

MOBILE BROWSERS AND CLOUD GAMING

Summary of final decision

12 March 2025

Summary

Overview

The independent inquiry group appointed for this market investigation has found that a number of markets relating to browsers on mobile devices are not working well for consumers and businesses, which is holding back innovation and could be limiting growth in the UK. Mobile browsers are apps which provide the primary gateway for consumers to access the web on their mobile devices, and hence for businesses to reach them with their content and products. The issues we have identified mean that consumers could be missing out on new features when using mobile browsers; and businesses are limited in their ability to reach consumers through browser apps.

Mobile browsers run on operating systems, which are the foundational layer of software on which other software operates on mobile devices. Apple and Google control the operating systems used on iOS and Android devices respectively, and there is a duopoly in mobile device operating systems in the UK: [50-60]% of mobile users used Apple's iOS and [40-50]% used Google's Android in 2023.¹ Further, Apple's Safari and Google's Chrome browsers have high and stable shares of supply in the UK, with Safari accounting for 88% of mobile browsers on iOS and Chrome 77% on Android in 2024.

We have identified a number of features in the markets for mobile browsers, browser engines and in-app browsing technology which restrict competition. Most of these features relate to the policies implemented by Apple in the relevant markets. In particular, we have found that various policies implemented by Apple are holding back innovation in the development of browsers on iOS.

First, Apple specifies that mobile browsers in the UK must use Apple's own underlying browser engine (WebKit), which determines what competing mobile browsers can do on iOS. We have found that this limits the extent to which competitors can differentiate their browsers and offer enhanced features to iOS users.

Second, Apple's own mobile browser Safari has or has had greater or earlier access to key functionalities from the operating system and Apple's WebKit browser engine, compared to competing mobile browsers. This has a negative impact on competition and innovation.

As a result, consumers and businesses could be missing out on potential innovative features that mobile browsers can provide. We have seen persuasive evidence that Apple's rules limit competition and so may prevent:

¹ Please note exact figures are covered by ranges, due to market sensitivity, as in standard CMA practice.

- other browser companies such as Mozilla and Vivaldi from offering users additional privacy features when browsing the web;
- Microsoft, Mozilla and others from providing additional security features to protect from malicious attacks online; and
- multiple browser providers loading pages on iOS as fast and efficiently as they could (compared to if they were allowed to use a browser engine other than WebKit).

In particular, Apple's rules appear to be holding back a category of apps known as 'progressive web apps' (PWAs) that are lower cost and easier for developers to build since they can run on any operating system. PWAs do not need to be listed on an app store, are not subject to app store charges and can be saved onto a home screen like native apps. PWAs are offered by companies such as Spotify, Facebook, Trivago and Pinterest. Many smaller UK app developers told us that limits on web apps are holding back their business because they could be developing PWAs as a comparable and lower cost alternative to developing a native app.

Third, Apple limits the technology available to link to web content from within an app on iOS. This is known as in-app browsing, which appears to be an increasingly significant proportion of all browsing which takes place on mobile devices. We have found that Apple's restrictions limit the traffic available to competing browsers in this type of browsing. These restrictions also limit the extent to which apps can customise their users' browsing experience, which companies like Meta, with millions of users, would like to do. We have found that this limits competition and choice in terms of the options available to app developers to offer in-app browsing and makes it harder for smaller browsers to grow.

Fourth, we are concerned about revenue sharing arrangements between Google and Apple, whereby Google pays Apple a significant share of the search advertising revenue earned from traffic on Safari and Chrome on iOS. We have found that Apple and Google earn significant revenue when their key rival's mobile browser is used on iOS for web searches on Google, significantly reducing their financial incentives to compete. In fact, the extent of this revenue-sharing is so large that the revenue share they earn from their competitor's product is lower but similarly significant to the revenue share they earn from their own. This means that the incremental revenue from winning customers, and therefore the financial incentive to compete, is significantly limited.

Fifth, we find both Apple's and Google's product design choices about when, whether and how users make certain decisions about mobile browsers, also known as 'choice architecture', are making it significantly harder for users to drive competition by making active choices about their use of mobile browsers.

Apple is able to control these product design choices through its iOS operating system, and Google through agreements with device manufacturers in relation to its Android operating system. Importantly, Safari on iOS and Chrome on Android are pre-installed,

placed prominently on the home screen of many new mobile devices in the UK and often set as the default browser which will open when web content is being accessed.

