

APEX STANDARDS

Codec Analysis Unifying Contributions & Specifications (JVET / MPEG / AOM / ITU-T)

Fact Sheet
ASS-70
Codec

Why codec experts choose ASS-70

ASS-70 delivers keyword-in-context, high-fidelity excerpts—in source order, as complete sentences/paragraphs, with adjacent figures—purpose-built for codec, container, and streaming work. Triage 20–50 docs in minutes; deep-read only what matters.

Pain Points We Eliminate

- Scattered PDFs/ZIPs/slides make context and provenance easy to lose.
- Mixed bodies (JVET/JCT-VC/MPEG vs. ITU-T/AOM) complicate cross-standard tracing.
- Meeting-week time pressure; difficult spec red-lining and IPR/claim-chart drafting.
- Gaps between proposal assumptions and deployment reality (latency/jitter/PLR).

ASS-70: One-Stop Search, No Blind Spots

- High-Fidelity Keyword in Context:** strict document order, full paragraphs, nearby visuals; click to enlarge figures.
- Unified coverage
 - Contributions:** JVET, JCT-VC, JCT-3V, JET, VCEG, MPEG (AHG notes, CFE/CTC, slides, PDFs/ZIPs).
 - Technical specifications:** ITU-T, MPEG (ISO/BMFF/DASH/audio), AOM (AV1/AV2); legacy VP8/VP9.
- Cross-checks with sister products**
 - ASS-10 3GPP SA4 multimedia/codec alignment.
 - ASS-35 IETF RTP/QUIC/L4S/jitter buffers & real-time transports.
- State-of-the-art tracking:** ULL/PLR resilience, DASH/ISO/BMFF updates, XR/RTC constraints.
- Prior-art checking:** Non-Patent Literature (NPL) sweeps and precedent tracing.
- Format-savvy ingestion: PDFs, WORD, slide decks, and bundles preserved in context.


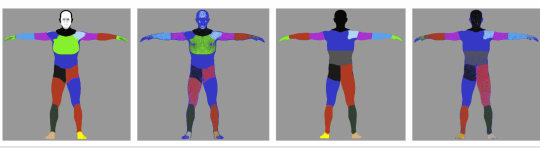
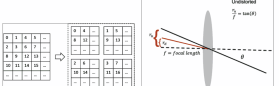
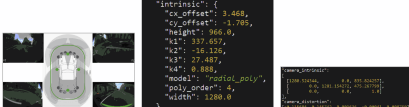
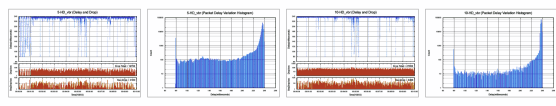
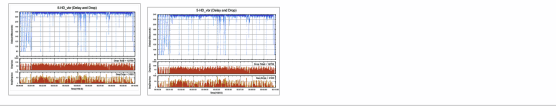
User Cases

- Meeting prep (JVET/MPEG/ITU-T):** ordered excerpts + plots to capture positions and test setups.
- Spec editing:** find definitions, evolution, and normative figures fast.
- IPR & claim-chart scouting:** dated excerpts and performance plots; map fields to claim elements; add E2E context via ASS-10/ASS-35.
- De-noised, in-order keyword-in-context snippets with visuals ready to cut prep time.

To learn more, please contact us at
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Keyword 1: semantic, Semantics, semantics | Keyword 2: sample, Sample, samples, Samples | Keyword 3: Area, area, areas

Relevant Phrases: Input pictures, SEI messages, Editorial updates, Spatial extrapolation, spatial area, Semantics fixes, partial content, SEI message Sample, ratio information, VSEI v4, option, generic face video, SPO SEI message, tabular form, PayloadBits +, JVET-AK0128 AHG9, chroma signals, X primaries, ITU-T H.273 | ISO/IEC

