

Video Operation Points

3GPP

About the project

What 3GPP TS 26.265 defines, and the part the validator comes from

Video capabilities

Part of 3GPP TS 26.265

Service-independent video decoding and encoding capabilities, which 3GPP service specifications and third-party services may reference.

Operation points

Part of 3GPP TS 26.265

Combinations of a video coding format and a representation format, with requirements for the bitstream and for the receiver.

Conformance

Part of 3GPP TS 26.265

The conformance functions, among them the conformance validator that tests whether a bitstream conforms to an operation point.

FIND OUT MORE

Technical Analysis

Specifications

Operation points

The seven operation points of TS 26.265, grouped by video format

3GPP-HD

AVC and HEVC

3GPP-AVC-HD: AVC High Progressive Profile, Level 4.0. 3GPP-HEVC-HD: HEVC Main 10 Profile, Main Tier, Level 4.1.

3GPP-HDR

HEVC, HD and UHD

HEVC Main 10 Profile, Main Tier: 3GPP-HEVC-HD-HDR at Level 4.1 and 3GPP-HEVC-UHD-HDR at Level 5.1.

3GPP-STEREO

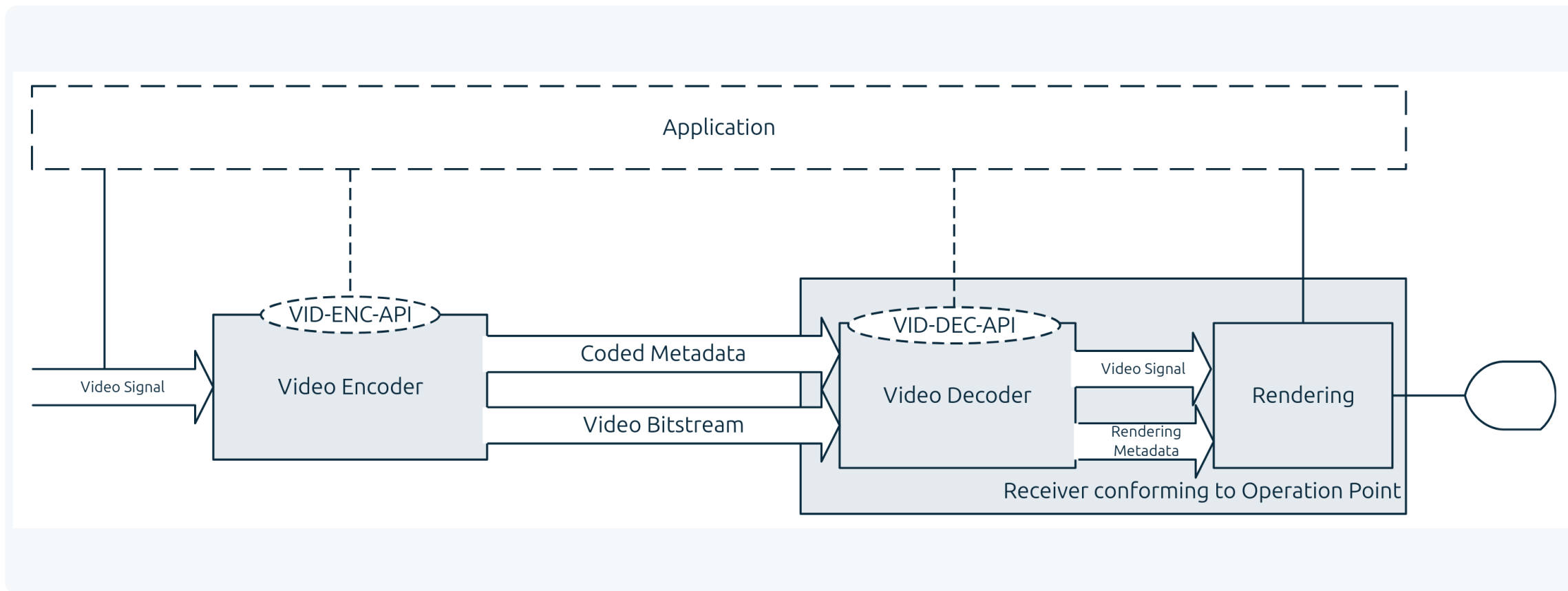
HEVC and MV-HEVC

3GPP-HEVC-Stereo: HEVC Main 10 Profile, Main Tier, Level 5.2, frame packed. 3GPP-MV-HEVC-Main-Stereo and 3GPP-MV-HEVC-Ext-Stereo: MV-HEVC, two layers.

An operation point is a collection of discrete combinations of video representation formats: spatial and temporal resolutions, colour mapping, transfer functions and the encoding format.

