

ISO/IEC 23009-6:2017-12 (E)

Information technology - Dynamic adaptive streaming over HTTP (DASH) - Part 6: DASH with server push and WebSockets

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms, definitions, abbreviated terms and conventions	1
3.1	Terms and definitions	1
3.2	Conventions	2
4	Background	2
5	Specification structure	3
6	Definitions	3
6.1	Data type definitions	3
6.1.1	General	3
6.1.2	PushType	4
6.1.3	PushDirective	5
6.1.4	PushAck	5
6.1.5	URLList	5
6.1.6	URLTemplate	5
6.1.7	FastStartParams	6
6.2	Push strategy definitions	7
7	DASH server push over HTTP/2	9
7.1	PushDirective binding	9
7.2	PushAck binding	9
7.3	Push cancel	9
8	DASH server push over WebSocket	9
8.1	Message flow over WebSocket	9
8.2	WebSocket sub-protocol for MPEG-DASH	10
8.2.1	MPEG-DASH WebSocket frame format and semantics	10
8.2.2	Definition of WebSocket streams	11
8.3	WebSocket message codes	12
8.4	WebSocket message definitions	12
8.4.1	MPD request (client server)	12
8.4.2	Segment request (client server)	13
8.4.3	MPD received (server client)	14
8.4.4	Segment received (server client)	16
8.4.5	End of stream (EOS) (server client)	17
8.4.6	Segment cancel (client server)	18
8.5	MPEG-DASH sub-protocol registration	19
Annex A (informative)	Considered use cases	20
Annex B (informative)	System architecture for HTTP/2	21

Annex C (informative) Examples of HTTP/2 client/server behaviour	23
Annex D (informative) Examples of WebSocket client/server behaviour	27
Annex E (informative) Protocol upgrade and fallback procedure for WebSocket	29
Annex F (informative) Examples of URL list and URL template	30
Annex G (informative) Examples of fast start	32
Annex H (informative) Use of DASH server push with the switching element	34
Bibliography	35