



Enabler Release Definition for Push to Communicate for Public Safety (PCPS)

Candidate Version 1.0 – 20 Feb 2015

Open Mobile Alliance
OMA-ERELD-PCPS-V1_0-20150220-C

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1. Scope

The scope of this document is given by the Enabler Release Definition of Push to Communicate for Public Safety (PCPS) enabler according to OMA Release process and the Enabler Release specification baseline listed in section 5.

The PCPS Enabler defines a service-level framework providing a standardized way to support Push-to-Talk services. This framework supports both the commercial push to talk services as well as the mission critical push to talk service for public safety envisioned in a later release.

The scope of the enabler covers all the requirements defined in OMA PoC V1.0, V2.0 and V2.1.

2. References

2.1 Normative References

- [PCPS_Document_Mgmt] “Push to Communicate for Public Safety Document Management”, Version 1.0, Open MobileAlliance™, OMA-PCPS-TS-Document_Management-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PCPS_AD] “Push to Communicate for Public Safety Requirements”, Version 1.0, Open Mobile Alliance™, OMA-AD-PCPS-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PCPS_CP] “Push to Communicate for Public Safety Control Plane”, Version 1.0, Open Mobile Alliance™, OMA-PCPS-TS-Control_Plane-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PCPS_IM] “Push to Communicate for Public Safety Endorsement of OMA IM”, Version 1.0, Open Mobile Alliance™, OMA-PCPS-TS-Endorsement_OMA_IM-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PCPS_INV] “Push to Communicate for Public Safety Invocation Descriptor”, Version 1.0, Open Mobile Alliance™, OMA-PCPS-TS-Invocation_Descriptor-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PCPS_IWF] “Push to Communicate for Public Safety Interworking Service”, Version 1.0, Open Mobile Alliance™, OMA-PCPS-TS-Interworking_Service-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PCPS_MC] “Push to Communicate for Public Safety Multicast”, Version 1.0, Open Mobile Alliance™, OMA-PCPS-TS-Multicast-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PCPS_RD] “Push to Communicate for Public Safety Requirements”, Version 1.0, Open Mobile Alliance™, OMA-RD-PCPS-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PCPS_SD] “Push to Communicate for Public Safety System Description”, Version 1.0, Open Mobile Alliance™, OMA-PCPS-TS-System_Description-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PCPS_UP] “Push to Communicate for Public Safety User Plane”, Version 1.0, Open Mobile Alliance™, OMA-PCPS-TS-User_Plane-V1_0, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [PoC2_1_EREILD] “Enabler Release Definition for Push to talk over Cellular”, Version 2.1 Open Mobile Alliance™, EREILD-PoC-V2_1, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)
- [RFC2119] “Key words for use in RFCs to Indicate Requirement Levels”, S. Bradner, March 1997, [URL: http://www.ietf.org/rfc/rfc2119.txt](http://www.ietf.org/rfc/rfc2119.txt)
- [SCRRULES] “SCR Rules and Procedures”, Open Mobile Alliance™, OMA-ORG-SCR_Rules_and_Procedures, [URL: http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)

2.2 Informative References

- [OMADICT] “Dictionary for OMA Specifications”, Version x.y, Open Mobile Alliance™, OMA-ORG-Dictionary-Vx_y, [URL:http://www.openmobilealliance.org/](http://www.openmobilealliance.org/)

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”, “Release Version Overview” and “Conformance Requirements Notation Details”, are normative, unless they are explicitly indicated to be informative.

The formal notation convention used in sections 9 and 10 to formally express the structure and internal dependencies between specifications in the Enabler Release specification baseline is detailed in [SCRRULES].

3.2 Definitions

Enabler Release	Collection of specifications that combined together form an enabler for a service area, e.g. a download enabler, a browsing enabler, a messaging enabler, a location enabler, etc. The specifications that are forming an enabler should combined fulfil a number of related market requirements.
Minimum Functionality Description	Description of the guaranteed features and functionality that will be enabled by implementing the minimum mandatory part of the Enabler Release.

3.3 Abbreviations

3GPP	3 rd Generation Partnership Project
ERDEF	Enabler Requirement Definition
ERELD	Enabler Release Definition
LTE	Long Term Evolution
OMA	Open Mobile Alliance
OMNA	Open Mobile Naming Authority
PCPS	Push to Communicate for Public Safety
PoC	Push to talk Over Cellular

4. Release Version Overview

PCPS Enabler covers all OMA PoC V1.0, V2.0 and V2.1 requirements. The intention is to leverage all OMA PoC Enabler capabilities as the baseline. PCPS Enabler will also align with the current 3GPP R12 for its SIP/IP Core operations taking advantages of its support of LTE and other key relevant features (e.g. eMBMS). The vision is to position PCPS V1.0 Enabler to be ready for further development to support the new Mission Critical Push to Talk public safety requirements that are being developed for 3GPP R13.

