

Mobile browsers and cloud gaming market investigation: response to working papers from Gener8

Overarching comments

Gener8 is highly supportive of the CMA's market investigation and of its original intent of removing barriers to competition and disruptive innovation for the mobile web.

The CMA has consistently set out a strong package of evidence and analysis, which will provide a solid foundation to move forward towards more detailed design and implementation of the remedies that have been discussed.

As a rule, Gener8 is supportive of all remedies that will give market participants more choice and contribute to a more level playing field. This includes those remedies that would give browser vendors more choice and freedom for how to build their product on iOS, while also enabling them to access the same underlying technology as Apple's Safari. We are also supportive of well-designed choice screens across both ecosystems that ensure even the smallest of browsers have a fair chance of being selected.

However, we note there are three major topics that do not feature sufficiently prominently within WP7 that we wish to draw further attention to:

- Limited support for browser extensions on mobile devices
- Limited support for web app capabilities on iOS
- Impact of revenue sharing agreements on incentives to compete

The lack of discussion of potential remedies to the challenges in these areas suggests the CMA has underestimated the significance of the underlying issues.

Finally, we note the CMA's consideration of concluding the investigation with a recommendation to the CMA Board to take forward the potential remedies using the CMA's new powers. While it makes sense to consider how the market investigation will eventually tie in with the new regime, we would have concerns if this potential recommendation was considered as an alternative to implementing remedies at the conclusion of the investigation.

Limited support for browser extensions

As noted in WP3, both Apple and Google have some limitations in place on iOS and Android respectively that hold back the adoption of browser extensions on mobile. On iOS, Apple supports extensions to Safari to an extent, but does not allow rival browsers to support extensions. The situation on Android is the opposite, whereby Google allows rival browsers to support extensions, but it does not allow extensions to be distributed

via Chrome. The outcome within each ecosystem is practically the same – browser extension providers are unable to reach their users in meaningful volumes, and vice versa.

We discuss the problems within each ecosystem separately below.

Restrictions to extensions on rival browsers on iOS

On iOS, Apple does technically support extensions to Safari, though there are some limitations that hinder adoption and their benefits. For example, extension providers still need to distribute a native app through the App Store, and extensions to Safari are not easily discoverable by users. Apple also does not allow extensions to change the UI of Safari, which restricts the range of potential use cases and means they cannot be used as a low-cost entry route for new browsers on iOS. These limitations stifle the uptake and awareness of extensions, while continuing to ensure that all economic activity on the iPhone is funnelled through its App Store.

The main problem on iOS to be addressed, however, is that rival browsers are prevented from supporting extensions at all. Though not explicitly mentioned, it does appear that the list of potential remedies set out within WP7 could address this imbalance, and we urge the CMA to ensure explicitly through remedy design and implementation that it does. By preventing rival browsers from supporting extensions, Apple is giving its own browser an unfair advantage, and harming browser extension providers.

We therefore support any interventions being considered by the CMA for iOS that will have the effect of enabling all browsers to support extensions, regardless of which browser engine they use.

Restrictions on extensions to Chrome on Android

On Android, many of the main browsers already support, or are in the process of introducing browser extensions. However, with Chrome still not supporting them 15 years after introducing them on desktop, and a quarter of a century after Microsoft introduced them on Internet Explorer, the vast majority of Android users will continue to miss out on extensions.

Unlike Apple with iOS, Google allows its rivals to support the functionality, which removes suggestions of anticompetitive conduct towards other browser vendors in this context. Taken at face value, it would be easy to look at this situation as one that will eventually be addressed through competition. Regulators might conclude that in a free market it is up to Google which features and functionality it adds to its own browser, so long as it does not hold back the progress, innovation, and distribution of other browsers.

