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**Information technology — Dynamic  
adaptive streaming over HTTP  
(DASH) —**

**Part 8:  
Session-based DASH operations**

*Technologies de l'information — Diffusion adaptative dynamique sur  
HTTP (DASH) —*

*Partie 8: Opérations de DASH basées sur la session*

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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives) or [www.iec.ch/members\\_experts/refdocs](http://www.iec.ch/members_experts/refdocs)).

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Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html). In the IEC, see [www.iec.ch/understanding-standards](http://www.iec.ch/understanding-standards).

This document was prepared by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittee SC 29, *Coding of audio, picture, multimedia and hypermedia information*.

A list of all parts in the ISO/IEC 23009 series can be found on the ISO and IEC websites.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html) and [www.iec.ch/national-committees](http://www.iec.ch/national-committees).

## Introduction

Dynamic adaptive streaming over HTTP (DASH) enables media-streaming model for delivery of media content in which control lies exclusively with the client. Clients may request data using the HTTP protocol from standard web servers that have no DASH-specific capabilities. Consequently, the ISO/IEC 23009 series focuses not on client or server procedures but on the data formats used to provide a DASH Media Presentation.

This document provides methods, interfaces and data for session-based operations to be used with the DASH standard. Session-based operations allows customization of requested segment URLs based on the information provided for a specific streaming session.



# Information technology — Dynamic adaptive streaming over HTTP (DASH) —

## Part 8: Session-based DASH operations

### 1 Scope

This document specifies the format of the Session-Based Description document and the MPD's extension to be used in session-based operations with MPEG DASH (ISO/IEC 23009-1).

### 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 23009-1:2019, *Information technology — Dynamic adaptive streaming over HTTP (DASH) — Part 1: Media presentation description and segment formats*

IETF RFC 7230, *Hypertext Transfer Protocol — HTTP/1.1*, June 2014

IETF RFC 3986, *Uniform Resource Identifier (URI): Generic Syntax*, January 2005

IETF RFC 8259, *The JavaScript Object Notation (JSON) Data Interchange Format*, December 2017

### 3 Terms, definitions, abbreviated terms and notations

#### 3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <https://www.electropedia.org/>

##### 3.1.1

##### **SBDStart**

starting time of the session-based description

##### 3.1.2

##### **session**

sequence of DASH client actions resulting in a unique playback of a media asset

##### 3.1.3

##### **session-based description**

collection of timed key-value pairs providing a value given a time range within the session

##### 3.1.4

##### **session-based client**

client capable of parsing SBD and adding queries to the DASH segment requests accordingly