

ISO/IEC 23009-1:2026-07 (E)

Information technology - Dynamic adaptive streaming over HTTP (DASH) - Part 1: Media presentation description and segment formats

Contents	Page
Foreword	v
Introduction	vii
1 Scope	1
2 Normative references	1
3 Terms, definitions, symbols and abbreviated terms	2
3.1 Terms and definitions	2
3.2 Symbols and abbreviated terms	7
3.3 Conventions	9
4 Overview	10
4.1 System description	10
4.2 DASH Client model	11
4.3 DASH data model overview	12
4.4 Protocols	16
4.5 Media stream and Representation properties	16
4.6 Brands	19
4.7 Schemes	19
5 Media Presentation	23
5.1 General	23
5.2 Media Presentation Description	23
5.3 Hierarchical data model	28
5.4 Media Presentation Description updates	111
5.5 MPD Assembly	113
5.6 Base URL Processing	115
5.7 Program information	118
5.8 Descriptors	119
5.9 DASH metrics descriptor	141
5.10 Events	143
5.11 MPD Chaining	158
5.12 Producer Reference Time	160
5.13 Leap seconds	162
5.14 Content Popularity Rate	164
5.15 MPD Patch Framework	166
5.16 Alternative Media Presentations	171
6 Segment formats	187
6.1 General	187
6.2 Segment types	187
6.3 Segment formats for ISO base media file format	190
6.4 Segment formats for MPEG-2 transport streams	194
7 Combined semantics of MPD and Segment formats	200
7.1 Overview	200
7.2 General	200
7.3 Media Presentation based on the ISO base media file format	202
7.4 Media Presentation based on MPEG-2 TS	204

8	Profiles	206
8.1	Definition	206
8.2	Full profile	208
8.3	ISO Base media file format On Demand profile	208
8.4	ISO Base media file format live profile	210
8.5	ISO Base media file format main profile	211
8.6	MPEG-2 TS main profile	212
8.7	MPEG-2 TS simple profile	213
8.8	ISO Base media file format extended live profile	214
8.9	ISO Base media file format extended On Demand profile	216
8.10	ISO Base media file format common profile	218
8.11	ISO Base media file format broadcast TV profile	218
8.12	DASH profile for CMAF content	221
8.13	ISO Base media file format Advanced Linear profile	235
8.14	ISO Base Media File Format List Profile	238
8.15	Single-Period Static Profile	238
Annex A (informative)	Example DASH Client behaviour	240
Annex B (normative)	MPD schema	265
Annex C (normative)	MIME type registration for MPD and other resources	266
Annex D (normative)	DASH Metrics	272
Annex E (normative)	Byte range requests with regular HTTP GET methods	280
Annex F (informative)	Guidelines for extending DASH with other delivery formats	282
Annex G (informative)	MPD Examples and MPD Usage	284
Annex H (normative)	Spatial Relationship Description	324
Annex I (normative)	Flexible Insertion of URL Parameters	332
Annex J (normative)	Open GOP resolution change	345
Annex K (normative)	DASH Service Description	346
Annex L (normative)	Implementation of Nonlinear Playback	364
Annex M (normative)	Addressable Resource Index Track	368
Bibliography		374