Reference architecture

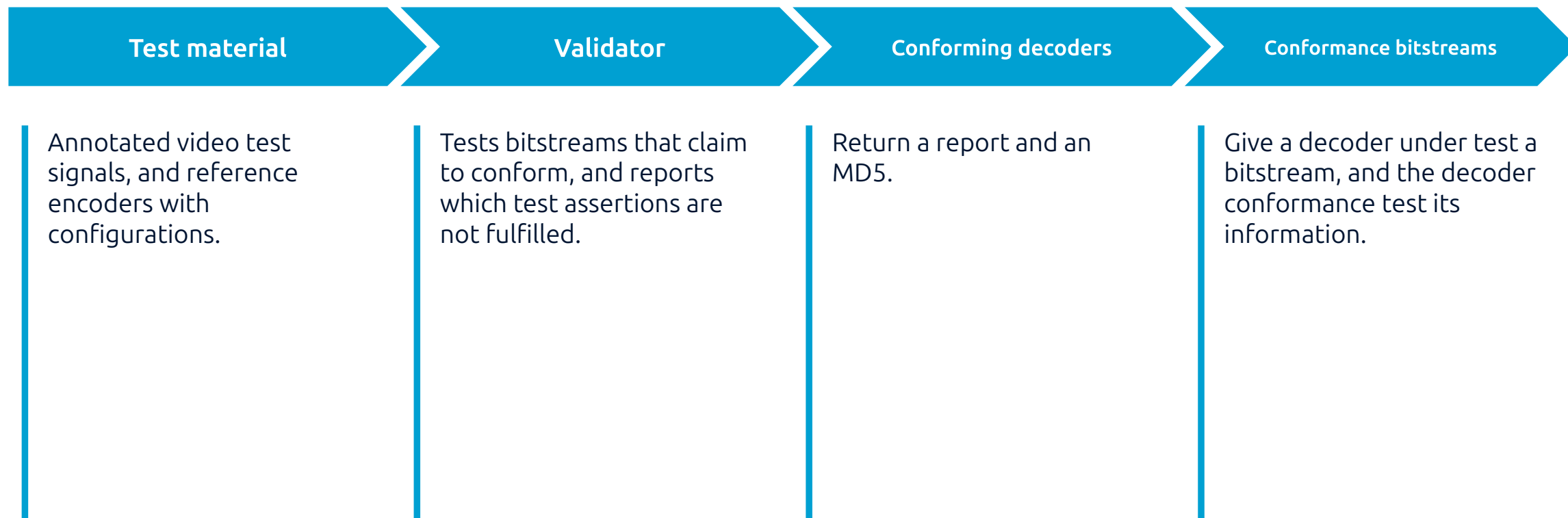
From a video signal to rendering, in the specification



Redrawn from TS 26.265. The APIs are not normatively specified: they serve as an example reference to configure encoders and decoders.

