

Mobile browsers and cloud gaming

Decision to make a market investigation
reference

22 November 2022

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1. Introduction

- 1.1 In June 2022, we published our mobile ecosystem market study final report,¹ which found that, within their respective mobile ecosystems, Apple and Google have substantial and entrenched market power over the key gateways through which users access content online through their mobile devices. This control over their mobile ecosystems puts them in a powerful position, allowing them to determine the ‘rules of the game’ and making it difficult for rival businesses to compete.
- 1.2 Alongside that market study final report, we opened a consultation on our proposal for a market investigation reference (MIR) into the supply of mobile browsers and browser engines, and the distribution of cloud gaming services through app stores on mobile devices. That proposal followed multiple calls for further direct action by the CMA in the second half of the market study, and was designed to target particular restrictions on competition that the CMA is concerned are constraining potentially disruptive innovation within mobile ecosystems.
- 1.3 The CMA’s market study into mobile ecosystems concluded that both Apple and Google have substantial and entrenched market power in the supply of mobile browsers and browser engines within their respective mobile ecosystems. The study found that weak competition to Safari on iOS and to Chrome on Android is in part down to the advantages gained from preinstallation, default settings, and revenue sharing agreements.
- 1.4 On iOS, Apple also bans the use of alternative browser engines to its own WebKit, limiting the potential for rival browsers to differentiate themselves, while also materially inhibiting the functionality of web apps. The study also highlighted related sets of concerns in respect of web compatibility issues and in-app browsers.
- 1.5 The primary concern raised by the market study with respect to cloud gaming services was that Apple does not in practice allow them to be listed on the App Store, as its Guidelines do not permit apps which offer access to a catalogue of games, with each game needing to be individually submitted and then approved by Apple.
- 1.6 These are both economically significant areas of mobile ecosystems and used by most UK consumers and businesses. We are concerned that weak competition in them is leading to worse outcomes for consumers and

¹ CMA [Mobile ecosystems market study](#) case page.

businesses alike. Apple's restrictions in particular are holding back potentially disruptive innovation that could transform the way that consumers access and experience content online.

1.7 Following review of the responses to our consultation, this document sets out the CMA's decision to make a market investigation reference regarding the supply of mobile browsers and browser engines, and the distribution of cloud gaming services through app stores on mobile devices (mobile browsers and cloud gaming).

1.8 The remainder of this document covers the following:

- a summary of the responses to our consultation;
- our assessment of the case for the market investigation reference;
- the CMA's decision and the scope of the reference; and
- next steps.

2. Summary of responses to our consultation

The purpose of the consultation

- 2.1 Prior to making a market investigation reference, whether in the course of a market study or not, the CMA is required to consult publicly on the proposed reference and its scope. The CMA considers this consultation process to be an important part of its decision making, and we are grateful to all those respondents that have taken the time to provide their views.
- 2.2 We set out several questions in our consultation document on which we were seeking feedback. These questions invited views on our analysis of the markets for mobile browsers and cloud gaming, the appropriateness of the proposed MIR and its scope, potential remedies that could be taken forward under the market investigation, and areas for further analysis.
- 2.3 Non-confidential versions of the responses we received have all been published on our case page, and are summarised below.

Overview of responses

- 2.4 We received 43 written responses to our consultation. These are summarised in the table below and explained in more detail below.

| Response | Number | Position on MIR proposal |
|--------------------------------|--------|--|
| Supportive | 31 | Includes 22 web developers and software engineers, several browser vendors, individuals and advocacy groups. Most were critical of Apple's restrictions in these areas. |
| Supportive, with broader scope | 6 | Proposals for expansion of scope included: browsers on other devices including desktop, general search, Apple's ATT framework, and iOS payment systems. |
| Against | 5 | Apple provided the strongest opposition to our proposal, stating that its submissions of evidence (eg relating to security risks) had not been adequately reflected in the CMA's assessment. A small number of individuals disagreed with the proposal for a mix of reasons, including that removing Apple's restrictions will create a Google monopoly, and that interventions would harm services for disabled and assistive-tech users. |
| Neutral | 1 | Notes the potential overlap with Ofcom mobile strategy |

