STRATEGIC MARKET STATUS INVESTIGATION INTO APPLE'S MOBILE PLATFORM

Proposed Decision

23 July 2025

The Competition and Markets Authority has excluded from this published version of the provisional findings report information which it considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂]. Some numbers have been replaced by a range. These are shown in square brackets. Non-sensitive wording is also indicated in square brackets.

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1. SUMMARY

1.1 On 1 January 2025, the Digital Markets, Competition and Consumers Act 2024 (**the Act**) established a new regime to boost competition in digital markets. The digital markets competition regime is designed to take a balanced and proportionate approach to driving greater competition in digital markets, unlocking opportunities for innovation and economic growth across the UK tech sector while protecting UK consumers and businesses from unfair or harmful practices. It is focused on a small number of firms which are very powerful in particular digital activities that are linked to the UK. Only those designated with 'strategic market status' (**SMS**) in such activities are within scope of the regime.[1]

1.2 The Act gives the Competition and Markets Authority (**CMA**) the ability to designate a firm as having SMS. Before doing so, we must carry out an investigation to determine whether the tests in the Act are met. These are, in summary, that the firm has:

(a) turnover of more than £1 billion in the UK or £25 billion globally; and

(b) 'substantial and entrenched market power' and 'a position of strategic significance' in respect of a digital activity linked to the UK (referred to as the **SMS conditions**).

1.3 If we designate a firm as having SMS, we can then introduce measures to promote competition and protect consumers in relation to the relevant digital activity, subject to further procedural steps and always in line with the principle of proportionality.

1.4 On 23 January 2025, we began our 'SMS investigation' into whether to designate Apple as having SMS in respect of its mobile operating systems, native app distribution services and its mobile browser and browser engine (now referred to as its **Mobile Platform**), used on its smartphones and tablets (together **Mobile Devices**). We set out our grounds for launching the investigation in the notice we published on the same day (the **Investigation Notice**). [2]

1.5 We also published an invitation to comment (the **ITC**) in which we explained that we chose to launch this SMS investigation because of the potential impact for people, businesses and the UK economy of effective competition in mobile platforms. [3]

[1] Digital markets competition regime guidance, December 2024 (**CMA194**), paragraphs 2.1-2.2.
[2] CMA's investigation notice to Apple in relation to the launch of initial strategic market status investigation dated 23 January 2025. On the same day, we also launched an investigation into whether to designate Google with SMS in respect of its operating system, native app distribution services, and mobile browser and browser engine on mobile devices.
[3] Invitation to comment

1.6 This Proposed Decision sets out our provisional view that Apple has SMS in the provision of its Mobile Platform under the digital markets competition regime.

1.7 Almost all adults in the UK currently have access to a mobile device[4] and almost all mobile devices use a Mobile Platform provided by Apple or Google. Mobile devices with Apple's Mobile Platform have a [50-60%] share of supply and those with Google's Mobile Platform have a [40-50%] share. Consumers use the Mobile Platform on their mobile devices to access, view and engage with digital content and services – for example browse the internet, engage and communicate with friends on social networks, watch videos and play games.

1.8 Apple's Mobile Platform is therefore vital for hundreds of thousands of UK businesses distributing digital content and services to consumers on mobile devices.[5]

1.9 The UK has a vibrant app developer community, representing Europe's largest app economy by revenue and app developer count. In total, the UK app economy generates an estimated 1.5% of the UK's GDP while supporting c.400,000 jobs across direct, indirect and other supporting functions.[6] It is therefore essential that this part of the digital economy works well, creating opportunities for all market participants, large and small, to invest, innovate and grow. And when this market works well in the UK, it creates more opportunities for UK app developers to compete globally.

1.10 More broadly, many UK businesses today use a native app as a key part of their digital offering – from transport and takeaways to retail, finance and fitness – these businesses range from large corporates to small start-ups across many different sectors of the economy. Some businesses distributing digital content and services may rely solely on native apps as their main channel to reach customers, without a website or physical store. This includes those operating in key growth areas of the economy like gaming and fintech. It is therefore essential for a wide range of UK businesses and their customers that competition works well in relation to Apple's Mobile Platform. And where this is the case, it is expected to deliver positive growth, investment and innovation opportunities for the UK economy.