There are several reasons why the CMA needs to look beyond these overly simplistic conclusions:

- **Google’s Chrome is not constrained by competition on Android.** The CMA concluded that Chrome has substantial and entrenched market power on Android. This means that even if rival browsers come forward with better quality or more innovative browsers, Android users are unlikely to switch. In this context, there is no reason to think that the support for extensions by other Android browsers will have any impact on Google’s internal decision making for Chrome. Although we are optimistic that the CMA’s interventions will go some way to address this situation, it will take several years to fully take effect, and in reality some degree of power is likely to be retained. With that in mind, it is unrealistic to think that Google will change course in response to competitive dynamics, despite having introduced extensions on desktop 15 years ago.
- **Extensions are not just a feature of browser competition, they are an entire distribution channel.** Google’s lack of support for extensions to Chrome on mobile should not be characterised simply as Google opting not to support a feature within its browser. Instead, Google is choosing to prevent other companies from distributing their extensions on Chrome. For extensions, the browser is the distribution platform, and on Android Google is banning extension providers from shipping their product to the vast majority of users. If extensions were all provided by the browser vendor, then it could be a logical conclusion to leave Google to decide whether to add them. But the majority of extensions are provided by other companies, and Google is deliberately holding those companies back.
- **Extensions only support low-cost entry if they are available on the popular browser.** As we have noted in previous submissions, browser extensions provide a low-cost route of entry for would-be browser vendors. There are several examples of existing market participants that started out with a browser extension on desktop. This was true for Gener8, but also some other more established browser vendors such as DuckDuckGo. But this strategy is not viable on mobile. The only meaningful way to deploy a browser extension as a route of entry is by deploying it first on the most widely available browser.¹ If an extension is only deployed on browsers that have very few users, then the extension will not be used, and the provider will not get to test the market as intended.
- **Google’s restriction on Chrome is holding back extensions on all browsers in both ecosystems.** Until Google supports extensions to Chrome on Android,

¹ This entry strategy is currently not viable on Android or iOS. Chrome on Android does not support extensions, while Safari on iOS does not allow changes to the UI, which rules out extensions that change the appearance of Safari to give the experience and feel of an alternative.

developers will not look at mobile browser extensions as a viable way to ship their new product or service. Developers need to develop their products with confidence that they can reach the maximum possible audience across mobile and desktop devices, and at present Google's restriction means the numbers don't stack up. The CMA identified the exact same dynamics in its analysis of web apps within its Mobile Ecosystems Market Study, which were historically supported on Android but with low success or uptake. It rightly concluded then that Apple's restrictions on web apps on iOS were undermining the value of developing a web app for Android. The patchwork of limited support for browser extensions is having the same stifling effect on the incentives to develop them, driving developers towards developing native apps.

- **Google's reasons for not supporting extensions will not stand up to public scrutiny.** We were disappointed that the CMA elected to redact all explanations provided by Google as to why it does not support extensions to Chrome on Android. Rather than harming legitimate business interests, Google will not have wanted these explanations published as they will not stand up to public scrutiny. The issue cannot be security related, as otherwise Google would not continue to support them on desktop, Samsung would not want them on its mobile devices, and neither would Apple. [Google's recent blog on the subject](#) made a strong case for how it is able to keep extension users safe, stating that "In 2024, less than 1% of all installs from the Chrome Web Store were found to include malware. We're proud of this record". We also know the issue cannot be technical or related to the capability of Android devices, since so many other browser vendors, including those powered by the Blink engine, are now supporting them. We recommend the CMA investigates Google's justifications and incentives for blocking extensions more closely, including by requesting information from Samsung, Mozilla, Microsoft, and Kiwi on the viability, security, and performance of browser extensions on Android.

Potential remedies to improve support for browser extensions

We were disappointed to see that the CMA's analysis of the market did not explicitly recognise browser extension providers as a type of market participant with WP1. Subsequently, we were disappointed that WP7 did not refer to limited support for browser extensions as an issue that needs to be addressed, nor have any interventions or potential remedies yet been given due consideration.

Although Gener8 initially raised these issues with your market investigation over a year ago, we acknowledge that it was not until recently that the CMA was presented with similar views from a wider cross section of stakeholders. We trust that the CMA will now undertake a thorough expedited assessment of the potential remedies to support wider

distribution of mobile browser extensions by Apple and Google, in advance of publishing its provisional decision report.