- 2.5 Overall, the majority of the responses we received were supportive of our proposal to make a MIR, with only five arguing against the proposal, and one response that was neutral.
- 2.6 Support for the reference came from a number of different stakeholder groups, but most prominently from web developers and browser vendors. The most widely referenced concerns related to Apple's WebKit restriction and its lack of feature support for progressive web apps.
- 2.7 Of those in favour, the majority supported the proposed scope and terms of reference, while six respondents proposed amendments or more substantive expansions to the scope. For instance:
- In relation to browsers, a couple of responses highlighted that some of our competition concerns regarding mobile browsers also apply on desktop devices.
 - A few responses highlighted the close links between browsers and general search, in particular regarding monetisation, and that it would therefore make sense to consider them together.
 - A small number of responses raised concerns regarding the impact of Apple's App Tracking Transparency framework, and argued that the CMA should be taking action in this area. One response pointed to some potential links between ATT and web apps and cloud gaming apps in the future.
- 2.8 We did not receive universal support for the proposal. Most notably, Apple argued strongly against the proposal, arguing that for both browsers and cloud gaming we had not fully reflected the evidence it had provided in our assessment of its restrictions. While Google's response was supportive of competition and choice with respect to browsers and cloud gaming, it stated that interventions would not be necessary within the Android ecosystem to achieve this.
- 2.9 Non-confidential versions of the responses can be found on our [case page](#).

3. The case for a market investigation reference

- 3.1 The CMA may decide to make a MIR when it has reasonable grounds for suspecting that a feature or combination of features of a market or markets in the UK prevents, restricts, or distorts competition, and a market investigation reference appears to be an appropriate response.²
- 3.2 For the reasons set out in the final report of the mobile ecosystems market study, our view is that the markets for the supply of mobile browsers and cloud gaming in the United Kingdom are not working well and that this is resulting in significant detriment for consumers.

The legal framework

- 3.3 As set out above, the reference test is a ‘reasonable grounds to suspect’ test and does not require the CMA to have concluded that there are, in fact, features of a market which prevent, restrict, or distort competition.³
- 3.4 Where the reference test is met, the CMA can exercise its discretion, to make a MIR. In the CMA’s guidance on making MIRs, it has set out four criteria which help to guide our exercise of that discretion:
- (a) The scale of the suspected problem, in terms of its adverse effect on competition, is such that a reference would be an appropriate response.
 - (b) There is a reasonable chance that appropriate remedies would be available.
 - (c) It would not be more appropriate to address the concerns through undertakings in lieu of a reference (UILs).
 - (d) It would not be more appropriate to address the competition problems through alternative powers available to the CMA or through the powers of sectoral regulators.⁴
- 3.5 In considering these factors, the CMA recognises that a MIR leads to significant costs, both to the CMA itself (and the public purse) and to the parties involved.

² [Section 131](#) (2) of the EA02 sets out what is to be construed as a feature for the purposes of Part 4 of EA02.

³ This point was made clear by the [Competition Appeal Tribunal in Association of Convenience Stores v OFT](#), [2005] CAT 36, paragraph 7.

⁴ [Guidance about the making of references under Part 4 of the Enterprise Act](#), OFT 511, paragraph 2.1.

The reference test

The markets

3.6 In making a MIR, the CMA must specify the goods or services in relation to the supply or acquisition of which there may be an adverse effect on competition (AEC). However, as stated in its published guidance on the making of MIRs, the CMA is not obliged to provide a precise definition of the market or markets to which any MIR relates.⁵

Mobile browsers

3.7 Mobile browsers are a type of mobile application that enables users of mobile devices to access and search the internet and interact with content on the open web.⁶ Other than app stores, browsers are the most important way for users of mobile devices to access content and services over the internet, reportedly spending a higher proportion of their time online on browsers than on any other single native app.⁷

3.8 Browsers comprise two main elements:

- A browser engine, which transforms web page source code into web pages (or web apps) that people can see and engage with.
- A branded user interface (UI), which is responsible for user-facing functionality such as favourites, browsing history and remembering passwords and payment details. The default search engine is set as part of the browser UI.

