



# SLOVENSKI STANDARD

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**Odprti dostop do storitve (OSA) - Spletne storitve Parlay X - 17. del: Aplikacijsko  
gnana kakovost storitve - (Parlay X 3)**

Open Service Access (OSA) - Parlay X Web Services - Part 17: Application-driven  
Quality of Service (QoS) - (Parlay X 3)

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**ICS:**

35.100.01	Medsebojno povezovanje odprtih sistemov na splošno	Open systems interconnection in general
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# ETSI ES 202 504-17 V1.1.1 (2008-05)

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ETSI Standard

**Open Service Access (OSA);  
Parlay X Web Services;  
Part 17: Application-driven Quality of Service (QoS);  
(Parlay X 3)**

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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 17 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 29.199-17 V7.0.2 (Release 7).**

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# 1 Scope

The present document is part 17 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 Application-driven Quality of Service (QoS) 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:
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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 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 given in ES 202 504-1 [2] and the following apply:

ADQ	Application-Driven Quality of Service
QoS	Quality of Service

## 4 Detailed service description

'Application Driven QoS' is a service which enables applications to dynamically change the quality of service (e.g. bandwidth) available on end user network connections. Changes in QoS may be applied on either a temporary basis (i.e. for a defined period of time), or as the default QoS to be applied for a user each time they connect to the network.

Applications will govern the quality of service available to the end user by requesting that pre-defined QoS Feature profiles are applied on the end user's connection. It is the responsibility of the Service Provider to define these QoS Features and share them beforehand with application providers, along with a clear indication as to which of these can be used as temporary QoS Features and which can be used to set the default QoS on an end user connection.

The following scenarios provide example business use-cases to further illustrate the difference between default and temporary QoS Features and when they may be applied by the application.

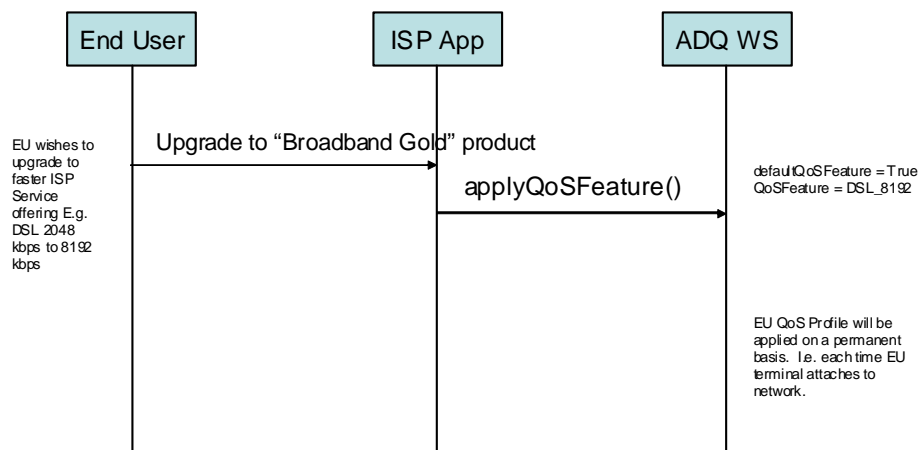
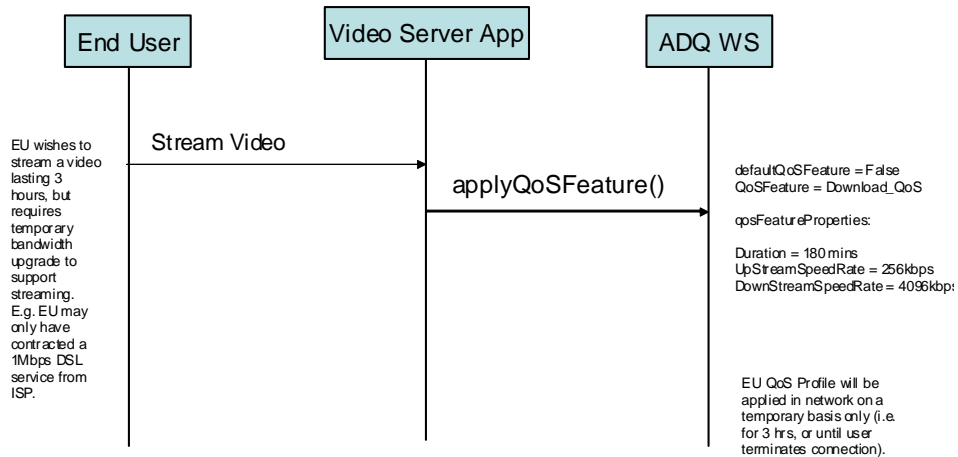