However, compared to our November 2024 provisional decision report, we have fewer concerns about Apple's and Google's choice architecture practices overall. This is due to two developments which took place after our report was published. First, Apple released a software update in December 2024 (iOS 18.2) which appears to make it easier for users to switch their default browser. Second, Google provided us with further evidence relating to the limits it has set on its use of prompts to encourage users to set Chrome as their default browser. These two developments have addressed some, but not all, of the concerns relating to choice architecture that we had identified in our provisional decision report.

As part of this market investigation, we have also considered a number of potential measures which could, in principle, address certain of the competition issues identified above. However, we concluded that if implemented through the remedy-making powers available to us in this market investigation, there would be a number of significant risks to the effectiveness of these measures.

During the course of this investigation, the CMA has been granted powers under the Digital Markets, Competition and Consumers Act 2024 which has established a new pro-competition regime for digital markets. These powers came into force on 1 January 2025 and enable the CMA to designate firms as having 'strategic market status' (SMS) in relation to one or more digital activities; and impose forward-looking requirements to guide the conduct of firms designated with SMS.

On 23 January 2025, the CMA opened investigations into whether to designate Apple and Google as having SMS in the provision of their respective mobile ecosystem services, including in the areas related to mobile browsers which were the focus of this investigation.

We have concluded that an effective and comprehensive means of addressing the competition concerns we have identified is to recommend that, if the CMA Board decides to designate Apple and/or Google with SMS in their respective digital activities in mobile ecosystems as a result of these investigations, it should consider imposing appropriate interventions, such as those we have set out in this report.

Should the CMA Board proceed with the recommended course of action, the markets that are the subject of this investigation have the potential to function better; allowing a wider range of companies to invest, innovate and grow, thereby giving millions of consumers access to mobile browsers which may be faster, more secure and more private for use in their everyday lives.

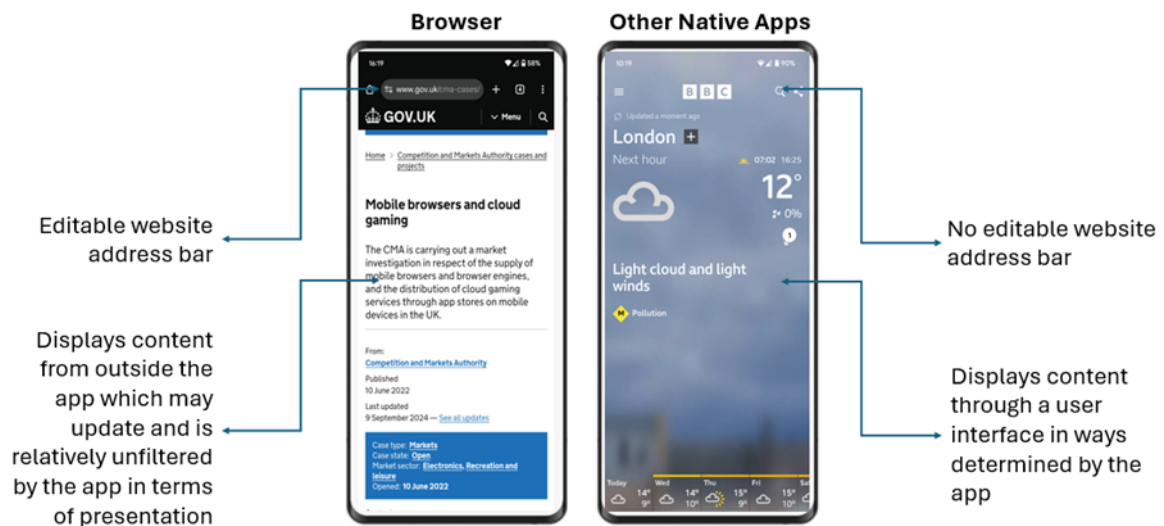
We also looked at cloud gaming on mobile devices. While a 2022 CMA market study which led to this market investigation had identified concerns that Apple's rules were blocking the development of cloud gaming apps on iOS devices, Apple has since made

significant rule changes, which look to have positive implications for competition in this market. Therefore, we have not found concerns in this area.

The focus of this market investigation

1. UK smartphone users spend an average of three hours a day using their devices, of which around 30 minutes is spent in dedicated mobile browser apps.
2. A mobile browser is an app that consumers use to access the internet on their mobile device. As such, it is a key gateway through which 56 million UK users² access and search the internet.
3. Consumers make use of standalone mobile browser apps, including household names such as Safari, Chrome, and Firefox, some of which are among the most used apps on UK mobile devices. Standalone browser apps are a specific type of native app³ used on a mobile device. Browsers show an editable website address bar and access dynamic content, meaning regularly changing content across the internet which resides outside the mobile browser app.