3.9 Browsers are also available on desktop computers including laptops (and other devices such as games consoles) as well as on mobile devices. However, as the principal concerns we have identified (such as Apple's WebKit restriction) relate to mobile devices, we consider it appropriate to refer for further investigation the supply of mobile browsers in the UK.⁸

⁵ [Market Investigation References guidance](#), OFT511 paragraph 4.8.

⁶ Web browsers provide the same function on desktops and other devices.

⁷ Kargo & Verto Analytics - Web vs App report 2019. The report says that approximately 17% of users' time is spent on mobile web (Safari and Chrome), with the next closest apps being Facebook with 14% and YouTube with 8%.

⁸ While the supply of mobile web browsers is carried out on a worldwide basis, for the purposes of this market investigation reference we are concerned only with the UK (OFT511, paragraph 4.11).

Mobile browser engines

- 3.10 The browser engine is responsible for web compatibility (ie the browser's ability to properly access and display the content on a particular web page) and determines the range of possible user inputs (eg camera, microphone). As a result, browser engines control the type of content that can be developed on the web, and significantly influence the products and services which consumers can access online.
- 3.11 Web content can be accessed through dedicated browsers or through native apps' in-app browsers.⁹ Examples of native apps with in-app browsers include a large variety of apps, including chat apps such as Snapchat, online social networks such as Facebook, search widgets such as Google Search, and email clients such as Gmail. Dedicated browsers and in-app browsers use the same set of browser engines controlled by Google (Blink), Apple (WebKit) and Mozilla (Gecko).
- 3.12 We considered whether it would be appropriate to include within the scope of the reference the supply of mobile browser engines to native apps (as 'in-app browsers'). On each operating system, apps (which use in-app browsers) and dedicated browsers can choose between the same set of major browser engines. Therefore, we consider that in investigating mobile browser engines, it is appropriate to include the supply of browser engines to in-app browsers for the purposes of our market investigation reference.
- 3.13 As was the case with browsers, the concerns we heard regarding browser engines were specific to those for mobile devices (rather than desktop browser engines). As such, we have not included desktop browser engines within the proposed scope of the referred market.
- 3.14 Therefore, we consider it appropriate for the referred market to relate to the supply of mobile browser engines in the UK.¹⁰

Cloud gaming distribution

- 3.15 Cloud gaming services are those which allow users to play games run on remote cloud servers and streamed to the user's mobile device. Previously, users would need to download individual games (ie via individual apps) to play them on mobile devices, and the sophistication of these games would be

⁹ In-app browsers typically have a reduced feature set compared to a dedicated browser app, with features (such as push notifications) typically arriving later on in-app browsers than on dedicated browsers. Steiner, Thomas. 'What is in a web view: An analysis of progressive web app features when the means of web access is not a web browser.' Companion Proceedings of The Web Conference 2018.

¹⁰ While the supply of mobile web browser engines is carried out on a worldwide basis, for the purposes of this market investigation reference we are concerned only with the UK part of it (OFT511, paragraph 4.11).

limited by the hardware capabilities of the user's device. Cloud gaming services remove this restriction, and as a result can provide users of mobile devices with access to high-quality games which would otherwise only be available on other platforms (such as video game consoles or computers).

- 3.16 Cloud gaming services can be distributed to users on mobile devices in one of two ways. They can be provided as native apps, which are distributed through app stores, or they can be provided as web apps, which users can access through browsers.
- 3.17 Cloud gaming services can also be accessed on various non-mobile devices, including computers, gaming consoles, dedicated cloud gaming devices and smart TVs. The concerns we heard regarding distribution of cloud gaming services were focussed on distribution on mobile devices through app stores, and as such we have not included distribution of cloud gaming on other platforms within the scope of the referred market.
- 3.18 Therefore, we consider it appropriate for the referred market to relate to the distribution of cloud gaming services through app stores on mobile devices in the UK.