1.11 Through our investigation thus far, we have heard widespread concerns as to how a lack of competition in relation to Apple's Mobile Platform is impacting the ability

[4] uSwitch; https://www.uswitch.com/mobiles/studies/mobile-statistics/
[5] In the UK in 2024, there were [1-2] million apps on the App Store, [0-1] million app developers distributing via the App Store and [20-30] million users downloaded a native app on the App Store. See Annex A – Market Outcomes (Apple).
[6] See https://assets.publishing.service.gov.uk/media/67c820ccd0fba2f1334cf23f/The_App_Association.pdf and https://actonline.org/wp-content/uploads/220912_ACT-App-EU-Report.pdf; GDP contribution includes direct economic impact (direct revenue earned by companies in the sector), impact due to spillover effects (the rise of M-commerce), and indirect impact (wealth beyond the companies in the app industry, including other productive sectors and households); jobs estimates cover direct jobs (software developers, mobile app specialists), indirect jobs (suppliers to the app developers) and induced jobs (jobs created by the spending of the direct and indirect jobs).

of app developers (and businesses more broadly) to grow and bring innovative new products and services to market. These concerns include:

(a) *App review:* Apple's App Store is the only way to distribute apps to consumers on iOS and iPadOS. Apple reviews all third-party apps before allowing them to be distributed on its App Store. We have heard concerns that the review process can be lengthy and unpredictable, adding risk for UK app developers; in particular, where an app or update is innovative, there is additional uncertainty as to how Apple's App Store Guidelines will apply and whether Apple will permit such an app or update.

(b) *Access to commercially sensitive data of competitors:* As part of its review of all apps, Apple reviews new apps and updates to apps which compete with its own apps (for example, it reviews new apps and updates to existing music and TV streaming services which compete with Apple Music or Apple TV). We have heard concerns that this means it has access to lots of data and information about its competitors which it could use unfairly to improve its own services.

(c) *Ranking App Store results:* As part of its operation of the App Store, Apple controls the ranking algorithm which dictates search results when a user searches for an app. We have heard concerns Apple uses this to preference its own apps over those of third parties.

(d) *App Store commission rates:* Apple charges a commission to app developers for distributing apps through its app store. Whilst the commission paid varies, the highest rate of 30% applies to digital content and services sold through apps distributed via the App Store. We have heard concerns that this high rate of commission makes the distribution of some digital content and services unviable, with implications for producers of digital content and services like streaming of music and TV, newspapers, audiobooks, in-app gaming purchases like coins or tokens. Apple places restrictions on the ability of app developers to steer consumers outside of the app, for example to alternative ways to purchase digital content and services.

(e) *Restrictions on third-party access to features and functionality within the operating systems:* Apple restricts the features and functionality third-party app developers have access to within its iOS and iPadOS operating systems, in turn limiting the features and functionality third-party app developers can offer to consumers in their apps. This limits the development of innovative new services by app developers and provides Apple's own services with an advantage over those of third parties. Concerns have been raised in areas such as digital wallets and connected devices.

(f) *Restrictions on alternative browser engines:* In addition, Apple requires all browsers that wish to operate on iOS and iPadOS to use its browser engine WebKit, again limiting the features and functionality third-party browsers can offer. It is particularly important that this restriction does not hold back innovation in mobile browsing, for example for mobile browsers incorporating AI.

1.12 Taken cumulatively, these concerns could mean UK consumers lose out, for example:

(a) new and valuable innovations could be held back, for example apps offering innovative services using AI.

(b) choice is more limited, for example consumers miss out on the wider set of options available for accessing content on their mobile devices, such as rival app stores, web apps, super-apps, rival browsers or digital wallets.

(c) prices are higher than they should be, for example app store commissions are above a competitive rate and this feeds through into the price consumers pay for digital content and services accessed through the mobile platform.

Our proposed description and scope of the digital activity

1.13 The CMA may designate a firm as having SMS in relation to one or more digital activities. A 'digital activity' is the provision of a service by means of the internet, or the provision of digital content.

1.14 We propose to describe the relevant digital activities as follows:

(a) Smartphone Operating System – the provision of an operating system or equivalent, which acts as an intermediary between hardware and software on a smartphone, enabling software applications and services to run on the smartphone.

(b) Tablet Operating System – the provision of an operating system or equivalent, which acts as an intermediary between hardware and software on a tablet, enabling software applications and services to run on the tablet.

(c) Native App Distribution – the provision of a service which enables the installation, distribution and operation of native apps on mobile devices, which are apps written to run on the Smartphone Operating System and/or the Tablet Operating System.

(d) Mobile Browser and Browser Engine – the provision of a mobile browser and mobile browser engine, which comprises:

(i) the provision of a software application that enables users of mobile devices to access and search the internet and interact with web content; and

(ii) the provision of a mobile browser engine, which is the underlying technology which native apps on mobile devices use to transform web page source code into content with which users can engage.