4.1 Version 1.0 Functionality

PCPS Enabler V1.0 covers all functionality in OMA PoC V1.0, V2.0 and V2.1 with the use of the appropriate supporting OMA enablers. Its SIP/IP Core support will align with 3GPP R12 especially with the support of LTE and other key relevant features (e.g. eMBMS).

Refer to [PoC2_1_ERELED] for detail functionalities supported.

5. Document Listing for PCPS V1.0

This section is normative.

Doc Ref	Permanent Document Reference	Description
Requirement Document		
[PCPS_RD]	OMA-RD-PCPS-V1_0-20150220-C	Requirement Document for PCPS Enabler
Architecture Document		
[OMA-PCPS_AD]	OMA-AD-PCPS-V1_0-20150220-C	Architecture Document for PCPS Enabler
Technical Specifications		
[PCPS_SD]	OMA-PCPS-TS-System_Description-V1_0-20150220-C	Defines the system description of PCPS V1.0 including detailed descriptions of technologies and their uses.
[PCPS_CP]	OMA-PCPS-TS-Control_Plane-V1_0-20150220-C	Defines the PoC Control Plane signaling procedures of the PCPS Client and PCPS Server for Push to Communicate for Public Safety (PCPS) service including example detailed signaling flows for the reference points POC-1, POC-2, POC-9, POC-14 and IP-1.
[PCPS_UP]	OMA-PCPS-TS-User_Plane-V1_0-20150220-C	Defines the User Plane procedures for the Push to Communicate for Public Safety (PCPS) service over the POC-3, POC-4, POC-10, POC 12 and POC-15 reference points as defined in the reference [PCPS-AD]. When necessary, inter-working between the Control Plane [PCPS-CP] and User Plane is described. If necessary, requirements on the implementation of SIP / IP Core are included.
[PCPS_MC]	OMA-PCPS-TS-Multicast-V1_0-20150220-C	Defines the procedures of a PCPS Client and a PCPS Server over the POC-3, POC-16 and POC-17 reference points when using multicast/broadcast access technology in a Push to Communicate for Public Safety (PCPS) session to distribute Media.
[PCPS_INV]	OMA-PCPS-TS-Invocation_Descriptor-V1_0-20150220-C	Defines the browser-based PCPS Client invocation.
[PCPS_IWF]	OMA-PCPS-TS-Interworking_Service-V1_0-20150220-C	Provides the PCPS Service Interworking specification by means of endorsement of the [PCPS-CP], [PCPS-UP] and [PCPS_Document_Mgmt] and documentation of applicability and exceptions.
[PCPS_Document_Mgmt]	OMA-PCPS-TS-Document_Management-V1_0-20150220-C	Defines the PCPS Enabler specific usage of XML documents defined by the XDM Enabler and specifies the PCPS Enabler deviations and extensions to these documents.
[PCPS_IM]	OMA-PCPS-TS-Endorsement_OMA_IM-V1_0-20150220-C	Endorses the OMA IM SIMPLE service for the PCPS discrete media transport.
Supporting Files		
[PCPS_LST]	OMA-SUP-XSD_pcps_listService-V1_0-20150220-C	XML schema for PCPS List Service Working file in XML Schema directory: file: pcps_listService-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[PCPS_GA]	OMA-SUP-XSD_pcps_group_advertisement-V1_0-20150220-C	XML schema for Group Advertisement Working file in XML Schema directory: file: pcps_group_advertisement-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/

[PCPS_USG]	OMA-SUP-XSD_pcps_pocusage-V1_0-20150220-C	XML schema for PCPS-specific URI List usage Working file in XML Schema directory: file: pcps_pocusage-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[POC2_RUL]	OMA-SUP-XSD_pcps_poc2_0Rules-V1_0-20150220-C	XML schema for PoC V2.0 extensions of PoC User access policy Working file in XML Schema directory: file: pcps_poc2_0Rules-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[PCPS_GAD]	OMA-SUP-XSD_pcps_dispatchInd-V1_0-20150220-C	XML schema for Group Advertisement Dispatch Attribute Working file in XML Schema directory: file: pcps_dispatchInd-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles/
[PCPS_ID]	OMA-SUP-XSD_pcps_FDCFO-V1_0-20150220-C	XML schema for Full Duplex Call Follow On Proceed postd Element Working file in XML Schema directory: file: pcps_FDCFO-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[POC2_SET]	OMA-SUP-XSD_pcps_poc2_0Settings-V1_0-20150220-C	XML schema for PoCv2.0 Service Settings Working file in XML Schema directory: file: pcps_poc2_0Settings-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[PCPS_SID]	OMA-SUP-XSD_pcps_sessionInvocationDescriptor-V1_0-20150220-C	XML schema for PCPSv1.0 Invocation descriptor Working file in XML Schema directory: file: pcps_sessionInvocationDescriptor-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[POC2_SGRP]	OMA-SUP-XSD_pcps_poc2_0SharedGroupExt-V1_0-20150220-C	XML schema for PoCv2.0 Shared Groups Working file in XML Schema directory: file: pcps_poc2_0SharedGroupExt-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[PCPS_FR]	OMA-SUP-XSD_pcps_finalReport-V1_0-20150220-C	XML schema for PCPSv1.0 Discrete Media Transfer Final Report file: pcps_finalReport-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[PCPS_DPR]	OMA-SUP-XSD_pcps_detProgressRep-V1_0-20150220-C	XML schema for PCPSv1.0 detailed Discrete Media Transfer Progress Report file: pcps_detProgressRep-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[PCPS_OPR]	OMA-SUP-XSD_pcps_optProgressRep-V1_0-20150220-C	XML schema for PCPSv1.0 optimized Discrete Media Transfer Progress Report file: pcps_optProgressRep-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[PCPS1_0_SES]	OMA-SUP-XSD_pcps_poc_sessions-V1_0-20150220-C	XML schema for PoC Session Search Working file in XML Schema directory: file: pcps_poc_sessions-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles

