VVC Deployment Readiness Checklist 2026

Decoder coverage, encoder choice, four deployment categories, patent pools, fallback ladder. Companion to article 3.8 of Block 3 (Codec Evolution). Print on A4 or US Letter. Fora Soft — 250+ shipped video projects since 2005.

VVC in one paragraph — the best-compression, hardest-deploy codec for 2026

- **VVC:** ITU-T H.266 / ISO/IEC 23090-3. Finalised Jul 2020.
- **Compression:** ~40-50% under HEVC, ~25-29% under AV1 at matched VMAF on UHD content.
- **Licence:** Royalty-bearing. VVC Advance + VCL Advance + Sisvel pools; 17+ unpooled holders.
- **Reference encoders:** VVenC (Fraunhofer, BSD-3, 5 presets); Spin Enc Live; MainConcept SDK.
- **Reference decoder:** VVdeC (Fraunhofer, BSD-3). FFmpeg 7.0+ via libvvdec. VLC and mpv pick up.

VVC decode footprint — May 2026

Platform	Decode status	Notes
Smart TV SoC	MediaTek Pentonic 700/800/1000	Samsung, LG, Sony, Hisense, TCL TVs 2024+
Realtek 4K STB chips	Yes	Used in operator-deployed STBs
Chrome / Firefox / Edge	No	Zero browser-side VVC decode in 2026
Apple Safari (mac / iOS)	No	Apple has made no VVC plans
Snapdragon 8 Gen 4 / Dimensity 9400	No HW decode	Software VVdeC works, eats ~3x battery vs dav1d
Apple A18 / M4 / M5	No VVC decode	AV1 decode added; VVC not on the roadmap
Software (FFmpeg + VVdeC)	Yes, multi-threaded	CPU-heavy. Mobile playback drains battery.
Game console / set-top OS	Console-specific	Verify before designing ladder

Patent pool exposure — get legal review before pricing

- **VVC Advance (Access Advance):** 45+ licensors. Rates locked through 2030 if signed by 31 Dec 2025.
- **VCL Advance (former Via LA pool):** Consolidated under Access Advance Dec 2025. Separate rate card.
- **Sisvel Video Coding Platform:** Third independent pool. Own rate card and licensors.
- **Avanci Video:** Streaming-targeted. Bundles VVC + AV1 + audio for content distribution.
- **Unpooled holdouts:** 17+ essential-patent holders outside every pool as of March 2026.

Four 2026 deployment categories where VVC is the right answer

1. **Broadcast / OTA TV.** DTV+, ATSC 3.0, DVB-I. Spectrum-tight; central encoder + chip decoder. Layer with MPEG-5 LCEVC.
2. **8K UHD-2 and contribution.** Gap vs HEVC widens at 8K to ~30%+. 12-16 bit support for masters.
3. **360 / VR / volumetric.** Subpicture mechanism enables viewport-dependent delivery. AV1 has no equivalent.
4. **Closed device ecosystems.** Surveillance, body-cam, drone, telemedicine. You control encoder + decoder.

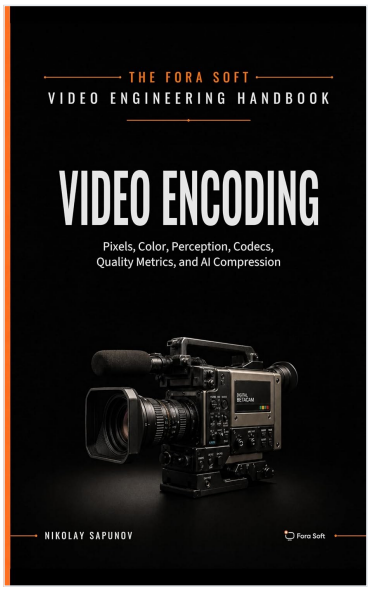
When NOT to deploy VVC in 2026

- **Web-facing streaming products.** No browser supports VVC. Use AV1 + HEVC + H.264 ladder instead.
- **Mobile-first content.** Software VVC kills battery; hardware VVC is absent from flagship phone SoCs.
- **Conferencing / WebRTC.** WebRTC mandates H.264 + VP8; AV1 is the realtime-codec path forward.

Recommended 2026 fallback ladder if you do deploy VVC

- **Top tier:** VVC Main 10 @ Level 6.1 for VVC-capable smart TVs / STBs (4K HDR up to 120 fps).
- **Middle tier:** HEVC Main 10 @ Level 5.1 for legacy 4K-capable devices without VVC silicon.
- **Floor tier:** H.264 High @ Level 4.2 for the universal long-tail (legacy STBs, older mobile, fallback).
- Wherever LCEVC fits (Brazil TV 3.0 model): pair VVC with MPEG-5 LCEVC enhancement layer for spectrum savings.

Companion to: 'H.266 / VVC: Technically Excellent, Market-Weak'
www.forasoft.com/learn/video-encoding/articles/h266-vvc-explained



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This checklist tells you where VVC fits in 2026: decode coverage, patent pools, the fallback ladder and the cases to avoid. Volume 1 explains the compression underneath: the coding tools that separate H.264, HEVC and AV1, how to compare codecs at matched quality, profiles and levels for HDR, and the metrics behind every bitrate claim.

WHAT YOU WILL FIND INSIDE

- Coding tools that separate H.264, HEVC and AV1
- Profiles, levels and bit depth for HDR and UHD
- Checking vendor compression claims on your content
- Comparing codecs at matched quality: BD-rate and VMAF
- Rate control choices for broadcast and streaming

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