The features in these markets

- 3.19 Based on the evidence and the analysis set out in our market study final report (see Chapter 5), we consider that there are reasonable grounds for suspecting that one or more of the following features, alone or in combination prevent, restrict, or distort competition in the supply of mobile browsers and mobile browser engines (and related ancillary goods and services) in the UK:
- Apple mandating the use of WebKit for browsers on iOS, controlling the boundaries of quality and functionality of all such browsers. This limits the potential for rival browsers to differentiate themselves, materially inhibits the functionality of web apps and prevents third-party web engines from serving browsers on iOS.
 - Web compatibility and associated network effects mean that it is more difficult for smaller browser engines to compete effectively and for new browser engines to enter on Android (where Google permits browser engine choice).
 - Apple's and Google's influence of user behaviour through pre-installation, default setting, and choice architecture, designed to maximise the use of their own browsers.

- Apple and (to a lesser extent) Google restricting access to functionality that affects alternative browsers.
- Revenue sharing agreements which dampen incentives for competition between browsers on iOS.

3.20 Based on the evidence and the analysis set out in our market study final report (see Chapter 6), we also consider that there are reasonable grounds for suspecting that the following feature, alone or in combination with others which we may identify, prevents, restricts, or distorts competition in the distribution of cloud gaming services through app stores in the UK:

- Apple restricting the ability of cloud gaming providers to access the App Store. This weakens their ability to attract users and degrades the user experience that they can offer.

Conclusion on the reference test

3.21 For the reasons set out above and in the relevant chapters of the mobile ecosystem market study final report, we have found that there are reasonable grounds to suspect that one or more features (alone or in combination) in relation to the supply of mobile browsers and cloud gaming (and related ancillary goods and services) prevent, restrict, or distort competition in the UK and that the reference test is met. Based on the evidence set out in Chapter 7 of the final report on the harms from weak competition in these markets, we also have reasonable grounds to suspect that any adverse effect on competition resulting from the features that we have identified may lead to significant consumer harm.

3.22 Having reached this conclusion, we now set out our assessment against the factors relevant to the exercise of the CMA's discretion to make a MIR.

Assessment of the appropriateness of a reference

First criterion: scale of the suspected problem

3.23 The CMA recognises that a MIR may impose a burden on the businesses concerned and, in addition, requires a significant commitment by the CMA itself in particular where any remedies imposed require active ongoing oversight or monitoring to be undertaken by the CMA. It will only make a MIR

when it has reasonable grounds to suspect that the adverse effects on competition of features of a market are significant.¹¹

- 3.24 In determining the scale of the suspected problem, our guidance identifies three factors of particular significance:
- a) the size of the market;
 - b) the proportion of the market affected by the features; and
 - c) the persistence of those features.¹²

The size of the market

- 3.25 In the UK, mobile browsers had around 55 million weekly active users in 2021, making them amongst the most widely used apps and the key gateway for people to access the web from mobile devices.¹³ In the case of browsers, high usage is followed by high commercial activity, as sales on browsers account for a material share of mobile retail commerce, which in turn represents a substantial and growing share of e-commerce and total retail sales in the UK.¹⁴ Therefore, browsers are an important gateway for online content providers and businesses with an online presence to reach potential customers.
- 3.26 As set out above, in their respective mobile ecosystems, both Apple and Google have very high shares of browser usage. Their combined share of supply on mobile devices in the UK is around 90%, with Safari having a usage share of close to 50% and Chrome above 40%. Samsung Internet is the only other browser with a share above 5%.¹⁵
- 3.27 Most browsers use one of the two main underlying browser engines, Apple's WebKit (mandated on all iOS devices) and Google's Blink (most browsers on Android use). Overall, in 2021, at least 97% of all browsing in the UK was performed using Blink and WebKit.¹⁶

¹¹ [Guidance about the making of references under Part 4 of the Enterprise Act](#), OFT 511, paragraph 2.27.

