

ETSI ES 202 504-19 V1.1.1 (2008-05)

ETSI Standard

Open Service Access (OSA); Parlay X Web Services; Part 19: Multimedia Streaming Control (Parlay X 3)



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ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00 Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

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Foreword

This ETSI Standard (ES) has been produced by ETSI Technical Committee Telecommunications and Internet converged Services and Protocols for Advanced Networking (TISPAN).

The present document is part 19 of a multi-part deliverable covering Open Service Access (OSA); Parlay X 3 Web Services, as identified below:

- Part 1: "Common";
- Part 2: "Third Party Call";
- Part 3: "Call Notification";
- Part 4: "Short Messaging";
- Part 5: "Multimedia Messaging";
- Part 6: "Payment";
- Part 7: "Account Management";
- Part 8: "Terminal Status";
- Part 9: "Terminal Location";
- Part 10: "Call Handling";
- Part 11: "Audio Call";
- Part 12: "Multimedia Conference";
- Part 13: "Address List Management";
- Part 14: "Presence";
- Part 15: "Message Broadcast";
- Part 16: "Geocoding";
- Part 17: "Application-driven Quality of Service (QoS)";
- Part 18: "Device Capabilities and Configuration";
- Part 19: "Multimedia Streaming Control";**
- Part 20: "Multimedia Multicast Session Management".

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The present document has been defined jointly between ETSI, The Parlay Group (<http://www.parlay.org>) and the 3GPP.

The present document forms part of the Parlay X 3.0 set of specifications.

The present document is equivalent to 3GPP TS 29.199-19 V7.0.2 (Release 7).

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1 Scope

The present document is part 19 of the Stage 3 Parlay X 3 Web Services specification for Open Service Access (OSA).

The OSA specifications define an architecture that enables application developers to make use of network functionality through an open standardized interface, i.e. the OSA APIs.

The present document specifies the Multimedia Streaming Control Web Service. The following are defined here:

- Name spaces.
- Sequence diagrams.
- Data definitions.
- Interface specification plus detailed method descriptions.
- Fault definitions.
- Service Policies.
- WSDL Description of the interfaces.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.
- Non-specific reference may be made only to a complete document or a part thereof and only in the following cases:
 - if it is accepted that it will be possible to use all future changes of the referenced document for the purposes of the referring document;
 - for informative references.

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NOTE: While any hyperlinks included in this clause were valid at the time of publication ETSI cannot guarantee their long term validity.

2.1 Normative references

The following referenced documents are indispensable for the application of the present document. For dated references, only the edition cited applies. For non-specific references, the latest edition of the referenced document (including any amendments) applies.

[1] W3C Recommendation (2 May 2001): "XML Schema Part 2: Datatypes".

NOTE: Available at <http://www.w3.org/TR/2001/REC-xmlschema-2-20010502/>.

- [2] ETSI ES 202 504-1: "Open Service Access (OSA); Parlay X Web Services; Part 1: Common (Parlay X 3)".
- [3] ETSI ES 202 504-6: "Open Service Access (OSA); Parlay X Web Services; Part 6: Payment (Parlay X 3)".
- [4] ETSI ES 204 915-7: "Open Service Access (OSA); Application Programming Interface (API); Part 7: Terminal Capabilities SCF (Parlay 6)".
- [5] ISO 4217: "Codes for the representation of currencies and funds".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the terms and definitions given in ES 202 504-1 [2] apply.

3.2 Abbreviations

For the purposes of the present document, the abbreviations defined in ES 202 504-1 [2] apply.

4 Detailed service description

The service provided to an end-user is consumption of streaming multimedia. The end-user has a terminal that is able to request a media stream, either from a built-in player, or an installed application. The terminal can be any terminal with streaming media playing capabilities, and the service should allow a user to transfer between his terminals.

- The basic scenario is where an individual is browsing the Internet and finds some interesting content that he/she wants to watch. The end-user is then either doing this through the operator's portal or accesses the content provider's site. In the first case, the request is then processed through the portal, and charged as the stream is set-up. In the second case, the content provider redirects the request to the operator, so that the terminal capabilities can be collected and charging is done, before the stream is started.
- One scenario is an individual watching his favourite sports stream on his TV or PC at home, but he/she must leave the house of some reason, and still wants to continue the session on his mobile terminal. In that case he/she would transfer the ongoing session to the other terminal with other capabilities, since he already paid for the entire episode.
- The other way is a similar case where an individual arrives at a destination with better viewing capabilities.

4.1 Overview

The figure below shows streaming content delivered to mobile terminals, but is not restricted to any particular terminal type. The content is either on a location accessible over the Internet or stored locally on an operator's domain or the content provider's domain. The access to the content is done through a smart router controlling the stream towards the terminal. Transcoding of a stream is an optional feature that could allow users to switch between different terminal and networks, while consuming content from a streaming source.