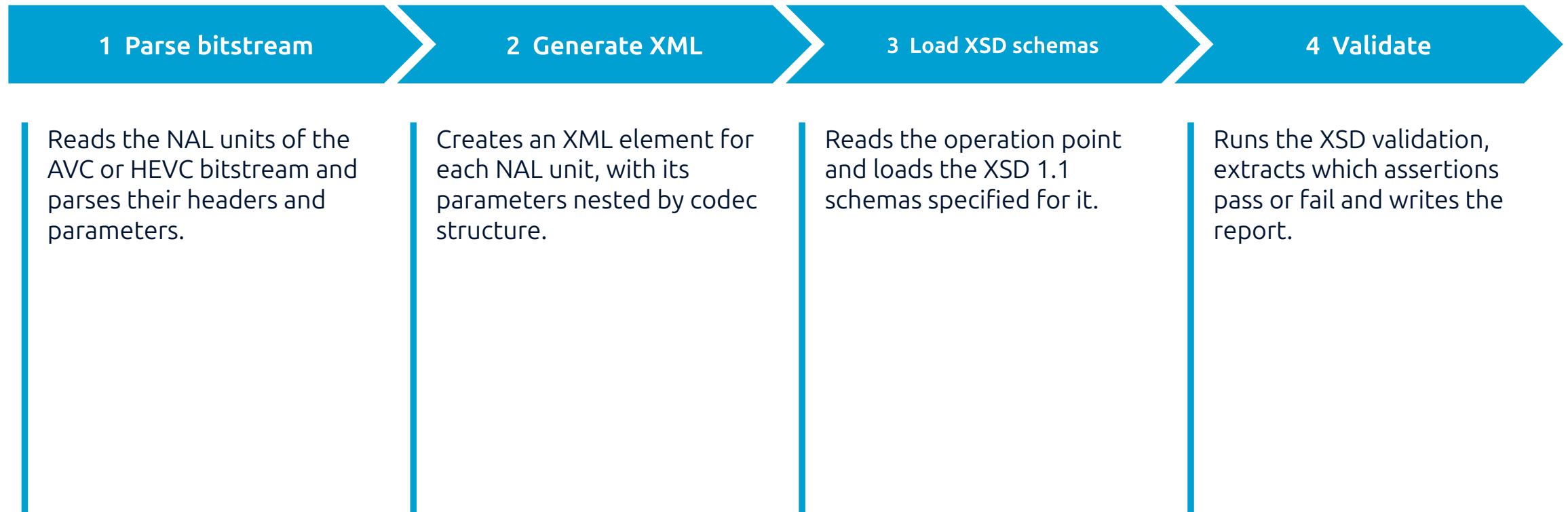
Conformance functions

What the conformance part of TS 26.265 provides



How the validator works

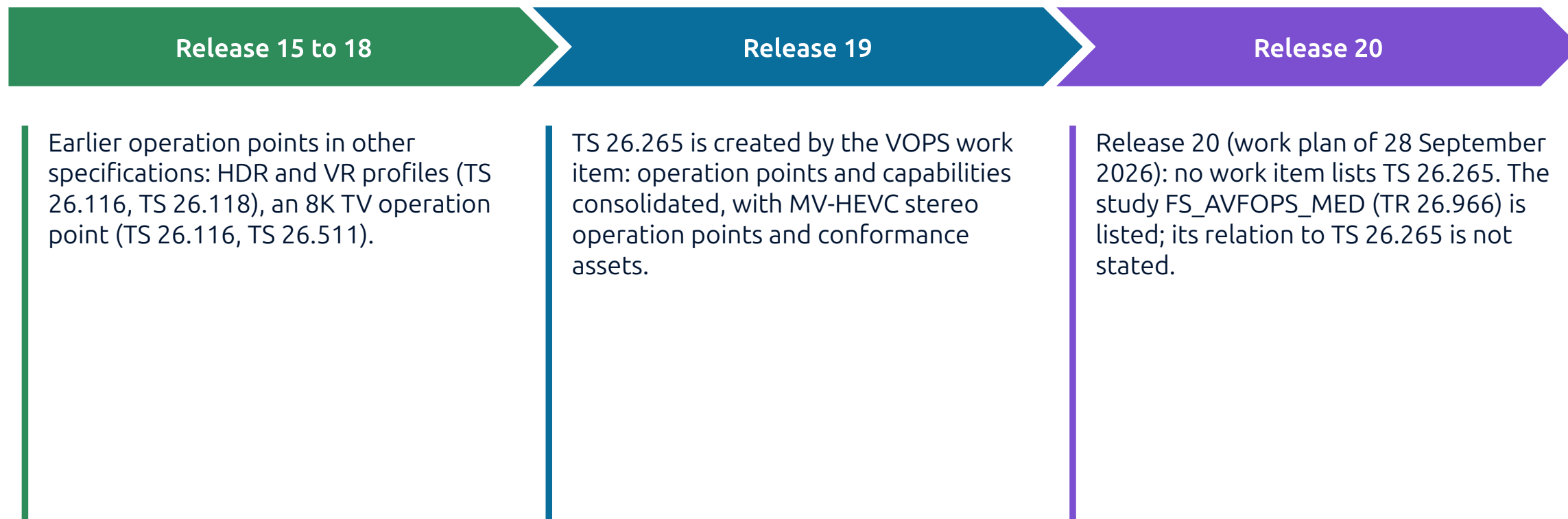
It parses a bitstream to XML, then checks the XML against schemas



From the repository README. A "shall" requirement that fails is reported as an error, a "should" as a warning.

How it grew

Video operation points before and in TS 26.265, release by release



What is still open

Points the specification leaves for further study, which bound the validator

System integration

Definitions for AVC and HEVC

The specification states that the definitions for AVC and for HEVC are for further study.

Encoder API

Mapping of operation points

The mapping of operation points to an encoder API is stated as work for further study.

Validator report

Semantics and format

The detailed semantics and the format of the report are for further study, so the JSON report is the validator's own.