¹² [Guidance about the making of references under Part 4 of the Enterprise Act](#), OFT 511, paragraph 2.28.

¹³ App Annie weekly active users data, provided by a browser vendor; Kargo & Verto Analytics - Web vs App report 2019. The report says that approximately 17% of users' time is spent on mobile web (Safari and Chrome), with the next closest apps being Facebook with 14% and YouTube with 8%.

¹⁴ In the first quarter of 2018 sales on browsers accounted for around half of the mobile retail commerce in Europe. Criteo, 2018, [Global commerce Review](#), Q1 2018. Statista, 2021, [Mobile commerce in the United Kingdom \(UK\)](#).

¹⁵ Statcounter page views data, [Mobile & Tablet Browser Market Share United Kingdom | Statcounter Global Stats](#), (retrieved 7 April 2022).

¹⁶ App Annie browser usage minutes data provided by a browser vendor. Statcounter, [Mobile & Tablet Browser Market Share United Kingdom | Statcounter Global Stats](#).

- 3.28 The number of users of cloud gaming services in the UK is currently small but is expected to grow quickly. In January 2022, across the providers contacted within our market study into mobile ecosystems, there were around 800,000 monthly active users of such services in the UK on all devices, around 215,000 of which were on Android or iOS, with the remainder using other devices such as consoles or PCs. Worldwide, there were just over 10 million monthly active users, with around 3.8 million on Android and iOS.¹⁷ Indeed, Microsoft alone says that its service has now streamed games to over 10 million people.¹⁸
- 3.29 Reports by third parties, submitted by Apple, indicate that worldwide, revenue from cloud gaming services was expected to grow quickly with a CAGR of 65%, and that the potential users of cloud gaming services across all devices would grow to 125 million by this year, however the distorting features of the market mentioned above may slow such growth.¹⁹
- 3.30 The wider gaming market may be indicative of the potential for cloud gaming's growth. In 2021, gaming generated around £4.3 billion in revenue in the UK (£1.5 billion from mobile gaming). Over the last decade, this figure has grown quickly with a CAGR of 7.8%.²⁰

The proportion of the markets affected by the features

- 3.31 As discussed above, both Apple and Google have very high shares of browser usage (combined around 90% in the UK) and browser engine usage (combined at least 97% in the UK). In addition, our assessment of competition suggests that the main barriers to competition cover substantial proportions of the markets under consideration. For example, over half of mobile devices in use in the UK are affected by Apple's WebKit restriction, and either Safari or Chrome are preinstalled on almost all mobile devices.
- 3.32 The restrictions we have identified on the distribution of cloud gaming services apply to all Apple mobile devices, which as noted above account for over half of mobile devices in use in the UK. Apple devices also account for the majority of mobile gaming revenues in the UK.²¹

¹⁷ Mobile ecosystems market study final report, Chapter 6.

¹⁸ [Microsoft says more than 10 million people have streamed games on Xbox Cloud Gaming - The Verge](#)

¹⁹ Mobile ecosystems market study final report, Chapter 6.

²⁰ [ENTERTAINMENT TARGETS £10BN IN UK SALES IN 2022 AS 2021 PRODUCES NINTH SUCCESSIVE YEAR OF GROWTH - ERA \(eraltd.org\)](#)

²¹ According to data from Sensor Tower, gaming app developers earned around \$760 million from iOS users and around \$600 million from Android users in the UK in 2021.