Limited support for web app capabilities on iOS

In launching the market investigation, the CMA highlighted Apple's lack of feature support for progressive web apps as a concern that could justify consideration of potential remedies. The potential remedies discussed within WP7 are likely to help towards this aim, for example by enabling other browsers on iOS to use a browser engine of their choice, and mandating that other browsers have access to the same features and technology as Apple's Safari.

However, the document appears to overlook the point that web app development is constrained by the lack of development of certain features by Apple. A requirement for rival browsers to have access to the same functionality as Safari could bake in a lack of support for web apps rather than address it.

There are strong parallels between this lack of support for web apps by Apple, and the lack of support for browser extensions by Google. They are each holding back a potential distribution channel for services which could serve as an alternative to their app stores and enhance competition between mobile browsers.

Revenue-sharing agreements

Although existing revenue-sharing agreements may be affected to some degree by some of the potential remedies related to choice architecture, we note that the CMA does not appear to be considering any potential remedies that relate directly to the content and impact of any individual agreements.

As noted in the CMA's reference decision document in November 2022, the market features that the CMA was concerned about included "*Revenue sharing agreements which dampen incentives for competition between browsers on iOS.*" In recognition of the scale of the potential of investigating revenue-sharing agreements, the CMA Board steered the market investigation panel to "*prioritise contractual or revenue sharing agreements whose primary purpose and/or effect appears to be to limit the ability or incentives for browser vendors to compete with one another within a given mobile ecosystem.*" The Issues Statement published in December 2022 confirmed the intention "*to investigate certain agreements between Apple and Google, in relation to browser search revenue sharing.*"

From what we can see, although there is some discussion (in Appendix A of WP5) of Google's agreements with Android device manufacturers, the CMA does not appear to have carried out any further consideration of agreements between Apple and Google.

We note that in the recent ruling in the US against Google, the decision stated that *"Google pays Apple [~~8~~] % of its ad revenue on Safari and Chrome"* and that *"Google pays revenue share on Chrome queries, notwithstanding the fact that Apple does not preload Chrome onto its devices."* This would appear to suggest that, regardless of whether an iOS user selects Safari or Chrome, the two companies will end up with the same amount of revenue. In such circumstances, the two companies have very little financial incentive to compete with each other to win each other's users. This would be true even after Apple's WebKit restriction was removed, or choice screens were implemented.

It would appear that the impact of the remedies under consideration by the CMA would be undermined by this contractual agreement, as the two biggest browser vendors would continue to quietly split the profits in a manner that insulates them from changes in consumer demand.

Interaction with the CMA's new Digital Markets Competition Regime

The CMA highlights in WP7 the possibility of concluding the market investigation with a recommendation to the CMA Board to *"consider whether to make an SMS designation in relation to mobile ecosystems and whether to impose certain remedies"*.

While the immediate effects and next steps of such an approach are not clear, we have serious concerns if this was viewed as an alternative to taking forward remedies directly at the conclusion of the market investigation. Presumably following such a recommendation, the CMA would then need to initiate an SMS investigation, during which it would be required to consult and consider views of affected stakeholders, and devise conduct requirements covering the entire mobile ecosystem. Although PCIs could theoretically be taken forward in this time, they equally could come later.

While we would welcome a recommendation from the market investigation that could support and smooth the way for a future SMS designation of Apple and Google in relation to mobile browsers, we would not support this as the sole outcome of the market investigation.

Summary

The CMA has led the way amongst its international peers in its work to understand and address the barriers to competition in the mobile browser market.

We support the CMA's findings and many of the potential interventions that have been discussed, in particular those on iOS that will give non-Safari browsers full access to the same underlying technology as Safari, whether or not they choose to use WebKit, and those that will introduce greater freedom of choice for users across both ecosystems.

However, from Gener8's perspective as a browser vendor and browser extension provider, the CMA appears to have omitted three key topics from its consideration that require robust remedies. In particular, we look forward to supporting the CMA with its further investigation of support for browser extensions before it reaches its provisional decision.

Finally, we urge the CMA to take bold and decisive action at the conclusion of the market investigation in relation to all of the competition concerns it has identified. We hope these remedies can then in future be incorporated into and enforced through the incoming Digital Markets Competition Regime.