iOS & Android Playback — One-Page Spec Sheet

The native player, streaming format, DRM, offline, and billing facts for both mobile platforms. Engineering reference; OS, player-library, and store-policy details change per version — confirm against current docs.

1 · iOS / iPadOS

- **Player** — AVPlayer (AVFoundation), built into the OS; adaptive bitrate for free.
- **Format** — plays HLS only (IETF RFC 8216); no native MPEG-DASH.
- **DRM** — FairPlay via AVContentKeySession; requires the cbcs scheme.
- **Offline** — AVAssetDownloadTask + a persistent FairPlay key that expires.

2 · ANDROID

- **Player** — ExoPlayer in Jetpack Media3 (1.10, 2026); standalone library deprecated.
- **Format** — plays HLS, MPEG-DASH, and Smooth Streaming.
- **DRM** — Widevine via MediaDrm; cbcs needs Android 7.1+ (API 25). L1=HD/4K, L3 caps 480-720p.
- **Offline** — DownloadManager + OfflineLicenseHelper keySetId that expires.

3 · ENCRYPT ONCE (BOTH)

- **One package** — cbcs Common Encryption (ISO/IEC 23001-7) serves FairPlay + Widevine.
- **One container** — CMAF fragmented-MP4 (ISO/IEC 23000-19) feeds HLS and DASH.
- **License per platform** — same encrypted files, a different licence each side.
- **Avoid** — cenc-only is a black screen on iPhone; H.264 plays everywhere, AV1 on new chips only.

4 · APP-STORE RULES

- **Playback (Apple 2.5.7)** — cellular video over 10 min must use HLS + a 192 kbps baseline.
- **Billing** — in-app subscriptions use Apple IAP / Google Play Billing.
- **Commission** — 30%, dropping to 15% after year one / small-business programs.
- **Reader apps** — may link out to an external sign-up; external-link fee is shifting (re-check).

THE RULE — PACKAGE ONCE, BUILD TWICE

There is no shared mobile player: iOS runs AVPlayer with FairPlay and plays only HLS, while Android runs ExoPlayer/Media3 with Widevine and plays HLS or DASH. You build, test, and maintain two native stacks no matter which cross-platform framework draws the screens — React Native and Flutter wrap these same native players underneath, so they shrink the interface budget, not the playback-and-protection budget. The one thing you share is the encrypted media: package each title once with the cbcs scheme of Common Encryption in CMAF fragmented-MP4, and the same files unlock under FairPlay on iOS and Widevine on Android. Decide cbcs before you encrypt anything; switching later means re-encoding the whole catalog. Then budget the store cut — 15-30% of every in-app subscription — and re-verify the external-link commission rules, which were unsettled in the US after the late-2025 court rulings. Confirm Media3, AVFoundation, and App Store / Play policy details against the current docs before launch.



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This spec sheet lines up AVPlayer and Media3, HLS and DASH, FairPlay and Widevine, and the store rules on one page. Our seven-volume handbook covers the whole video stack behind both apps; start with Volume 3 for players, ABR and DRM, then Volume 2 for HLS, DASH and CMAF packaging, and Volume 1 for codecs.

WHAT YOU WILL FIND INSIDE

- Players, ABR and DRM licence flows (Vol. 3)
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