8003 - MPLP Robust

Red indicates major parameters of interest

Red background indicates inability to match parameter on current platform

Number	**8003**
Mnemonic	P17S1
VV Reference	VV8003-P17S1
Notes	MPLP, Robust signal and audio

Payload Parameters

○LLS

Group Id	1
Group Count -1	0
SLT	all required attributes: @bsid, @serviceId, @sltSvcSeqNum, @serviceCategory
RRT	
STT	@currentUtcOffset, @utcLocalOffset
AEAT	-
OnScreenMessageNotificadtion	-
SMT	-
UserDefined	-
Reserved	-

○SLS

All SLS fragments are contained in a metadataEnvelope per RFC 2387 in an LCT channel using an Extended FDT Instance with TOI = '0' to reference SLS fragments OR and EFDT element embedded in SrcFlow element. TOI values in the E-FDT shall follow LCT Header filters in Annex C.

USBD	relative base URL
DASH MPD	single period
S-TSID	media on separate ROUTE sessions
APD	No
HELD	No
DWD	No
RSAT	No
MMT MPU	-
MMT mmt_atsc3_message	-
MMT video stream properties descriptor	-
MMT atsc staggercast descriptor	-
MMT audio stream properties descriptor	-
MMT caption asst descriptor	-
MMT DRM	-
MMT Signed message	-
MMT content advisory ratings	-

○Delivery

Transport Session	Source Flow
Mode	File
EFDT	Instance in TOI '0'
LCT Header Codepoint	128
FEC Payload ID	start_offset

LCT Extension Header		EXT_TOL
Service Guide		OMA BCAST SG, Sec 5.4.2 with SGDD in LCT channel
SGDD/SGDUÃ,	Service Fragment with elements in A/332 Table 5.1 Name and Description elements extensions in A/332 Table 5.2 Schedule FragmentÃ, with elements in A/332 Table 5.6 Content Fragment with elements in A/332 Table 5.7	
Broadcaster Application		-

○DASH-IF

XML NameSpace	urn:mpeg:dash:schema:mpd:2011
@availabilityStartTime	1970-01-01T00:00:00Z (UnixEpoch)
@availabilityTimeOffset	
@timeShift BufferDepth	
@minBufferTime	PT2S
@minimumUpdatePeriod	PT0S
@profiles	urn:mpeg:dash:profile:isoff-broadcast:2015 (ISO BMFF Broadcast TV Profile), http://dashif.org/guidelines/dash-atsc-main
@publishTime	yes
@suggestedPresentationDelay	PT1.500S
MPD@type	dynamic
@schemaLocation	urn:mpeg:dash:schema:mpd:2011 dash-mpd.xsd
Period	single
Period start	current UTC wallclock - UnixEpoch
AdaptationSet	single Representation per AdaptationSet
Random access type	closed
DASH segments	$Number$
@contentType="video"	Table 2
Ratings	
Supplemental Property	
Supplemental Descriptor	
@contentType="audio"	Table 6 & 7
Supplemental Property	
Accessibility (Audio Descriptor)	@schemeIdUri="urn:mpeg:dash:role:2011" value="enhanced-audio-intelligibility"
@contentType="text"	W3C TTML IMSC1 Text Profile
@codecs	stpp.ttml.im1t
Accessibility (Captions)	@schemeIdUri="urn:mpeg:dash:role:2011" @value="caption"
Role	@schemeIdUri="urn:mpeg:dash:role:2011",@value="su
Supplemental Property	@schemeIdUri="http://dashif.org/guidelines/dash-atsc-closedcaption", @value="ar:16-9"
HTTP Headers	lowercase
DRM	

Content Replacement

○ Schema

A/331	ATSC-META-1.0-20190122.xsd ATSC-FDT-1.0-20170920.xsd SYSTIME-1.0-20170921.xsd S-TSID-1.0-20190208.xsd SLT-1.0-20210312.xsd ROUTEUSD-1.0-20170920.xsd
A/332	SA-1.0-20210312.xsd, RRT-1.0-20210128.xsd
A/360	-

○ PHY

Number of PLPs	3 (PLP0, PLP1 & PLP2)
Physical Layer Frame Length	156 msec
Number of Symbols	PLP0: 31, PLP1: 18, PLP2: 14
FFT Size	subframe 0:8K subframe 1:16K subframe 2:32K
PLP Size	PLP0: 194400 cells PLP1: 226800 cells PLP2: 364500 cells
Bandwidth Use	
Preamble Modes	Basic: 3 / Detail: 3
Preamble Pilot Dx	Dx = 4
Guard Interval	G4_768
Pilot Boost	0
Scattered Pilot Pattern	PLP0: SP 8_2 PLP1: SP 8_2 PLP2: SP 16_2
Constellation Size	PLP0: QPSK PLP1: 16 QAM PLP2: 256QAM
LDPC Frame Legnth	PLP0: 64800 bits PLP1: 64800 bits PLP2: 64800 bits
Code Rate	PLP0: 5/15 PLP1: 5/15 PLP2: 9/15
Outer Code	PLP0: BCH PLP1: BCH PLP2: BCH
Time Interleaver	HTI PLP0: 6 FEC Blocks 1 TI Block PLP1: 14 FEC Blocks 2 TI Blocks PLP2: 45 FEC Blocks 2 TI Blocks
Frequency Interleaver	On
Approximate Yielded Bitrate	PLP0: 800 Kbps PLP1: 1.8 Mbps PLP2: 11 Mbps
Approximate C/N	PLP0: -2 dB Gaussian PLP1: 10 dB Gaussian

PLP2: 15.7 dB Gaussian

- **pcaps**