1.15 Together, we refer to these activities as a Mobile Platform which is used to facilitate interactions between users and providers of digital content and services on mobile devices in order to allow users to access, view and engage with such content and services on their mobile devices.

1.16 We consider Apple's services and digital content which allow it to fulfil its role as a Mobile Platform are the iOS operating system which runs on Apple's iPhones, the iPadOS operating system which runs on Apple's iPad tablet, Apple's App Store deployed on its mobile devices, and Apple's Safari browser and WebKit browser engine deployed on its mobile devices.

1.17 Our definition of this digital activity does not include mobile devices themselves. However, we recognise in our analysis that the Mobile Platform, and the mobile device it is deployed on are closely interlinked. Similarly, content accessed via the Mobile Platform, such as apps themselves, are not within the scope of the defined digital activity. We refer to Apple's broader activities, including mobile devices, the Mobile Platform, and content accessed via the Mobile Platform as **Apple's Mobile Ecosystem**.

Our provisional findings on whether Apple has SMS in its Mobile Platform

1.18 On the evidence we have seen to date, we provisionally find that Apple's Mobile Platform meets the SMS conditions.

1.19 In relation to the first SMS condition, we provisionally find that Apple has substantial and entrenched market power in respect of the provision of its Mobile Platform.

1.20 Apple's Mobile Platform faces limited competitive constraint from rival Mobile Ecosystems. As set out above, Apple and Google are the largest Mobile Platforms with Apple's Mobile Platform having a [50-60]% share and Google's [40-50]%. Within this, however, Apple and Google focus on different price segments. For example, smartphones with Apple's Mobile Platform accounted for 71% of new smartphones sold over £300 and smartphones deployed with Google's Mobile Platform accounted for 100% of new smartphones sold under £300. Consumers purchase replacement mobile devices relatively infrequently. Once they make a purchase, they are locked into that Mobile Platform and, even when they do come

to replace their mobile device, often do not consider switching, rather remaining an 'Apple' or 'Android' user. This is partly driven by concerns about losing data when switching between the two. There is limited evidence of Apple improving the quality of its Mobile Platform in response to competition and often improvements are motivated by other factors, such as driving greater sales of replacement Apple mobile devices. These findings are reinforced by agreements between Apple and Google which limit their incentives to compete.

1.21 For app developers distributing digital content and services through Apple's Mobile Platform, the evidence shows that they have little alternative if they want to reach a significant user base.

1.22 There are significant barriers to entry and expansion, which limit the threat of a new rival emerging or an existing rival growing into a greater competitive constraint on Apple. The need to attract a sufficient number of app developers to make the platform attractive for consumers as well as attract a sufficient number of consumers to make the platform attractive for app developers ('indirect network effects') is a particularly strong barrier which the likes of Microsoft, Samsung, Mozilla and Amazon have been unable to successfully navigate. Evidence indicates that, although technological developments such as AI[7] and AR/VR products may affect Apple's conduct in relation to its Mobile Platform, they are not expected to significantly change Apple's position in the next five years.

1.23 We also provisionally find that Apple faces limited competitive constraints in relation to its content distribution (App Store and Safari) within its Mobile Ecosystem and from non-mobile alternatives.

1.24 In native app distribution, Apple's policies prevent competition from alternatives to its App Store within Apple's Mobile Ecosystem (for example, alternative app stores are not permitted, nor is downloading apps from other sources – 'sideloading'). Web-based alternatives (like web-apps) provide only a weak competitive constraint. Furthermore, non-mobile content distribution alternatives (such as gaming platforms) are typically seen as complements rather than substitutes to the App Store.

1.25 In mobile browsers, Apple's Safari also faces limited competitive constraints within Apple's Mobile Ecosystem. Although other mobile browsers are available – in March 2025, Safari had a web traffic share of supply of 86% on Apple's Mobile Ecosystem in the UK. The ability of other mobile browsers to provide a competitive constraint is limited by several barriers to entry and expansion, in particular the requirement to use Apple's WebKit browser engine, as well as Safari's superior access to functionality, and choice architecture. Alternatives to mobile browsers (namely native apps and AI tools) only provide a limited competitive constraint for

[7] Artificial intelligence (AI) refers to computer systems that can perform tasks that normally require human intelligence, such as understanding language or solving problems.

a limited set of use cases. Non-mobile browsing alternatives (such as desktop browsing) are generally considered a complement rather than a substitute for mobile browsing.

1.26 There are no expected or foreseeable developments that are likely (whether individually or in combination) to be sufficient in scope, timeliness and impact to eliminate Apple's substantial market power in the provision of its Mobile Platform over the next five years. This includes market developments, technological developments and regulatory developments. Accordingly, our provisional view is that Apple's substantial market power in the provision of its Mobile Platform is entrenched.

