoC Interworking Service. The use of the Pre-established Session within the PoC Network is not visible at the open interface to the PoC Interworking Service.

- Subclauses related to Simultaneous PoC Sessions: F.10 does not apply and the text in each subclause is replaced with the following note:

NOTE: The use of the Simultaneous PoC Sessions feature is not a requirement for the PoC Interworking Service. The use of the Simultaneous PoC Sessions feature within the PoC Network is not visible at the open interface to the PoC Interworking Service. The Simultaneous PoC Sessions feature can be used on behalf of a PoC Remote Access User if supported by the corresponding PoC Client.

- In support of usage scenario 1 replace the "PoC Server performing the Participating PoC Function" with the "PoC Interworking Function performing the Participating PoC Function" and the respective "PoC Client" with "P2T Client" in the signalling flows.

- In support of usage scenario 2 replace the "PoC Server performing the Controlling PoC Function" with the "PoC Interworking Function performing the Controlling PoC Function" and of the "PoC Client" in the controlling network with "P2T Client" in the signalling flows.

- In support of usage scenario 3 replace the "PoC Client" with the "PoC Interworking Agent" for the PoC Remote Access User in the signalling flows.

Appendix G: "*Change History*" in [OMA-POC-CP] does not apply.

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6. Endorsement of OMA PoC User Plane

This clause provides and endorsement of "*OMA PoC User Plane*" [OMA-POC-UP].

The elements of "*OMA PoC User Plane*" [OMA-POC-UP] apply, with the following qualifications:

The following rules are valid through the whole document.

Apply the general statements referring to the PoC Client also for the PoC Interworking Agent.

Apply the general statements referring to the PoC Server also for the PoC Interworking Function.

In order to support usage scenario 1 as described in clause 4 "*Introduction*" in the present document replace "PoC Server performing the Participating PoC Function" with "PoC Interworking Function performing the Participating PoC Function" in all requirements.

In order to support usage scenario 2 as described in clause 4 "*Introduction*" in the present document replace "PoC Server performing the Controlling PoC Function" with "PoC Interworking Function performing the Controlling PoC Function" in all requirements.

In order to support usage scenario 3 as described in clause 4 "*Introduction*" in the present document replace "PoC Client" with "PoC Interworking Agent"

Apply the the statements referring to PoC Users also for P2T Users and PoC Remote Access Users.

Clause 1 "*Scope*" in [OMA-POC-UP] does not apply and is replaced by the clause 1 "Scope" in the present document.

Clause 2 "*References*" in [OMA-POC-UP] apply with modifications.

The references listed below are replaced by references applicable to PoC Interworking Service.

Reference no.	**OMA-TS-POC-UserPlane-V2 [OMA-POC-UP]**	**Applicable reference is this document**
[OMA-PoC-CP]	OMA Push to talk over Cellular (PoC) – Control Plane	This document.
[XDMSPEC]	XML Document Management (XDM) Specification.	This document.

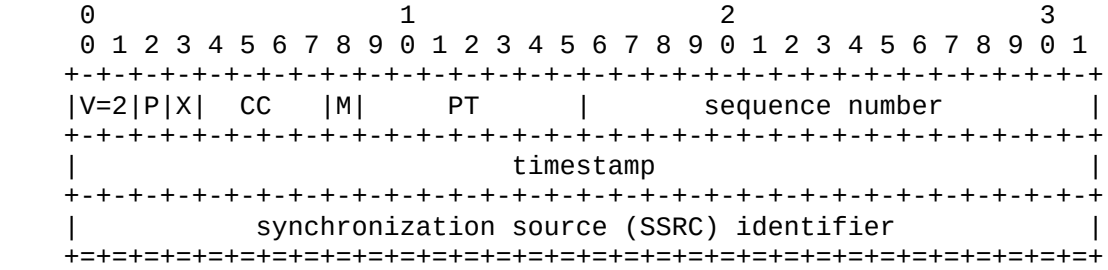
Clause 3 "*Terminology and Conventions*" in [OMA-POC-UP] applies with the additions in the clause 3 "*Terminology and Conventions*" in this document.

Clause 4 "*Introduction*" in [OMA-POC-UP] applies.

Clause 5 "*Transport*" in [OMA-POC-UP] applies with the following additions:

- Add at the end of the subclause 5.3 "*RTP*":

  The Interworking Agent SHALL remove RTP Media packets received from the PoC Client when only the following fields are included:



- Add at the end of the subclause 5.4 "*RTCP*":

  NOTE: The Interworking Agent discards any RTP Media packets received from the PoC Client for keeping the RTCP session binding through NATs on the RTCP port open.

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- Add at the end of the subclause 5.5 "*MSRP*" the following:

  The Interworking Agent needs to support a method for NAT traversal (e.g. [RFC 4145], [RFC 3489bis], etc) if connecting PoC Clients on an IP Network behind a NAT.