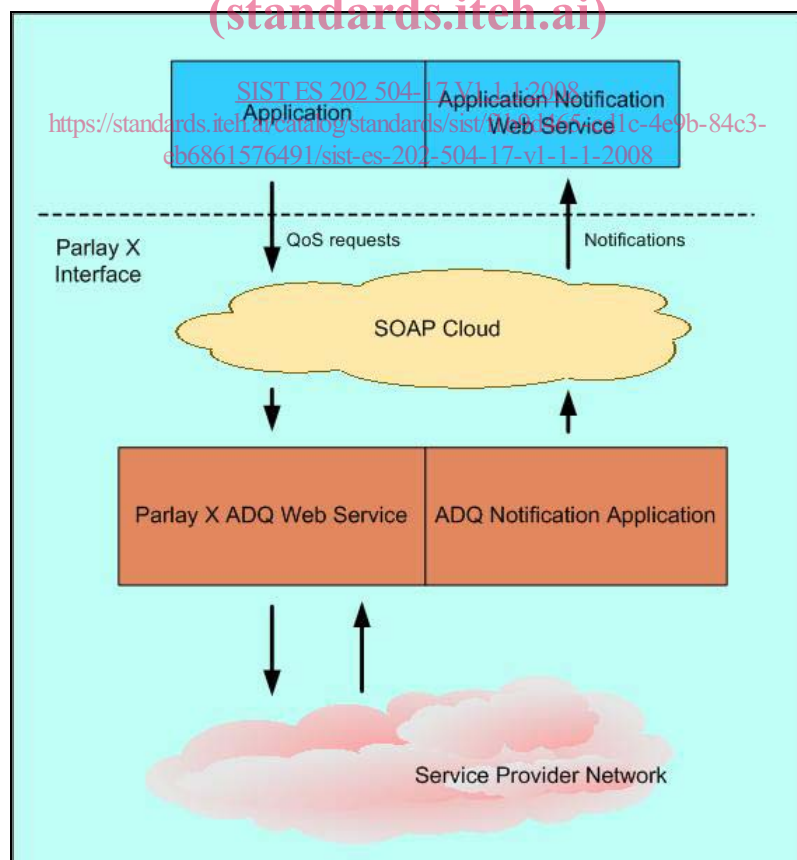
Figure 4.1: Example Default QoS Feature Use-Case

Figure 4.1 provides an example of where a default QoS Feature could be applied to an end user connection. The scenario given shows the end user of a DSL service requesting a permanent upgrade from their existing service offering (e.g. 2048 kbps) to a higher bandwidth service (e.g. 8192 kbps). The application subsequently makes a request to the ADQ web service to apply the pre-defined 'DSL\_8192' QoS Feature to the end user connection on a permanent, or default, basis. Following successful completion of this use-case, each time the end user's terminal equipment attaches to their DSL service, the default QoS (in this case DSL\_8192) will be applied.



**Figure 4.2: Example Temporary QoS Feature Use-Case**

Figure 4.2 provides an example of where a temporary QoS Feature could be applied to an end user connection. The scenario given shows an end user of a DSL service who wishes to stream a piece of video content. Their current service offering (e.g. 1024 kbps DSL) however will not support video streaming and hence they require a temporary bandwidth upgrade for the duration of the video stream. The streaming application then makes a request to the ADQ web service to apply the pre-defined 'Download\_QoS' QoS Feature to the end user connection, specifying the upstream and downstream bandwidth rate and the duration for which the temporary QoS Feature should be applied. Assuming that the network supports the requested bandwidth rate, the end user's bandwidth will be increased to the rate requested by the application for the specified duration. Once the requested duration has expired, the end user's service will resume to their original (in this example 1024 kbps bandwidth) QoS.



**Figure 4.3: ADQ Web Service**