#	URL	Date	Full Context
1	www.mpeg.org/wp-content/uploads/mpeg_meetings/151_DaejeonW25294.zip	Thu, Oct 23, 2025	<p>...B.1 General 32 Supplemental enhancement information (SEI) syntax and semantics Annex C (normative) 33 C.1 VDI SEI envelope 33...</p> <p>...CAP_BITRATE_FLAG queries the bitrate parameter which indicates the instantaneous maximum coded bitrate in bits per second that the queried component can process. CAP_MAX_SAMPLES_SECOND_FLAG queries the max_samples_second parameter which indicates the instantaneous maximum number of luma and chroma samples combined per second that the queried component is able to process. CAP_MAX_PERFORMANCE_POINT_FLAG queries the max_performance_point parameter which indicates the maximum performance point of a bitstream that can be decoded by the indicated component in a new instance of that decoder component...</p> <p>...picture_rate indicating the instantaneous picture rate of the maximum performance point in pictures per second. ...height indicating the height in luma samples of the maximum performance point... ..width indicating the width in luma samples of the maximum performance point...</p> <p>...The decoder instance may use this information to intelligently reduce its decoding processing by discarding units that do not fall in the cropped output region whenever possible. The information about the area of the video to be output is provided by the CropWindow structure. PARAM_MAX_OFFTIME_JITTER indicates the maximum amount of time in microseconds between consecutive executions of the decoder instance...</p> <p>...Next see semantic in clause. maxInstances 5.4.1.1.2...</p> 
1	www.mpeg.org/wp-content/uploads/mpeg_meetings/145_OnLineW2512.zip	Thu, Oct 23, 2025	<p>...7.4.1 General 42 7.4.2 Vertices correspondence sample entry 42 7.4.3 Vertices correspondence sample format 43...</p> <p>...7.4.2 Vertices correspondence sample entry 42 7.4.3 Vertices correspondence sample format 43 7.5 Carriage format for pose and weight 43...</p> <p>...7.5.1 General 43 7.5.2 Pose transformation sample entry 44 7.5.3 Pose transformation sample format 44...</p> <p>...8.2.2 Semantics 8.2.2.1 Semantics at scene level The semantic of the MPEG_scene_interactivity extension is based on the definition of trigger, action and behavior objects as shown in Table 31...</p> <p>...Defines the region of intersection within the primitive. If zero, then all area of the primitive activates the trigger. Otherwise, the region of intersection decreases following the normal direction of all sides of the primitive from its centroid...</p> 
6	1jvet-experts.org/doc_end_user/documents/39-DaejeonWg11/JVET-AK0102-v4.zip	Mon, Jun 30, 2025	<p>... Document both the breadth-first and depth-first SEI processing order approach of JVET-AH0350 as TUC text specification to determine whether depth-first has some advantage. ... Semantics fixes for GFV SEI message form JVET-AH0349 ... Add generic face video enhancement SEI message from JVET-AH0127...</p> <p>...0x80 Spatial extrapolation (i.e., generating content outside of the spatial area of the input pictures), possibly also with removal (i.e., remove partial content from the input pictures).</p> <p>...0x100 Tone mapping (i.e., modification of the colour samples values, in terms of contrast, colour, saturation, luminance) ResolutionResamplingFlag, The variables ChromaUpsamplingFlag, PictureRateUpsamplingFlag, BitDepthUpsamplingFlag, ColourizationFlag, TemporalExtrapolationFlag, and SpatialExtrapolationFlag, and ToneMappingFlag specifying whether nnpfc_purpose indicates the purpose of the NPF to include chroma upsampling, resolution resampling, picture rate upsampling, bit depth upsampling, colourization, and temporal extrapolation, respectively, are derived as follows...</p> <p>...When nnpfc_tm_t cv_white_point_y is not in the range of 5 to 42 000, inclusive, the normalized y chromaticity coordinate of the white point of the maximal colour volume resulting from the tone mapped operation is indicated to be unknown or unspecified or specified by other means not specified in this document. NOTE 5 – An example of the use of values outside the range for which semantics are specified in this document is that ANSI/CTA 861-G uses normalized (x, y) chromaticity coordinate values of (0,0) for the white point to indicate that the white point chromaticity is unknown. nnpfc_tm_t cv_max_luminance_present_flag equal to 1 specifies that the syntax element nnpfc_tm_t cv_max_luminance is present...</p>  <p>...3.1 Woodscape distortion model Semantic annotation of 40 classes at the instance level is provided for over 10,000 images. Described as the first extensive public fisheye automotive dataset, named after Robert Wood who invented the fisheye camera in 1906, the Woodscape database was produced by Valeo vision systems [1]...</p> 
4	phenix-int-every.fr/jctid/oc_end_us/er/docume/nts7_GenEvalWg11/JCTVC-1150-V1.zip	Tue, Nov 8, 2011	<p>...The simulation parameter handling pro-active queue flushing (in case of stale packets) is the key parameter used for adjusting the simulated network's behavior to the target packet loss rates. Further, there is hard queue tail-drop flushing in all active network elements at approximately 30ms built-up, which results in the simulated network in a maximum network latency of roughly 240 ms—an operation point (barely) suitable for interactive video. In order to make up a realistic scenario, the author selected one of the 40+ pre-configured network models to roughly match the traceroute below, which happens to be the traceroute between the author's home office and a video conference switch used by the author to telecommute to his employer...</p> <p>...The network model "p4u4" configured for the simulation assumes eight active network elements, which roughly match the distinct network elements located at the end of some form of long-distance pipe (or otherwise loaded) in the traceroute, as identified by the measured delay. In the traceroute, elements marked in yellow reflect borders of administrative domains (stewe.org -> Comcast -> GlobalCrossing -> he.net), and elements marked in red reflect active elements with higher latency (presumed due to queue built-up due to limited outline capacity); traceroute to main.videocom (64.71.164.194), 64 hops max, 52 byte packets...</p>  <p>... Traffic injected in several categories – VoIP (constant low bitrate) – OTT Video (TCP, high bitrate)...</p> <p>... For example, the 1% loss file contains a long burst of more than 16 packets (with two successfully transmitted packets in the burst) around timestamp 0.93 sec • Jitter low at low and high loss rates, highly variable at medium loss rates – Low jitter because queues are mostly empty/full at low/high loss rates...</p> <p>... Jitter low at low and high loss rates, highly variable at medium loss rates – Low jitter because queues are mostly empty/full at low/high loss rates – High jitter, because queues are oscillating...</p> 

One decision-ready page: normalized keyword strip, auto-extracted Relevant Phrases, provenance-preserving results (URL, body badge, date), full-context excerpts in source order, inline figure thumbnails with enlarge, and consistency cues. Screenshot summaries, drill down in one click, and export as topic packet.