Clause 6 "*Media Burst Control*" in [OMA-POC-UP] applies with following exceptions:

- Subclauses related to Pre-established Session: 6.2.2, 6.2.4, 6.2.6, 6.3.4, 6.3.6 do not apply and the text in each subclause is replaced with the following notes:

NOTE: The use of the Pre-established Session feature is not a requirement for the PoC Interworking Service. The use of the Pre-established Session within the PoC Network is not visible at the open interface to the PoC Interworking Service.

- Subclauses related to Simultaneous PoC Sessions: 6.2.7, 6.2.8, 6.3.7, 6.3.8 do not apply and the text in each subclause is replaced with the following notes:

NOTE: The use of the Simultaneous PoC Sessions feature is not a requirement for the PoC Interworking Service. The use of the Simultaneous PoC Sessions feature within the PoC Network is not visible at the open interface to the PoC Interworking Service. The Simultaneous PoC Sessions feature can be used on behalf of a PoC Remote Access User if supported by the corresponding PoC Client.

- Subclauses related to queuing of Media Burst requests: 6.2.9, 6.5.10, 6.5.11 do not apply and the text in each subclause is replaced with the following notes:

NOTE: The use of the queuing of Media Burst requests is not a requirement for the PoC Interworking Service. The use of queuing of Media Burst requests within the PoC Network is transparent for the PoC Interworking Service. Queuing of Media Burst requests can be used on behalf of a PoC Remote Access User if supported by the corresponding PoC Client.

- Subclauses related to PoC Box: 6.6, 6.7 do not apply and the text in each subclause is replaced with the following note:

NOTE: PoC Box functionality is not a requirement for the PoC Interworking Service. The PoC Box functionality can be used on behalf of a PoC Remote Access User if supported by the corresponding PoC Client.

Clause 7 "*Media Control*" in [OMA-POC-UP] applies with following exceptions:

- Subclauses related to Pre-established Session: 7.6 do not apply and the text in each subclause is replaced with the following note:

NOTE: The use of the Pre-established Session feature is not a requirement for the PoC Interworking Service. The use of the Pre-established Session within the PoC Network is not visible at the open interface to the PoC Interworking Service.

- Subclauses related to Simultaneous PoC Sessions: 7.5 do not apply and the text in each subclause is replaced with the following note:

NOTE: The use of the Simultaneous PoC Sessions feature is not a requirement for the PoC Interworking Service. The use of the Simultaneous PoC Sessions feature within the PoC Network is not visible at the open interface to the PoC Interworking Service. The Simultaneous PoC Sessions feature can be used on behalf of a PoC Remote Access User if supported by the corresponding PoC Client.

Clause 8 "*Talker Identification*" in [OMA-POC-UP] applies.

Clause 9 "*Timers*" in [OMA-POC-UP] applies with following exceptions and modifications:

- Timer T14 related to the Simultaneous PoC Sessions in table 15 of clause 9.2 does not apply.

Appendix A "*Change History*" in [OMA-POC-UP] does not apply.

Appendix B "*Static Conformance Requirements (SCR)*" in [OMA-POC-UP] applies with following exceptions and modifications:

Replace SCR Item Names "POC_UP-XXX-Y-NNN-Z" with POC_UPIW-XXX-Y-NNN-O"

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Delete SCR Items referring to clauses related to Pre-established Sessions: 6.2.2, 6.2.4, 6.2.6, 6.3.4, 6.3.6, 7.6, Simultaneous PoC Sessions: 6.2.7, 6.2.8, 6.3.7, 6.3.8, 7.5 and queuing of Media Burst requests: 6.2.9, 6.5.10, 6.5.11.

Appendix C "*Message Flows*" in [OMA-POC-UP] applies with following exceptions and modifications:

Subclauses related to Pre-established Session: B.1.1.2, B.1.1.5, B.1.3.2 and B.8 do not apply and the text in each subclause is replaced with the following note:

NOTE: The use of the Pre-established Session feature is not a requirement for the PoC Interworking Service. The use of the Pre-established Session within the PoC Network is not visible at the open interface to the PoC Interworking Service.

- In support of usage scenario 1 replace the "PoC Server performing the Participating PoC Function" with the "PoC Interworking Function performing the Participating PoC Function" and the respective "PoC Client" with "P2T Client" in the message flows.
- In support of usage scenario 2 replace the "PoC Server performing the Controlling PoC Function" with the "PoC Interworking Function performing the Controlling PoC Function" and of the "PoC Client" in the controlling network with "P2T Client" in the message flows.
- In support of usage scenario 3 replace the "PoC Client" with the "PoC Interworking Agent" for the PoC Remote Access User in the message flows.

Appendix D "*RTP Session Description Parameters*" in [OMA-POC-UP] applies.

Appendix E "*Documentation of XML Extensions*" in [OMA-POC-UP] applies.

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7. Endorsement of XML Document Management (XDM) Specification

This clause provides and endorsement of "*XML Document Management (XDM) Specification"* [XDMSPEC].