Figure 1: Visual comparison between a browser and other native app on a user device



Source: CMA

4. Whether they know it or not, consumers also access a significant amount of internet content through 'in-app browsers'. These are browsers which are embedded in other apps, for example, within social media or online marketplace apps. These in-app browsers can often be distinguished from standalone browser

² Statista, [Number of smartphone users in the UK 2020-2029](#).

³ Applications written to run on a specific operating system and as such interact directly with elements of the operating systems in order to provide relevant features and functionality.

apps as there is an option at the top of the screen to exit the in-app browser and return to the native app.

5. The way that a browser works on a mobile device is determined by the mobile operating system (OS). The OS is the foundational software upon which all other software on a mobile device must run.
6. In the UK there is a duopoly in mobile device operating systems, with [50-60%] of smartphone customers using Apple's operating system (iOS), and [40-50%] using Google's operating system (Android), in 2023.⁴
7. The market power that Apple and Google hold in relation to mobile operating systems enables them to set the rules and parameters relevant to how mobile browsers, browser engines and in-app browsing technology are allowed to work on iOS and Android devices respectively. Accordingly, Apple's and Google's conduct has the potential to restrict competition in mobile browsers, reduce the pace of innovation and therefore diminish the quality of browsing experiences.
8. This investigation also related to cloud gaming, which is a popular and growing service allowing video game content to be streamed over the internet, from powerful gaming hardware in a data centre, to be displayed on a user's choice of supported mobile device. In January 2024, there were [X] monthly average users accessing cloud gaming services on mobile devices in the UK.⁵ Apple and Google are able to exercise control over the provision of cloud gaming services through their app stores – Apple's App Store and Google's Play Store.

This final report represents the culmination of a significant body of work

9. This investigation follows a 12-month market study by the CMA examining the wider mobile ecosystem of which mobile browsers form an important part, namely the Mobile Ecosystems Market Study (MEMS), which ran 2021-22.
10. Over the course of this investigation, we have obtained and analysed information from stakeholders and market participants active across the relevant browser markets and related digital space. More specifically, we have:
 - (a) Spoken or sent information requests to 17 companies which supply mobile browsers, 62 developers of apps and internet content, 17 companies which manufacture mobile handsets, and nine other industry groups and parties involved in mobile browsers more widely. We have also obtained and

⁴ Please note exact figures are covered by ranges, due to market sensitivity, as in standard CMA practice.

⁵ This figure assumes that mobile users do not multi-home across iOS and Android mobile devices. Responses to the CMA's information requests [X].

analysed a significant number of internal documents provided by Apple, Google and other stakeholders.

- (b) Commissioned two professional research organisations to provide independent, quantitative and qualitative research.
- (c) Held two sets of hearings with Apple and Google, consulted on our emerging thinking through seven working papers, and analysed 55 responses to these papers.
- (d) Consulted on our provisional decision report, published on 22 November 2024. We received, analysed and published responses from a range of stakeholders.

11. We have looked in-depth at the technical features and markets related to mobile browsing, for example the underlying 'browser engines' which are crucial in determining the limits of what mobile browsers can do, the multiple forms of 'in-app browsing' where much browsing now takes place, and various forms of 'web-apps' – applications which allow users to access services such as email inboxes, music streaming and many others without needing to download a traditional 'native app' (ie an app designed for their specific operating system) on their device.

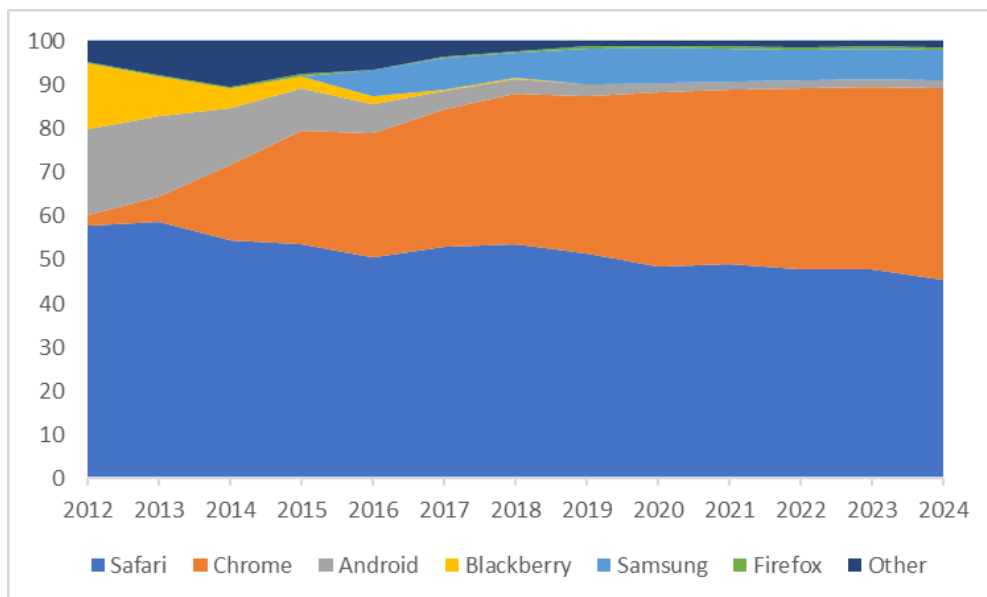
Box 1: What browser engines are, and why they matter