1.27 In relation to the second SMS condition, we provisionally find that Apple has a position of strategic significance in the provision of its Mobile Platform. Apple's Mobile Platform is used by a very large number of UK users (eg to access, view and engage with digital content and services on their Apple mobile devices) and businesses in the UK (eg as a means of reaching those users). The services provided by Apple as part of its Mobile Platform are important to a wide range and large number of other businesses in the UK to provide digital content and services to users of Apple's mobile devices.

Next steps

1.28 We therefore propose to designate Apple as having SMS in respect of the provision of its Mobile Platform. We are now consulting on that proposal and will take account of responses to our consultation in making a final decision prior to the statutory deadline for our investigation in October.

1.29 A finding that Apple has SMS does not imply that it has acted anti-competitively, nor does it impose any automatic constraints on Apple's conduct. If we designate Apple as having SMS, it would then be open to us to seek to introduce interventions through Conduct Requirements or Pro-Competition Interventions to promote greater competition and protect consumers. Any such measures would themselves be subject to a further legal process, including further public consultation, prior to being imposed. We will only intervene where we can demonstrate that an intervention is effective and proportionate to address a clear concern.

1.30 The digital markets competition regime is designed to be flexible and highly targeted, with a participative engagement process – involving all stakeholders, from the largest firms to challengers and consumer groups. The CMA is also embedding our '4Ps' – Proportionality, Pace, Predictability and Process – into our approach, to avoid any action we take hampering innovation or creating uncertainty which could chill investment.

1.31 To support pace and predictability, alongside our SMS investigation we are looking in parallel at potential actions we might take were Apple to be designated. Specifically, to provide greater predictability for Apple and other market participants, we are going further than the legislation requires by publishing a Roadmap of how we propose to prioritise these actions during the first half of any designation period. If we reach a final decision that Apple has SMS, we expect to begin consulting on initial Conduct Requirements shortly after any decision to designate Apple with SMS.

1.32 In taking decisions on which measures to consult on, we will be guided by the CMA's prioritisation principles and the government's recent strategic steer. This includes: prioritising those interventions which have a clear and beneficial impact for UK consumers, businesses and the UK economy; prioritising pro-growth and pro-investment interventions as well as those which can support growth and international competitiveness in the growth-driving sectors identified in the government's industrial strategy; and considering the interplay of digital markets issues with the actions of other regulators and government bodies domestically and internationally.

1.33 We welcome consultation responses on this Proposed Decision by 20 August 2025. We must reach a final decision on whether to designate Apple as having SMS by 22 October 2025.

2. CONTEXT TO THE INVESTIGATION

Background on Apple and its Mobile Ecosystem

2.1 Apple is a technology company that sells consumer electronics, including its mobile devices – the iPhone and iPad tablet.

2.2 All of Apple's mobile devices come preloaded with its proprietary operating system: iOS for iPhones and iPadOS for iPads. The operating system determines and controls a range of features that are important to users of mobile devices, ranging from the appearance of the user interface, through to the speed, technical performance and security of the mobile device. It also determines what kinds of software can run on the mobile device, including all applications, such as native apps and mobile browsers. As the developer of iOS and iPadOS, Apple specifies the terms on which apps can run on iOS and iPadOS.

2.3 Apps are software that provide additional functionalities to the mobile devices and mobile operating system on which they are installed. Apple pre-installs its own apps (like Apple Music, Photos and Calendar) on iOS and iPadOS but users can also download third-party apps from the Apple App Store.

2.4 Apple's App Store is the only way for UK users to download native apps on iOS and iPadOS. Alternative app stores and the ability to download native apps directly from other sources are not permitted. The App Store enables consumers to search, select, purchase, install, and review millions of apps and enables many hundreds of thousands of businesses, large and small to describe, distribute and promote their content and services, via apps to millions of users.[8]

2.5 Apple sets certain standards and requirements for apps wishing to be distributed via its App Store in a number of agreements and guidelines, including the App Store Review Guidelines which are the criteria that Apple uses to review all apps and app updates submitted to the App Store from third-party app developers.[9] Apple also charges commission for distribution of apps via the App Store.