The elements of "*XML Document Management (XDM) Specification*" [XDMSPEC] apply, with the following modifications:

The following rules are valid through the whole document.

Apply the general statements referring to the Enabler Specific Server and Application Server also for the PoC Interworking Function.

Apply the the statements referring to Users also for PoC Remote Access Users.

In order to support usage scenario 3 as described in clause 4 "*Introduction*" in the present document replace "XDM Client" with "PoC Interworking Agent"

Clause 1 "*Scope*" in "XML Document Management (XDM) Specification" [XDMSPEC] does not apply and is replaced by the clause 1 "*Scope*" in the present document.

Clause 2 "*References*" in "XML Document Management (XDM) Specification" [XDMSPEC] apply with modifications.

The references listed below are replaced by references applicable to PoC Interworking Service.

Reference no.	**XML Document Management (XDM) Specification [XDMSPEC]**	**Applicable reference is this document**
[OMA-PoC-CP]	OMA Push to talk over Cellular (PoC) – Control Plane	This document.
[OMA-POC-UP]	OMA Push to talk over Cellular (PoC) – User Plane	This document.

Clause 3 "*Terminology and Conventions*" [XDMSPEC] applies with the additions in the clause 3 "*Terminology and Conventions*" in this document.

Clause 4 "*Introduction*" in [XDMSPEC] applies.

Clause 5 "*Common Procedures*" in [XDMSPEC] applies.

Clause 6 "*Description of Procedures at XDM Functional Entities*" in [XDMSPEC] applies.

Appendix A "*Change History*" in [XDMSPEC] does not apply.

Appendix B "*Static Conformance Requirements (SCR)*" in [XDMSPEC] applies with following exceptions and modifications:

Replace SCR Item Names "XDM_Core-XXX-Y-NNN-Z" with XDM_CoreIW-XXX-Y-NNN-O"

Delete SCR Items referring to clauses related to XDM Server: B.5, Aggregation Proxy: B.3, Search Proxy: B.4 and Aggregation Proxy of Remote Network: B.5.

Appendix C "*Examples*" in [XDMSPEC] applies.

Appendix D "*XDMC Provisioning*" in [XDMSPEC] applies.

Appendix E "*OMA specific extensions to HTTP entity header fields*" in [XDMSPEC] applies.

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Appendix A. Change History (Informative)

A.1 Approved Version History

Reference	Date	Description
n/a	n/a	No prior version

A.2 Draft/Candidate Version 2.0 History

Document Identifier	Date	Sections	Description
Draft versions: OMA-TS-PoC_Interworking_Service-V2_0	11 Sep 2006	n/a	Initial document to address the basic starting point
	16 Oct 2006	All	Updated with agreed CR OMA-POC-PoCv2-2006-1027R01
	24 Nov 2006	All	Updated with agreed CR OMA-POC-PoCv2-2006-1086R01
	06 Dec 2006	All	Updated with agreed CR OMA-POC-PoCv2-2006-1142R01
	19 Dec 2006	All	Updated with agreed CRs OMA-POC-POCv2-2006-1302 OMA-POC-PoCv2-2006-1401R02 OMA-POC-PoCv2-2006-1484
	21 Dec 2006	All	History box reformated Fonts corrected
	20 Feb 2007	All	Updated with agreed CRs OMA-POC-POCv2-2007-103R01 OMA-POC-PoCv2-2007-139R01 OMA-POC-PoCv2-2007-140R01 OMA-POC-PoCv2-2007-141R01 OMA-POC-PoCv2-2007-143R01 OMA-POC-PoCv2-2007-145
	30 Mar 2007	All	Updated with agreed CR OMA-POC-PoCv2-2007-137R03
	30 Apr 2007	All	Updated with agreed CR OMA-POC-PoCv2-2007-536R01
	22 Jun 2007	All	Updated with agreed CR OMA-POC-PoCv2-2007-698R01 OMA-POC-PoCv2-2007-888R02 OMA-POC-PoCv2-2007-957
	13 Aug 2007	All	Updated with agreed CR OMA-POC-PoCv2-2007-1065R01 OMA-POC-PoCv2-2007-1054
Candidate version: OMA-TS-PoC_Interworking_Service-V2_0	02 Oct 2007	All	Status changed to Candidate by TP TP ref # OMA-TP-2007-0343R01-INP_POC_V2_0_ERP_for_Candidate_Approval General editorial clean-up of styles for publication.
Draft version: OMA-TS-PoC_Interworking_Service-V2_0	20 Dec 2007	2.1, 6	Inclusion of CR: OMA-POC-POCv2-2007-1163R01
Candidate version: OMA-TS-PoC_Interworking_Service-V2_0	26 Feb 2008	n/a	Status changed to Candidate by TP TP ref # OMA-TP-2008-0098-INP_Push_to_talk_over_Cellular_V2_0_ERP_for_Notification

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