- Behind the branded browser interface users see when reading a news article or booking a cinema ticket online lies a complex body of several million of lines of code known as a 'browser engine'.
- While their presence is unknown to most consumers, browser engines largely determine how fast and smoothly a browser runs, the levels of privacy the user has and the degree of security from malicious attacks while doing so.

Apple's and Google's browsers on iOS and Android devices have very high shares of supply

12. Apple and Google have had consistently high shares in the supply of mobile browsers in the UK for at least the last 5 years, with 44% for Apple's Safari and 46% for Google's Chrome in 2024, as shown in Figure 2 below.

Figure 2: UK browser shares of supply (mobile) – 2012 to 2024



Source: Statcounter, [Mobile & Tablet Browser Market Share United Kingdom](#). Notes: (i) Mobile refers to both smartphones and tablets; (ii) Android refers to Android Open-Source Project (AOSP)-based browsers developed on top of the web browser apps made available through the Android Open-Source Project.

13. This picture is even starker looking at Apple’s and Google’s ecosystems separately. On iOS, as of December 2024, Apple’s browser Safari has an overwhelming 88% share, with Google Chrome’s 11% share accounting for most of the remaining supply. On Android, Chrome has a share of 77%, with Samsung Internet, the second-largest, holding a share of 13%.
14. The situation is similar when looking at some of the key ‘under the hood’ aspects of mobile browsers. For browser engines, which are crucial to determining browser performance, Apple’s WebKit has a 100% share of supply of browser engines on iOS. Mobile browsers based on Google’s Blink engine have a share of supply of browser engines on Android of at least 95%, with the remaining 3% coming from Mozilla’s Gecko engine.⁶
15. Alternative third-party browsers do exist, from companies such as Microsoft, Mozilla, Brave, Opera, and Ecosia. Mozilla also offers an alternative browser engine on Android only. However, these third-party browsers and browser engines have struggled to gain significant footholds in the relevant markets, as shown by their low shares of supply.
16. We also observe low levels of users switching between mobile browsers, with only 16% of UK users we surveyed having downloaded a different mobile browser from the one which came pre-installed with their phone.⁷

⁶ Please note shares do not sum to 100% due to rounding. Some of these browsers are also based on ‘light forks’, ie modified versions of Blink.

⁷ Verian Group UK (2024), Mobile Browsers Quantitative Consumer Research, slides 82 and 83.

We have found that some intrinsic aspects of the supply of mobile browsers are contributing to competition problems

17. We have found that two intrinsic aspects of the markets for supplying mobile browsers are contributing to competition problems.
18. The first aspect stems from the fact that it costs time and effort for web developers to ensure that the websites they create are compatible with different mobile browsers and browser engines. Web developers are therefore most likely to design content to run on the mobile browsers with the most users, and users are therefore more likely to prefer those same browsers because they offer the best user experience. This creates 'network effects', giving the large incumbent players an advantage and making it more difficult for smaller mobile browsers or browser engines to compete effectively, and for new mobile browsers or browser engines to enter the market.
19. The second aspect is that many consumers do not readily understand what a 'browser' on their mobile device is; which particular browser they are using at any given time; the differences between providers; the initial settings which determine their default browser (ie the one which usually opens when they click on a website link); nor think about mobile browser options when they buy a device. The picture may be even less clear for many consumers when they access an in-app browser within apps whose primary purpose is something else, for example social media or email. This makes it harder for consumers to make active choices about which mobile browser they use.
20. We consider that these aspects are intrinsic to a degree in these markets in the sense that they are particularly problematic when combined with the impact of Apple's, and to a lesser extent Google's, policies in the markets (set out below), but they would also likely exist to some degree absent these policies.