The persistence of those features

- 3.33 The supply of mobile browsers and of mobile browser engines is highly concentrated, and this has increased over time. Safari and Chrome’s combined share of supply on mobile devices in the UK increased from around 80% in 2015 to around 90% in 2022.²² WebKit and Blink’s combined very high share of supply on mobile devices in the UK further increased in 2020 when Microsoft discontinued its proprietary browser engine and started to use Blink.²³
- 3.34 The above barriers to competition are similarly persistent, for example the browser engine restriction on iOS has been in place since 2008. Based on the evidence we have obtained so far, we expect that these features will persist (both in the UK and internationally) as there is currently no evidence to suggest that the dynamics of competition would change in the supply of mobile browsers and browser engines. Our analysis of entry suggests that there is limited prospect of entry given the barriers we have identified.
- 3.35 The restrictions on competition in cloud gaming distribution, while more recently imposed, also appear to be persistent. Apple introduced guidelines in 2018 that prevented cloud gaming services from being distributed through its App Store. Although Apple introduced new guidelines in 2019 to technically allow cloud gaming apps, as discussed above these included caveats which prevent cloud gaming apps from being feasible to develop for the App Store in practice, and Apple has not indicated any willingness to remove these restrictions.²⁴

Conclusion on first criterion

- 3.36 We consider that the scale of the suspected problems and associated harm in relation to mobile browsers and cloud gaming services are sufficiently large and persistent to justify the burden of a MIR.

Second criterion: availability of appropriate remedies through a MIR

- 3.37 The availability of remedies and the prospective value of a market investigation is part of the CMA’s assessment when considering whether to make a MIR. This includes consideration of the availability and likely ‘complexity’ of remedies that could address the concerns identified to date – for example, whether potential remedies could be implemented in an effective

²² Mobile ecosystems market study final report, Chapter 5.

²³ Ibid.

²⁴ See [App Store Review Guidelines - Apple Developer](#) for details on Apple’s game streaming provisions.

manner, and broader factors such as possible implementation timeline and the need for any ongoing monitoring and refinement over time. This is not however an assessment of the ultimate need for or appropriateness of any individual remedies which will be for the inquiry group appointed to carry out the MIR to determine.

3.38 At this stage, we consider there may in principle be a number of appropriate remedies to the potential competition problems and resulting detrimental effects we have identified. A non-exhaustive list of potential remedies that a market investigation could consider includes:

- removing Apple's restrictions on competing browser engines on iOS devices;
- mandating access to certain functionality for browsers (including supporting web apps);
- requiring Apple and Google to provide equal access to functionality through APIs for rival browsers;
- requirements that make it more straightforward for users to change the default browser within their device settings;
- choice screens to overcome the distortive effects of pre-installation; and
- requiring Apple to remove its App Store restrictions on cloud gaming services.

3.39 In carrying out a MIR, the CMA has wide-ranging powers to accept undertakings or impose an Order, as well as to make recommendations. As highlighted by the examples above, we consider that there are a number of potential appropriate remedies within the scope of such powers, and that some of these could be complementary in nature. Feedback from affected stakeholders such as browser vendors, web developers and cloud gaming service providers suggest these interventions would deliver substantial benefits and improvements to the functioning of the markets.

3.40 We therefore consider that appropriate remedies are likely to be available. As with all interventions of this potential scale and significance, the design and any ongoing involvement by a regulatory authority would need to be considered carefully prior to implementation.

Third criterion: the availability of undertakings in lieu of a reference

- 3.41 The CMA has the power under section 154 of the Enterprise Act 2002 to accept undertakings in lieu of a reference (UILs) instead of making a MIR. Before doing so, the CMA is obliged to: ‘have regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the adverse effect on competition concerned and any detrimental effects on customers so far as resulting from the adverse effect on competition’.²⁵ As the CMA’s guidance notes, such UILs are ‘unlikely to be common’, but ‘where an adverse effect on competition arises from the conduct of a very few firms there may be more scope for accepting undertakings in lieu’ than ‘when the adverse effects on competition arise from market features involving several firms or industry-wide practices’.²⁶
- 3.42 No UILs have been offered since we published our proposal to make a MIR and therefore UILs are not available in this case.