FIND OUT MORE

Technical Analysis

Specifications

IMPLEMENT

Repositories

The conformance validator, from the description of its repository

REPOSITORY	WHAT IT IS	COVERS	LATEST RELEASE
vops-conformance-validator	Checks AVC, HEVC and MV-HEVC bitstreams against the operation points of TS 26.265; some requirements only partly	AVC HEVC MV-HEVC XSD 1.1 schemas JSON report	none yet GitHub

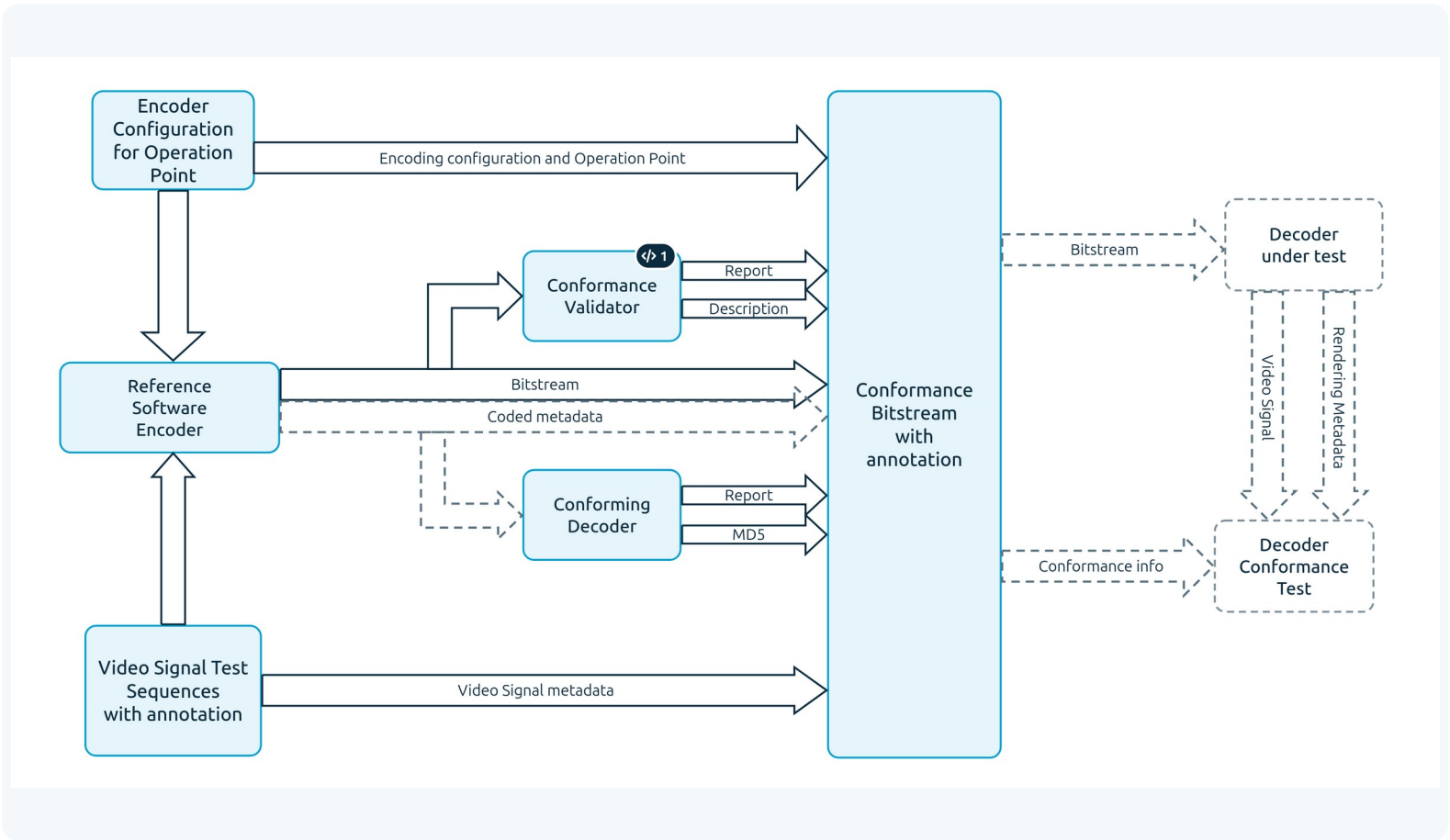
FIND OUT MORE

- Technical Analysis
- Specifications

released no release yet

Repositories in the architecture

The Reference Tools on the specification figure, as the figure generator draws them



PROVIDED BY THE REFERENCE TOOLS

1 vops-conformance-validator

Only the Conformance Validator is mapped to a repository.

Latest updates and roadmap

Status on 23 October 2026

PLANNED

- **Testing with conformance bitstreams**

Every operation point is to be tested with its conformance bitstreams, to confirm the schemas and parsers.

- **Version 19.3.0 of the specification**

The Standards page keeps V19.2.0 as the baseline until the validator is rebuilt against V19.3.0, which changes the dual-layer HEVC capabilities.



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