CTA™

Consumer Technology Association, producer of CES®

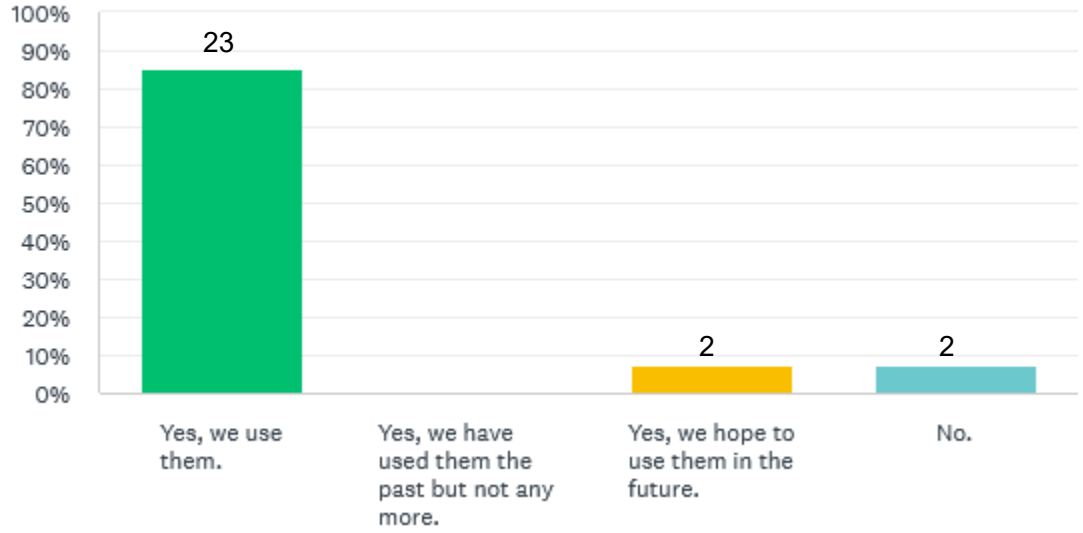
EMI API Survey Results

May 2025

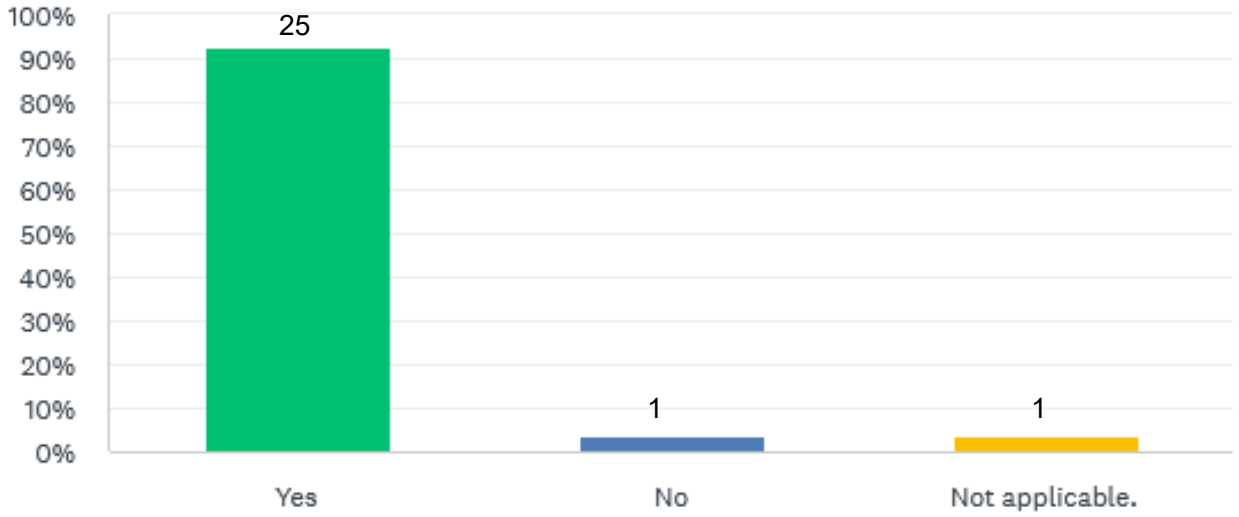
Notes

- All free-form responses (i.e., any responses to “Other” and the answers to Question 7) are verbatim from the survey participants and not edited in any way.
- Although some participants did provide contact information, WAVE has not yet reached out to any to discuss their responses.