We have found that policies implemented by Apple in relation to mobile browsers and browser engines adversely impact competition

21. As explained above, Apple's control over iOS gives it market power at the operating system level. In turn, this enables Apple to set the rules and parameters relevant to how mobile browsers are allowed to work on iOS.
22. We have heard widespread, detailed and compelling evidence that the rules Apple sets due to its control of the iOS operating system limit the ability of mobile browsers other than Apple's Safari to provide more innovative, differentiated features.
23. This is in contrast to Google's approach on Android, which is more open in terms of how it allows other mobile browsers to operate.

24. **Fundamental to this is Apple’s rule on iOS which bans the use of other underlying browser engines**, which are crucial for determining browser performance, security, privacy, and providing new features (see Box 2).
25. We note that there is no such rule on Apple’s desktop operating system macOS, where other browser engines are allowed, nor on other mobile platforms beyond iOS.

Box 2: mobile browser features which challenger firms have told us they could provide if Apple allowed alternative browser engines

- **Better performance:** evidence from Microsoft, Mozilla, Vivaldi and others suggests the requirement to use WebKit means their mobile browsers cannot compete by providing improvements to the user experience, which could result in benefits such as faster loading times and fewer delays and glitches.
- **Stronger security:** Microsoft, Mozilla and others have told us they are prevented from fully offering additional security features against malicious attacks online. Examples include limits on introducing ‘Safebrowsing mode’, which provides warning messages about potentially dangerous sites or downloads and ‘site isolation’, which provides an additional layer of protection, making it harder for an untrustworthy website to attack or compromise other websites accessed through the browser.
- **Greater privacy:** companies such as Mozilla and Vivaldi have told us they are prevented from offering users additional privacy features when browsing the web.

26. We have considered submissions from Apple that insisting browsers only use WebKit is necessary because allowing alternative browser engines could raise security, privacy and performance risks.
27. We accept that the current restriction does reduce the risk of third-party browsers on iOS using outdated, vulnerable engines or implementing insecure new features. However, we consider that the risks could be managed in other ways which would not involve a complete ban on other browser engines as is currently the case, eg by Apple imposing minimum security standards on mobile browsers using browser engines other than WebKit. We also note that alternative browser engines perform similarly to WebKit on security outcomes and that Apple’s current restriction actually prevents mobile browsers competing and innovating on security and privacy features, for example by implementing security updates more frequently than Apple’s architecture currently allows.

Box 3: progressive web apps – a potentially more direct way for users to access apps, currently limited on iOS

- Progressive web apps (PWAs) are a version of a webpage saved on the home screen of a device. They are offered by companies such as Spotify, Facebook, Trivago and Pinterest, and may look to a user like any other kind of app.
- Importantly, PWAs can be built to run on any operating system, thus lowering developers' costs for developing apps and allowing them to offer more apps and greater choice. They do not need to be listed on an app store and are not subject to app store charges.
- We have been told that Apple's rules mean that PWAs on iOS do not perform optimally and have limited features, which in turn means developers are less able to offer sufficiently high-quality web apps.

28. Looking beyond Apple's prohibition of alternative browser engines, we have found that **Apple's mobile browser Safari has or has had greater and earlier access to key functionalities from the operating system and Apple's WebKit browser engine; when compared to other browsers – such as Firefox, Brave, Opera, Vivaldi and Chrome.**
29. As explained in Box 4 below, we have concluded that this limits the ability of mobile browsers competing with Safari on iOS to attract users by offering high-quality products and, as a result, reduces competition and the resulting benefits for consumers.

Box 4: features which challenger firms have told us they could provide or could have provided sooner if Apple allowed browsers access to the same functionalities as Safari

- It is not currently possible for challenger firms to offer the same browser extension functionality – such as ad-blockers, productivity tools and others – as Safari does.
- Safari was able to implement full screen video almost four years before Apple allowed other browsers access to the functionality required to do so.
- Safari was able to offer Intelligent Tracking Protection, an important privacy feature, over two years before other browsers had access to the same functionality.

We have found that a revenue sharing arrangement between Apple and Google reduces financial incentives to compete for the two main browsers on iOS devices

30. We have found that competition between mobile browsers on iOS is further weakened by an agreement between Apple and Google, pursuant to which Google pays Apple a significant share of the search advertising revenue earned from traffic on Safari and Chrome on iOS.⁸
31. This means Apple and Google earn significant revenue when their key rival's mobile browser is used on iOS for web searches on Google, significantly reducing their financial incentives to compete. In fact, the extent of this revenue-sharing is so large that the revenue share they earn from their competitor's product is lower but similarly significant to the revenue share they earn from their own, so that the incremental revenue from winning a customer is significantly limited.⁹ We have found that this negatively impacts competition among mobile browsers on iOS devices.