Fourth criterion: alternative powers available to the CMA or to sectoral regulators

- 3.43 Finally, we have carefully considered whether alternative powers are available to us, or others,²⁷ and if so, whether it would be more appropriate to use those to address the features we have identified.
- 3.44 However, for the reasons set out in this document, we have decided that a MIR is the most appropriate tool to address our concerns, in particular given its focus on remedying AECs and their harmful effects in the future, rather than seeking redress – through a financial penalty or otherwise – for past conduct (for which enforcement action under the CMA’s other powers might be more appropriate).
- 3.45 We have considered the CMA’s powers in relation to competition law prohibitions on anticompetitive agreements or abuse of a dominant position and in relation to consumer law, before considering the powers available to other regulators. We have not, at this stage, identified any grounds to suggest that it would be more appropriate or effective to address one or more of the features or their effects using competition or consumer powers. Nevertheless, we have not ruled out the possibility of using our powers under the

²⁵ [Section 154\(3\) of the EA02](#).

²⁶ [Guidance about the making of references under Part 4 of the Enterprise Act](#), OFT 511, paragraph 2.21.

²⁷ For example, other regulators.

Competition Act 1998 in the future. The CMA will keep this option under review as the MIR progresses.

- 3.46 We also considered the potential role of other concurrent regulators, and the potential use of their powers to address the concerns we have identified. Having done so, we believe the CMA remains best placed to take forward action in this area.
- 3.47 We believe that a MIR will allow us to take into account all of the factors which give rise to a potential AEC and would enable us to do so in a timely manner.
- 3.48 We do not consider alternative powers or another regulator could more appropriately address the concerns we have identified.

Conclusion on the appropriateness of a reference

- 3.49 For the reasons set out above, we consider that it is appropriate to exercise our discretion to make a MIR in relation to mobile browsers and cloud gaming.

4. The CMA's decision to make a market investigation reference

4.1 In light of the information set out above, we have made an 'ordinary'²⁸ MIR within the meaning of section 131(6) of the Enterprise Act 2002 in respect of the supply of mobile browsers and cloud gaming in the UK.

Scope of the market investigation reference

4.2 As set out in the Terms of Reference published alongside this document, the MIR covers the supply of mobile browsers and mobile browser engines, and the distribution of cloud gaming services through app stores on mobile devices (and the supply of related ancillary goods and services) in the United Kingdom.

4.3 For the purposes of this reference:

- 'mobile browsers' means applications which enable users of mobile devices to access the world wide web;
- 'mobile browser engines' means the underlying technology which applications on mobile devices use to transform web page source code into content with which users can engage;
- 'cloud gaming services' means services which allow for the streaming of games from remote servers to users' devices;
- 'distribution through app stores on mobile devices' refers to the availability of applications for download through an app store; and
- 'mobile devices' refers to smartphones and tablets.

4.4 While we understand the rationale presented by some stakeholders to expand the scope into additional areas including for example desktop devices and general search, we have chosen to retain the scope described above. This is on the basis that a targeted investigation will be more manageable to deliver results in a timely manner. However, we are mindful of the links between browsers and search services, both from user experience and financial perspectives, which we will take into account when assessing competition in the supply of mobile browsers and potential remedies.

²⁸ As opposed to a cross market reference – section 131A(2A) and (6) of the EA02. See CMA3 paragraphs 2.31-2.37

- 4.5 With respect to cloud gaming, the focus of this investigation will be solely in relation to the access that such services have to app stores on mobile devices. As such, the investigation will not look more broadly at the market for cloud gaming services or the strength of competition between suppliers of cloud gaming or competition in gaming more generally.
- 4.6 Alongside this decision document and the Terms of Reference, we have published an Advisory Steer from the CMA's Board to the investigation's independent group of decision makers. This Advisory Steer highlighted three specific areas within the scope of the MIR where the Inquiry Group may need to exercise some caution to maintain the targeted nature of the investigation as intended, and to avoid scope creep. These are in relation to in-app browsing, revenue sharing agreements, and web compatibility. This Advisory Steer also commented on the CMA's general approach to remedies and its wider digital strategy and portfolio of digital cases.

5. Next steps

- 5.1 All next steps and updates on the market investigation will be published on the [mobile browsers and cloud gaming case page](#).
- 5.2 You can contact us by email at: browsersandcloud@cma.gov.uk