## Summary of individual responses to the mobile browsers and cloud gaming market investigation 'WP7: Potential remedies'

We received 41 responses from individuals to our 'WP7: Potential remedies' published on 8 August 2024. An anonymous summary of those responses in provided below.

***Third party browser engines***

One respondent raised a concern that Safari updates are bundled with iOS updates. This could mean that some users (in particular users with older devices) do not have access to the most recent web APIs and other functionalities necessary to maintain an up-to date browser on their device, which would impact their ability to view current versions of some websites or web apps. The respondent stated that if browsers using alternate engines were available then these users could potentially continue to have access to the latest technologies.

***Progressive Web Apps (PWAs)***

Many respondents noted the benefits of PWAs to their businesses, mentioning how it saves time and resource by allowing them to develop and produce one product that can be used across multiple operating systems. Limits on the ability to use web apps are therefore holding back their businesses. Some respondents told us they are unable to develop native apps for each operating system and platform due to cost and capacity. They explained that PWAs are a solution to this issue, allowing a team to develop one app for all platforms and systems. Some respondents also stated that developing a native app for iOS can also incur high costs due to the charges Apple takes from certain developers using the App Store.

One respondent explained that the restrictions on PWAs on iOS impacts small developers and start-ups disproportionately due to the high cost of developing multiple apps across different platforms and having to pay Apple's App Store fees and stated that remedying this could reduce barriers to entry.

One respondent told us one of the main discrepancies between PWAs and native apps on iOS is that there is no way to reliably store user data from PWAs locally on the device. This means that users are repeatedly signed out of services on web apps, creating a limited user experience.

One respondent noted the importance of making apps accessible for all users. They told us that PWAs can be made more accessible than native apps for users who utilise a screen reader due to there being more detailed information available about the individual elements of the content.

Many respondents noted concerns that on iOS, installed PWAs do not open and run using the browser they were originally installed from. One respondent noted the importance of running a PWA in the same browser it was installed from as the user's own browser settings and the underlying browser engine can affect the accessibility of the PWA.

One respondent told us they are concerned that they may not be able to install web apps with the current proposed remedies as Apple may remove access to the relevant install functionality from

Safari (and therefore from iOS altogether) if it was simply required to offer equivalent access for other browsers.

Many respondents told us they were concerned with the existing installation process for PWAs on iOS. These respondents explained that better install prompts would allow users to understand how to download web apps more easily and feel more secure in doing so. They told us this would increase the popularity of web apps which would in turn make them more economically viable for developers.

***APIs***

A number of respondents told us third party browsers need greater access to software and hardware APIs than they currently have on iOS to be able to compete with Safari fairly. They stated that these APIs, particularly Web APIs, would also allow web apps and PWAs to compete more fairly with native apps.

Some respondents explained that third party browsers and browser engines should have access to more APIs than just the equivalent to Safari as this could allow for more innovation, rather than just repeating Safari's functionality. There were also some concerns raised that if the remedy required Apple to allow the same APIs for third party browsers as Safari, Apple could potentially take away functionality from Safari to avoid having to provide access to these APIs.

Some respondents highlighted the in-development 'Web Install' API which enables third party browsers use install prompts to request a user install a PWA and is not currently available on iOS. This would enable a better PWA installation process for users.

***Open Web Advocacy's response***

A high number of responses we received from individuals advocated for the remedies proposed in an article published by the Open Web Advocacy.[1] These remedies are:

1. Apple shall allow third-party browsers to install and manage Web Apps using their own browser engine.
2. A requirement for Apple to implement Install Prompts for iOS Safari.
3. A requirement for Apple to grant all software and hardware access to APIs to browsers using alternative browser engines that they require to port their engines and implement stability, functionality, security and privacy. Restrictions on this can be subject to only strictly necessary, proportionate and justified security grounds.
4. Where feature parity between Web Apps and Native Apps is possible, Apple must technically enable it and it should not be artificially prevented either by OS rules or OS design. Apple must not self-preference their own Apps, Apps sold via their App Store or their own Services over Web Apps.

[1] UK's Browser and Cloud Investigation may fail to allow Web App competition - Open Web Advocacy (open-web-advocacy.org).