We have found that Apple's rules on in-app browsing limit the user experience, competition and traffic to alternative browsers

32. It appears that an increasing amount of web browsing now takes place within apps such as social media, email inboxes and others, rather than on dedicated browser apps. We have found issues which stem from Apple's rules relating to the way these browsing experiences can be offered, for example in terms of browsing speed, stability and security.
33. **First, apps cannot fully customise the in-app browsing experience for their users because Apple does not permit apps to use alternative browser engines for in-app browsing.**
34. We have found that banning the use of alternative browser engines for in-app browsing limits the development of the user experience within apps, and of new innovative products. It also limits the possibility that apps with in-app browsers might introduce new features that could be adopted or introduced more widely and therefore improve competition between standalone browser engines and mobile browsers. One such example is the experience of Meta, a firm with millions of users through popular apps such as Facebook and Instagram. This is set out in Box 5, below.

⁸ Information Services Agreement, [REDACTED].

⁹ Google response to the CMA's information request [REDACTED].

Box 5: case study on missed innovations: Meta's desire to build its own in-app browser on iOS

- Meta told us that it wants to build an in-app browser using its own browser engine on iOS that it could customise completely to create in-app browsing experiences.
- According to Meta, this would allow it to develop new features that could improve user experience, security and performance, for example, by being able to more quickly load web pages and also to make the in-app browser more stable.
- While Meta has been able to do this on Android, it cannot develop these features on iOS currently because Apple's rules require apps to use Apple's own technology – including its WebKit browser engine – for in-app browsing within apps like Facebook.

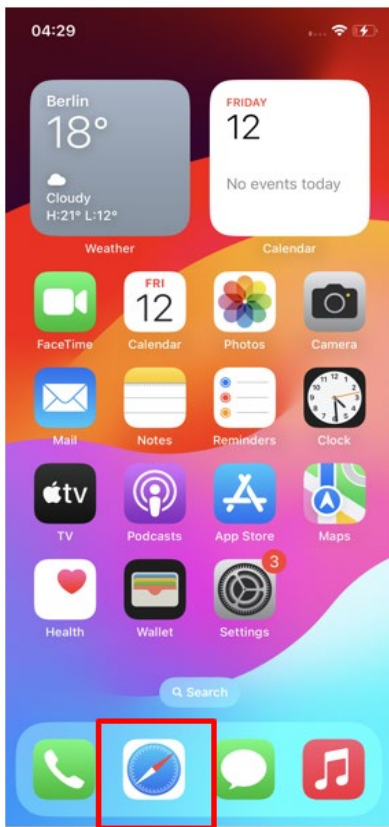
35. **Second, apps are prevented from relying on other mobile browsers instead of a technical solution offered by Apple for in-app browsing, which limits traffic to alternative browsers and browser engines, and reduces competitive pressure on Apple's in-app browsing offering on Safari.** We consider that this limits the growth of alternative browsers and prevents innovation that could benefit apps and consumers.

We have found that Apple's product design choices make it significantly harder for consumers to drive competition by actively choosing which browser they use

36. Apple's control of its iOS operating system means it is able to determine key design decisions such as which products are placed prominently on a user's screen and which apps are treated as the 'default' option.¹⁰ We have seen evidence that this is happening in the Apple ecosystem with regard to browsers, when users first get their device, and again later, while they are using it.
37. We recognise that it can be helpful for consumers to have mobile devices which are ready to use 'straight-out-of-the-box', but **we have found that the factory settings for Apple's mobile devices limits competition between browsers, particularly given low levels of consumer engagement with these types of products.**

¹⁰ Design decisions can also be referred to 'choice architecture' which specifies when, whether and how users make choices.

Figure 3: Placement of Safari on iOS devices.



38. In particular, Apple pre-installs Safari as a browser on new iOS devices, places it in the ‘application dock/ hotseat’ along the bottom of the home screen, and sets it as the ‘default browser’, ie the browser which usually opens when users click on a website link. The prominent placement of Safari on iOS devices can be seen in Figure 3.

39. We have found the pre-installation and prominent placement of Safari and default settings on iOS devices reduce user awareness, engagement and choice, increase barriers to entry and expansion for other browser vendors and further reinforce Safari’s very strong position on iOS.

Source: CMA

Note: Screenshot taken on iPhone 10 running iOS 17.4 in April 2024.