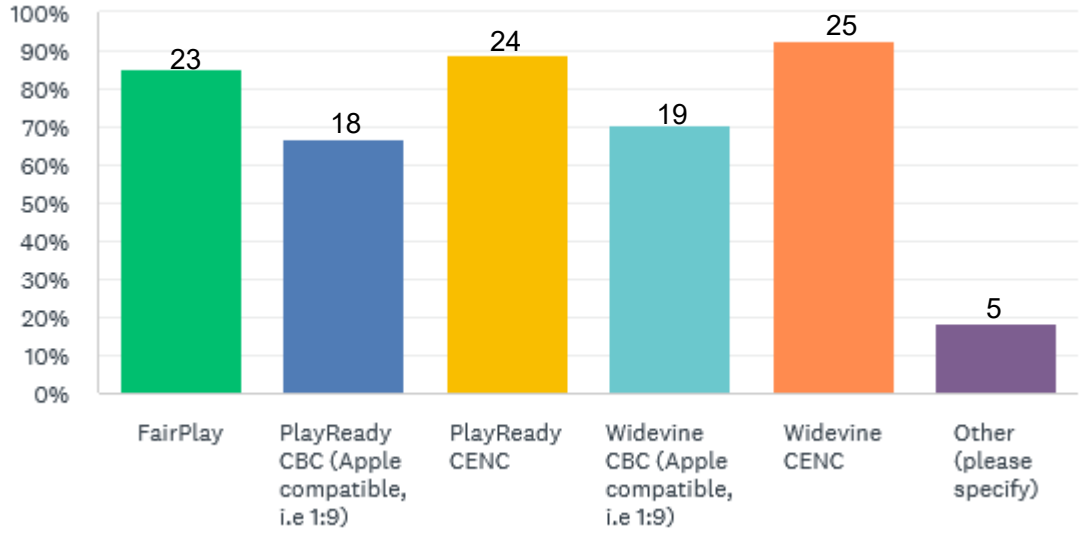
Q1 Do you use, have you used, or do you want to use Web APIs (EME, MSE) for playback of encrypted media?



Q2 Have you used these Web APIs or do you want to use them on media consumption devices (phones, tablets, sticks, Smart TVs...)?

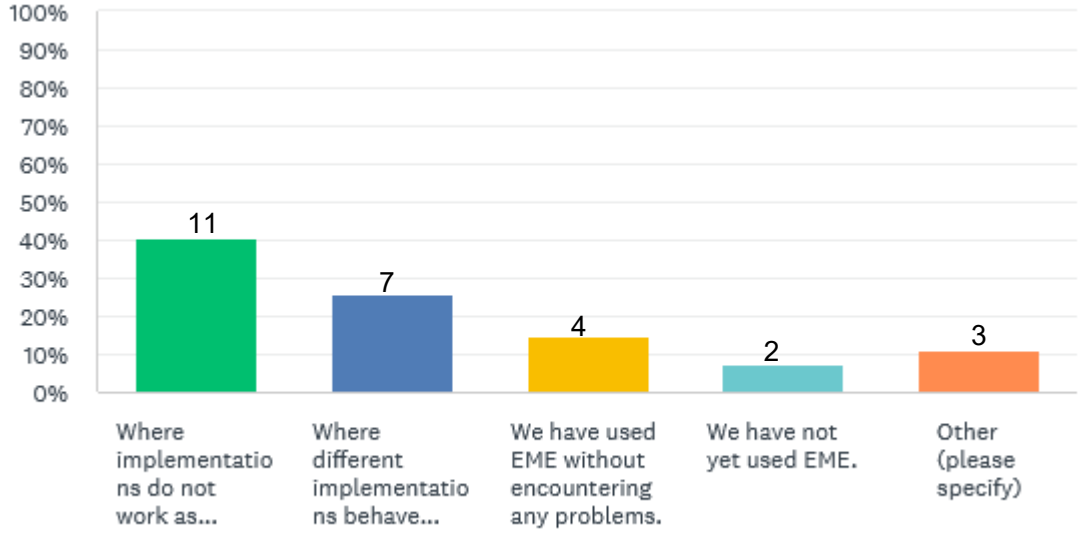


Q3 Which of the following DRM systems have you used (or do you hope to use) with EME?



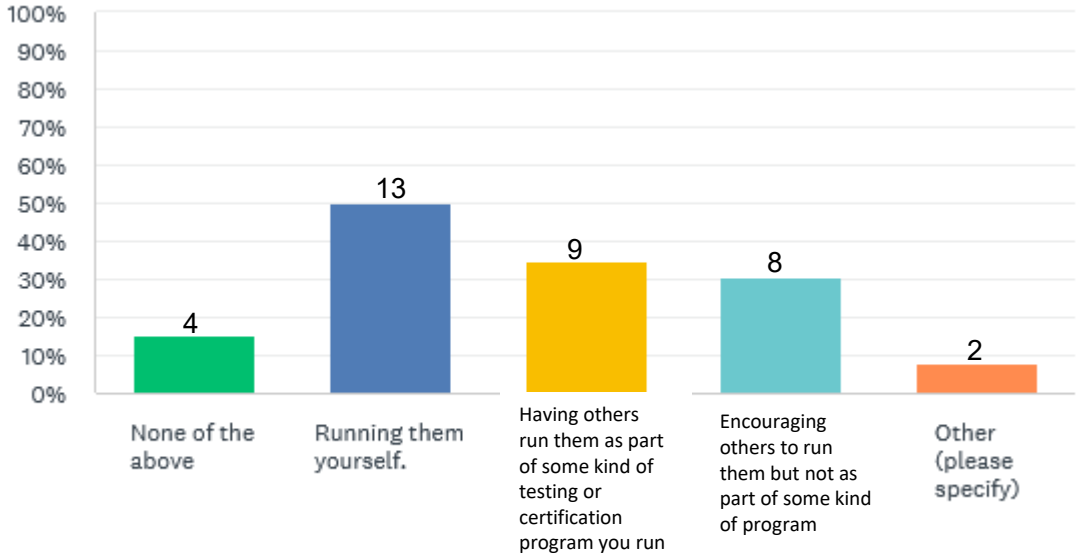
Other: ClearKey; have not used yet; Wiseplay

