HDR Delivery Decision Checklist

Pick HDR10 / Dolby Vision / HDR10+ / HLG by delivery, content, devices, and licensing. Version 1.0 - May 2026

1 - DELIVERY MODEL

- [ ] Live broadcast (sport, news, events) — *use HLG*
- [ ] On-demand premium VOD with budget for Dolby licensing — *use HDR10 + Dolby Vision 8.1*
- [ ] On-demand VOD, no Dolby budget, large Samsung audience — *use HDR10 + HDR10+*
- [ ] Single HDR master, broad reach, no premium ambition — *use HDR10 only*
- [ ] Mixed audience: HDR + SDR sets, single signal required — *HLG handles both*

2 - CONTENT TYPE

- [ ] Cinematic content with creative grading per scene — *Dolby Vision shines*
- [ ] User-generated / talking heads / corporate — *HDR10 is enough*
- [ ] Sport / news / live events — *HLG is the only sane choice*
- [ ] iPhone-shot content distributed natively — *Dolby Vision profile 8.4 by default*

3 - TARGET DEVICES

- [ ] Audience uses Samsung TVs >30% of installs — *HDR10+ becomes important*
- [ ] Audience mostly LG / Sony / Apple — *Dolby Vision covers them*
- [ ] Audience includes 2015-2018 SDR-only sets — *HLG keeps SDR fallback automatic*
- [ ] Premium hardware (reference monitors, cinema) — *Dolby Vision profile 5 acceptable*

4 - METADATA AND TAGGING

- [ ] `color_transfer = smpte2084` (PQ) or `arib-std-b67` (HLG) — *verify with ffprobe*
- [ ] `color_primaries = bt2020` — *must match transfer function*
- [ ] `color_space = bt2020nc` — *bt2020 non-constant luminance*
- [ ] MaxCLL / MaxFALL set for HDR10 — *tone-mapping needs these*
- [ ] Dolby Vision RPU survives transcode (profile 8.1) — *RPU is the dynamic-metadata payload*
- [ ] HDR10+ ST 2094-40 metadata atoms preserved at CDN edge — *common drop point*

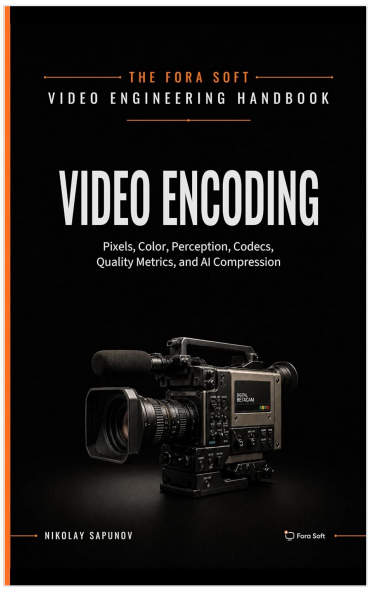
5 - PIPELINE CONSISTENCY

- [ ] Bit depth 10-bit minimum (HEVC Main10 or AV1) — *8-bit produces severe banding*
- [ ] 12-bit if Dolby Vision target — *matches 4,096 brightness steps*
- [ ] Every transcode stage preserves color metadata — *audit each stage with ffprobe*
- [ ] CDN preserves mdcv / clli atoms — *edge transforms can drop them*
- [ ] Player tested on Samsung + LG + Sony + iPhone + Apple TV — *fragmented HDR ecosystem*

TOP-5 HDR DELIVERY BUGS IN PRODUCTION

- color_transfer tagged bt709 on PQ data - neon, oversaturated, broken colours.
- color_primaries tagged bt709 with bt2020 colours - everything shifts toward green.
- Dolby Vision profile 5 shipped to Samsung TV - playback fails, no fallback.
- 8-bit encode with PQ - severe banding in skies, walls, gradient backgrounds.
- MaxCLL/MaxFALL missing - TV falls back to safe defaults, highlights clip.

Companion to: 'The Complete Guide to HDR'
www.forasoft.com/learn/video-encoding/articles/hdr-complete-guide-hdr10-dolby-vision-hlg



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This checklist picks HDR10, Dolby Vision, HDR10+ or HLG for your delivery model and flags where metadata breaks. Volume 1 covers HDR from the ground up: colour science and transfer functions, PQ and HLG, BT.2020 and 10-bit pipelines, static and dynamic metadata, and how to check the result.

WHAT YOU WILL FIND INSIDE

- Colour spaces, BT.2020 and transfer functions
- 10-bit and 12-bit pipelines without banding
- Tagging and checking colour metadata
- PQ vs HLG and when each fits
- HDR10, HDR10+ and Dolby Vision metadata

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