40. In addition, **we have found concerns related to Apple’s design choices used after the first set-up of a device**, albeit to a lesser extent than we outlined in our November 2024 Provisional Decision Report (PDR).
41. In the PDR, we had provisionally found that on iOS there was no simple and clear way for users to change the default browser. Instead, users had to navigate a series of menus to do so, giving rise to concerns that this would be likely to make it harder for users to switch browsers, therefore limiting competition.
42. We also found that, unlike Android, Apple also does not provide a way for alternative browser vendors to effectively target ‘prompts’, which encourage users to switch their default browser, to users who have downloaded, but not yet set, an alternative browser as their default. Competing browser vendors told us that effective prompts can contribute to their visibility, and can increase user engagement and switching in the market for mobile browsers. Therefore, we were concerned this would restrict competing browsers – which, unlike Safari, are not pre-set as the default browser on iOS devices – in their ability to be more effective and targeted in their use of prompts. This restriction would limit their ability to

compete and increase the risk of users receiving prompts that are untimely and redundant.

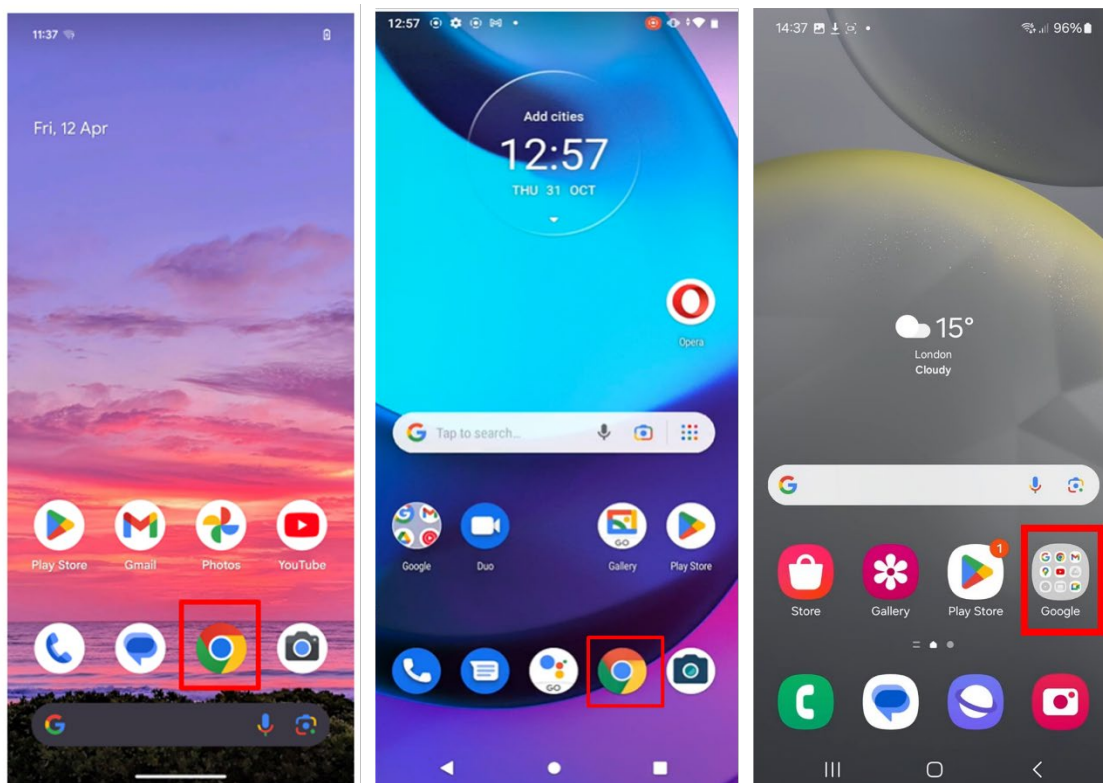
43. In December 2024, soon after our PDR was published, Apple released a software update (iOS 18.2) which provided a central way to change default browser, and appears to make the user journey to do so easier. Our concerns regarding alternative browser vendors being unable to effectively target prompts to users who have downloaded their products to change their default settings remains unchanged, however.

We have also found that Google’s product design choices make it significantly harder for consumers to drive competition by actively choosing which browser they use, albeit to a lesser degree than on iOS.

44. Google’s control of the Android operating system means it is able to determine key design decisions such as which products are placed prominently on a user’s screen and which apps are treated as the ‘default’ option. We have seen evidence that this is happening in relation to how browser options are presented when users first get their device, and again later, while they are using it.
45. Google uses factory setting agreements with device manufacturers who use Google’s Android operating system, with Chrome being pre-installed, prominently placed,¹¹ and often set as the default browser on many devices. This can be seen in the three diagrams in Figure 4 below.