[PCPS1_0_LIPI]	OMA-SUP-XSD_pcps_limitedParticipantInfoReq-V1_0-20150220-C	XML schema for Limited Participant Information Request Working file in XML Schema directory: file: pcps_limitedParticipantInfoReq-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[POC2_1_PII]	OMA-SUP-XSD_pcps_poc2_1ParticipantInfoInd-V1_0-20150220-C	XML schema for PoCv2.1 Participant Information Indications Working file in XML Schema directory: file: pcps_poc2_1ParticipantInfoInd-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[POC2_1_SGRP]	OMA-SUP-XSD_pcps_poc2_1SharedGroupExt-V1_0-20150220-C	XML schema for PoCv2.1 extensions of Shared Groups Working file in XML Schema directory: file: pcps_poc2_1SharedGroupExt-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[POC2_1_SET]	OMA-SUP-XSD_pcps_poc2_1Settings-V1_0-20150220-C	XML schema for PoCv2.1 extensions of Service Settings Working file in XML Schema directory: file: pcps_poc2_1Settings-v1_0.xsd path: http://www.openmobilealliance.org/tech/profiles
[PCPS1_0_MO_DDF]	OMA-SUP-MO_oma_pcps-V1_0-20150220-C	Defines the PCPS Management Object Device Description Framework for PCPS 1.0 enabler file: oma_pcps-v1_0.ddf path: http://www.openmobilealliance.org/tech/omna/omna-dm_mo

Table 1: Listing of Documents in PCPS Enabler

6. OMNA Considerations

7. API Considerations

8. Conformance Requirements Notation Details

This section is informative

The tables in following chapters use the following notation:

- Item:** Entry in this column **MUST** be a valid `ScrItem` according to [SCRRULES].
- Feature/Application:** Entry in this column **SHOULD** be a short descriptive label to the **Item** in question.
- Requirement:** Expression in the column **MUST** be a valid `TerminalExpression` according to [SCRRULES] and it **MUST** accurately reflect the architectural requirement of the **Item** in question.

9. ERDEF for PCPS – Client Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-PCPS-C-001-M	PCPS V1.0 Client	

Table 2: ERDEF for PCPS Client-side Requirements

10.ERDEF for PCPS – Server Requirements

This section is normative.

Item	Feature / Application	Requirement
OMA-ERDEF-PCPS-S-001-M	PCPS V1.0 Server	

Table 3: ERDEF for PCPS Server-side Requirements

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 1.0 History

Document Identifier	Date	Sections	Description
Draft Versions OMA-ERELED-PCPS-V1_0	05 May 2014	ALL	Initial baseline version
	07 May 2014	4, 4.1	Online revision during May 7 CC
	08 May 2014	5	Updated the permanent document list prior to RD Formal Review Editorial clean up
	24 Jul 2014	5	Editorial update of permanent document references in section 5
Candidate Version OMA-ERELED-PCPS-V1_0	12 Aug 2014	All	Status changed to Candidate by TP TP Ref # OMA-TP-2014-0163- INP_PCPS_V1_0_RD_for_Candidate_Approval
Draft Versions OMA-ERELED-PCPS-V1_0	30 Sep 2014	All	Edit to include all documents needed for CONR review
	14 Oct 2014	5	Editorial update of permanent document references in section 5 prior to Consistency Review
	26 Jan 2015	All	All issue resolutions (#L001-L012) from 20150126 CONRR resolved and included in this version. Updated Document List to include latest versions of permanent documents for close of CONRR. Subsequent to company review, this version is for candidate approval.
	30 Jan 2015	All	Correct minor editorial comments found during company review. This version is for candidate approval.
	12 Feb 2015	5	Editorial update of permanent document references in section 5
Candidate Version OMA-ERELED-PCPS-V1_0	20 Feb 2015	All	Status changed to Candidate by TP TP Ref # OMA-TP-2015-0062- INP_PCPS_V1_0_ERP_and_ETR_for_Candidate_Approval