

# CSAI Integration Checklist

Pre-launch checks for client-side ad insertion: VAST 4.3, SIMID, OMID, ad-pod sequencing, header bidding, the seven production pitfalls.

## 1. VAST 4.3 parsing

*Contract between ad server and player.*

Validate against the live XSD ([github.com/InteractiveAdvertisingBureau/vast](https://github.com/InteractiveAdvertisingBureau/vast)).

Cap wrapper depth at 5 (IAB max) — alert if p95 > 3.

Mandatory in 4.x: AdServingId, UniversalAdId, AdVerifications.

Pick MediaFile by viewport, bandwidth, codec — not blindly highest.

Wrapper timeout: 5 s default; tighten to 2.5 s on CTV.

## 2. SIMID 1.2 interactivity

*Sandboxed iframe; postMessage only.*

Iframe sandbox: 'allow-scripts'; never grant 'allow-top-navigation'.

Cryptographically secure session ID per ad.

Implement Player:init / Creative:requestSkip / resize messages.

Test responsive sizing — creative may report -1 unknown.

Reject any creative declaring apiFramework=VPAID.

## 3. OMID 1.5 measurement

*Viewability via parallel verification API.*

Use OM SDK runner, never bypass with custom loader.

Register player UI controls as friendly obstructions.

Enforce VAST AdVerifications accessMode (LIMITED default).

Pipe playerStateChange + geometryChange events.

Verify with the IAB compliance API before launch.

## 4. Ad-pod sequencing

*Three to six spots per CTV mid-roll.*

Read Ad[sequence] attribute; play in numeric order.

Pre-buffer pod ad N+1 while ad N is in firstQuartile.

Skip-after-N timing resets per ad inside the pod.

Pod-level beacons: podStart, podEnd (4.2 OTT addendum).

Allow gracefull pod-abort if any one ad fails.

## 5. Header bidding (Prebid)

*Optional but high yield on premium inventory.*

Run auctions in parallel with 1500 ms hard timeout.

Pass winning bid into primary ad server, never directly to player.

Use Prebid Server (cloud) over Prebid.js on CTV.

Yield uplift 15–35% on premium inventory (Prebid.org 2023+).

## 6. IMA SDK or open-source stack

*Default to IMA unless you have a hard reason not to.*

IMA HTML5 3.726.0 — VAST 4.x + SIMID + OMID built-in.

Video.js + contrib-ads + videojs-ima for open-web sites.

Shaka / hls.js + custom layer when DRM or format dictates.

Pick the SDK matrix BEFORE the CTV player matrix.

## 7. Seven production pitfalls — the things that break the week before launch

Pitfall	Mitigation
Wrapper-depth timeout	p95 over 3 hops → fall back to backup tag or skip the break.
Black frame at the splice	Keep content element warm. Swap, do not load() + play().
IFA / GAID leak claims	Audit every ad-tag parameter; respect platform privacy resets.
OMID script load failure	Have a verification-fallback path — do not block ad start.
UniversalAdId mismatch	Frequency caps misfire when DSPs strip the ID — log and alert.
Cookie-consent collisions	If TCF v2.2 string is missing, ad request still legal under PAS.
Frame-rate mismatch ad ↔ content	Re-encode ad creative to content fps to avoid jitter on swap.