¹¹ This happens to varying degrees depending on their agreement with the handset manufacturer.

Figure 4: Prominent placement of Chrome on Android devices, as shown on Google Pixel, Motorola, and Samsung S24.



Source: CMA.

Note: Screenshot 1 taken on Google Pixel 6a running Android 14 in May 2024. Screenshot 2 taken on Motorola Moto E20 running Android 11 in November 2024. Screenshot 3 taken on Samsung S24 running Android 14 in November 2024.

46. We recognise that it can be helpful for consumers to have phones which are ready to use ‘straight-out-of-the-box’, but we have found that the **use of factory settings which see Google’s mobile browser app frequently pre-installed, given prominent placement, and in some cases set as the default limits competition, particularly given low levels of user engagement with these types of products.**
47. We have found that this raises barriers to entry and expansion for other browser vendors and maintains low levels of consumer awareness and engagement in relation to choice of mobile browsers, reinforcing Chrome’s very strong position on Android.
48. In the PDR, we had provisionally found that Google’s use of prompts to encourage users to set Chrome as their default browser on Android across multiple access points made it harder for browser vendors to retain newly switched users and therefore compete with Google. However, Google has provided additional evidence in response to our PDR concerning the limits it places on its use of prompts and so we no longer have a concern in this regard.

Our decision on remedies: a recommendation to the CMA Board

49. We have considered a number of potential measures which could, in principle, address the competition issues identified above; and concluded that there would be significant risks to the effectiveness of these measures if implemented through the remedy-making powers available to us in this market investigation.
50. During the course of this market investigation, the CMA has been granted powers under the Digital Markets, Competition and Consumers Act 2024 which established a new pro-competition regime for digital markets. These powers came into force on 1 January 2025 and enable the CMA to designate firms as having 'strategic market status' (SMS) in relation to one or more digital activities; and impose forward-looking requirements to guide the conduct of firms designated with SMS.
51. On 23 January 2025, the CMA opened investigations into whether to designate Apple and Google as having SMS in the provision of their respective mobile ecosystem services, including in the areas related to mobile browsers which were the focus of this investigation. In parallel to the announcement of these investigations, the CMA published an invitation to comment (ITC) in which it stated that it will explore the potential harms that may arise in relation to Apple and Google's provision of mobile browsers and browser engines and consider whether interventions are appropriate. It also noted that it would consider this final report once it is published.
52. We have therefore concluded that an effective and comprehensive means of addressing the competition concerns we have identified is to recommend that, if the CMA Board decides to designate Apple and/or Google with strategic market status in their respective digital activities in mobile ecosystems as a result of the SMS investigations opened on 23 January 2025, it should consider imposing appropriate interventions, such as those we have considered in this report.

The primary concern referred to us relating to cloud gaming has been addressed following changes to Apple's rules and no further action is warranted at this time

53. We have also examined the distribution of cloud gaming services through app stores on mobile devices in the United Kingdom, as per the terms of reference for this market investigation.
54. As set out in the issues statement we published early in this investigation, our focus has been to consider whether Apple's App Store policies effectively ban cloud gaming services and whether this weakens competition in the distribution of cloud gaming services.

55. The CMA's Mobile Ecosystems Market Study made a reference in 2022 for this market investigation to consider cloud gaming services. The primary concern raised by the market study was that Apple did not allow cloud gaming apps to be available on the App Store.
56. During the course of our investigation, cloud gaming service providers raised some additional concerns, such as the requirement for apps to use Apple's in-app payment method and pay the associated commission.
57. However, we have concluded that, considered in the round, the available evidence is insufficient to conclude that Apple's guidelines are limiting the availability of cloud gaming services as native apps on mobile devices. In this context, we note that we have seen some evidence of potential market entry by some cloud gaming service providers.

Box 6: Apple's January 2024 cloud gaming rule changes

Prior to January 2024, Apple's App Store Review Guidelines contained an effective ban on cloud gaming services being provided through native apps on the App Store. This was due to a requirement that each streaming game had to be submitted to the App Store as an individual app (previous Guideline 4.9) and a guideline precluding apps where code distribution was the 'main purpose' and the code was offered in a 'store or store-like interface' (the previous Guideline 4.7).

In January 2024, Apple announced major worldwide changes to its Guidelines, including the deletion of Guideline 4.9 and amendments to Guideline 4.7. Apple has stated that it will now allow 'game streaming apps' on the App Store.