Q4 Have you encountered problems using EME either:



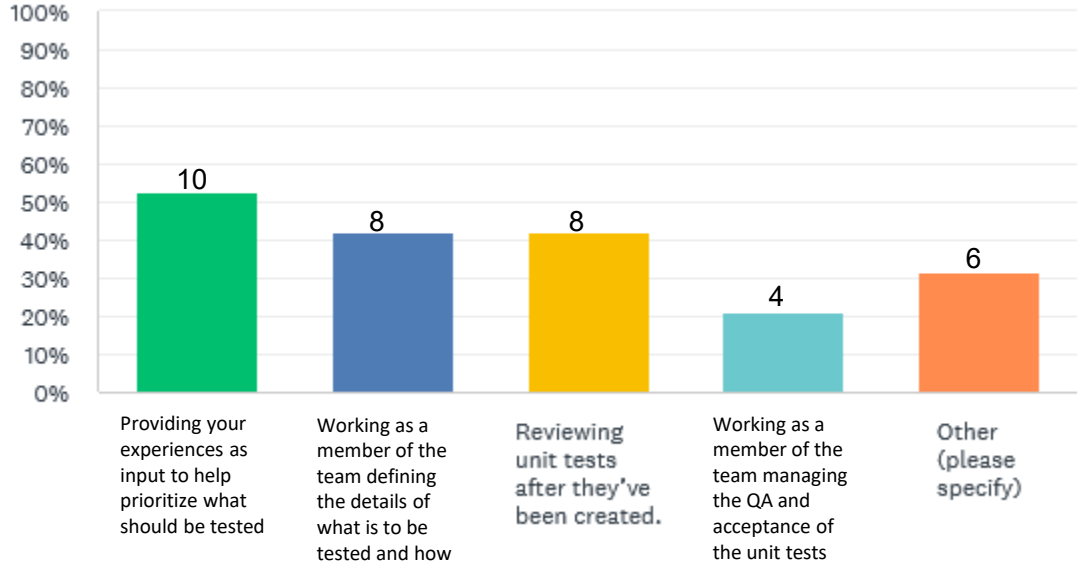
Other: have not used yet; WV + PR being hacked constantly, rights owners demand updates; FairPlay with EME is not directly supported in dash.js.

Q5 Would you have any interest in a set of unit tests for the integration of a web browser with DRM system(s) on media consumption devices?



Other: Already having some tests at https://livesim2.dashif.org, but FairPlay missing; I don't understand the question. Is it for the browser vendor? For the CDM vendor? For the app developer?

Q6 Would you have any interest in contributing to such a set of unit tests?



“Other” responses to Q6

- Some datatypes are supported on MSE but not with EME.
- Working as a team member where it would apply in broadcast transmission sector.
- This sounds like a good thing, but there seem to be a lot of "corner cases", so covering them and especially debating what is "okay" sounds like a decent amount of work and additional "job". So, I'm not sure I'm up for it. But it would be great to at least note down common differences and then see/decide what can be done about those.
- May add extra tests/commercial DRM providers to livsim2. Currently only EzDRM.
- No interest at this stage.
- Unavailable due to corporate policies.

Q7 What are the key problems with DRMs in combination with EME on devices that would require consistent testing?

- Different codecs with the combination of DRMs and EME. Note that more complicated scenarios are emerging e.g. Multiperiod dash where the content may go in the clear and swap out to an external source.
- Distinguish if there is EME or native DRM playback from player side.
- When DRM causes a restriction on available codecs, outputs, performance that are not easily understood through the MSE/EME apis.
- It must be seamless to the user.
- In one word, transparent testing around 'decenc' type hacks
- Different DRMs support EME bit differently, from custom omissions to extensions, to slight modifications of behaviour of specific features.
- The combination of key systems with different codecs.
- Clear to Encrypted periods transitions.
- Persistence
- The main issue I see is lack of certificate server URL in DASH MPD, but that is being addressed in the DASH-IF content protection group.

Q7 continued

- Mixed clear and encrypted periods.
- APIs are not consistent. There are capabilities that are not covered by EME APIs on browsers. For example: query which keys are already available to the CDM, ability to return null for a license request where the requested key already exists.
- Interoperability with various use cases and stream formats.
- Regionally popular device support (Fetch in Australia, Sky in UK, HbbTV in places that support it) and aging hardware 2011-2017 that are still popular but not maintained.
- Implementations don’t behave as expected.