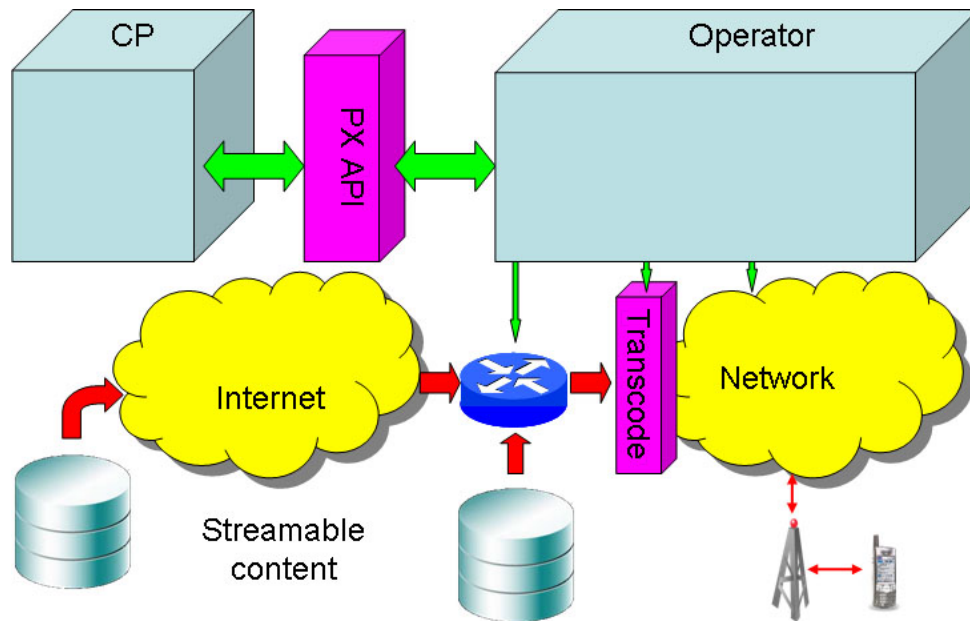


Figure 4.1.1

5 Namespaces

The Streaming interface uses the namespace:

http://www.csapi.org/wsd/parlayx/streaming/v3_0

The StreamingNotificationManager interface uses the namespace:

http://www.csapi.org/wsd/parlayx/streaming/notification_manager/v3_0

The StreamingNotification interface uses the namespace:

http://www.csapi.org/wsd/parlayx/streaming/notification/v3_0

The data types are defined in the namespace:

http://www.csapi.org/schema/parlayx/streaming/v3_0

The 'xsd' namespace is used in the present document to refer to the XML Schema data types defined in XML Schema [1]. The use of the name 'xsd' is not semantically significant.

6 Sequence diagrams

The following use case diagram defines the core functionality which should be supported by the Multimedia Streaming Control web service. These high level logical use cases will be supported by the defined API, but not necessarily on a one to one mapping basis.

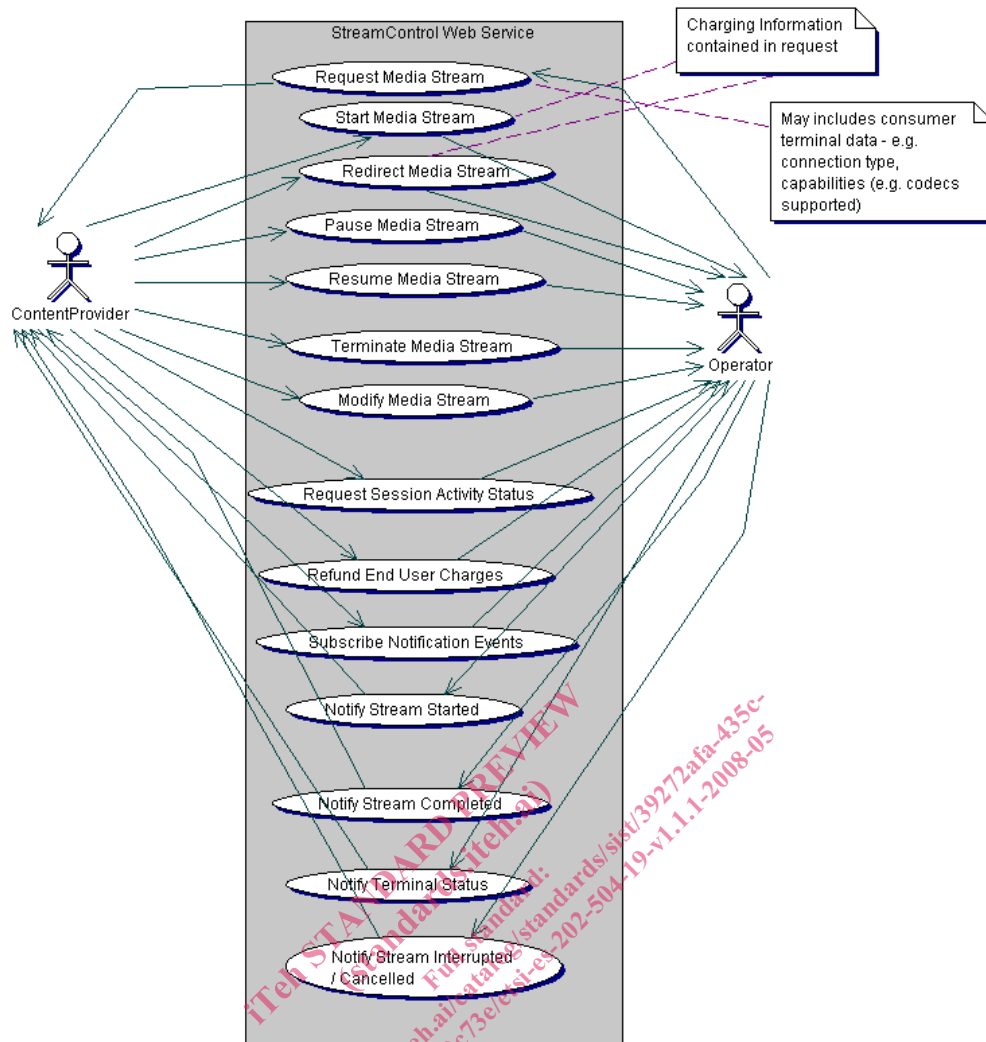


Figure 6.1

6.1 Getting requests

The following diagram illustrates the scenario where incoming stream requests are buffered at the operator. The content provider periodically retrieves streaming requests and handles them.