2.6 An important type of app is a mobile browser, which enables users to interact with content on the web. Apple's Mobile Platform comes with Apple's Safari browser pre-installed, placed prominently and set as the default browser.[10] On iOS and iPadOS, all browsers outside the European Economic Area[11] must be built on Apple's WebKit browser engine. The browser engine is responsible for processing HTML, CSS and JavaScript code and rendering websites into the visual format

[8] ITC, paragraphs 16-17.
[9] Apple, Agreements and Guidelines for Apple Developers, accessed by the CMA on 29 May 2025.
[10] ITC, paragraphs 21.
[11] Although Apple permits iOS apps to use alternative browser engines in the EEA since March 2024, the WebKit restriction continues to apply in the UK and the rest of the world. Using alternative browser engines in the European Union, accessed on 27 May 2025.

that users see on their mobile devices. Browser engines play an important role in the user experience of mobile browsing, as they can impact speed, stability, and levels of compatibility with different web content and standards.

2.7 Figure 2.1 below shows the key elements of Apple's Mobile Ecosystem.

Figure 2.1: Apple's Mobile Ecosystem

2.8 Apple also produces a range of different products which work in conjunction with its mobile devices, including AirPod headphones and the Apple Watch.

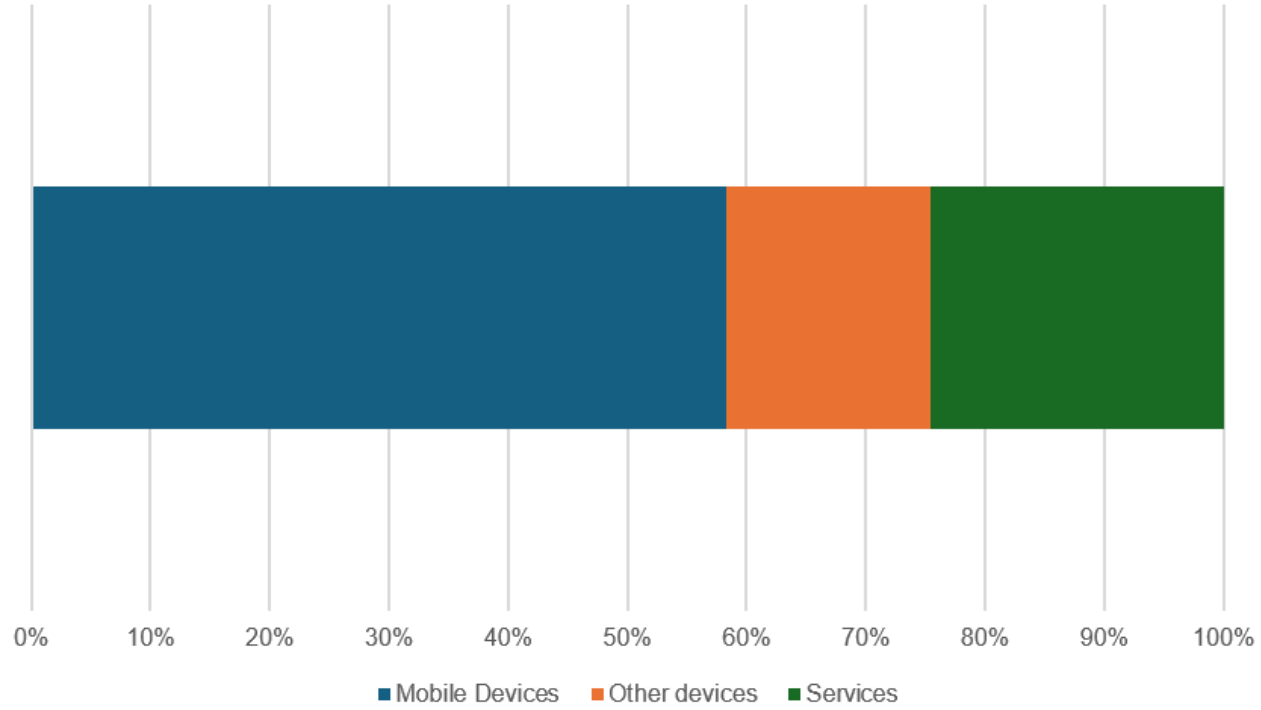
2.9 As shown in Figure 2 below, Apple's primary source of revenue is from device sales. In the financial year ending September 2024, Apple's total global revenues were £308 billion, the majority of which (£233 billion, or 75%) was from device sales; while Services revenue has reached almost 25% of global revenue, up from 9% in 2015.[12,13]

[12] Segmental analysis is based on Apple's segmental reporting in its published accounts. Services revenues refers to reported revenue for Apple's Services reporting segment; Device revenues refers to reported revenues for Apple's Products reporting segment, described by Apple as comprising the iPhone, the iPad, the Mac, and 'Wearables, Home and Accessories, and its Products segment. Apple 2024 10k, page 4.
[13] CMA analysis of segmental revenue reporting in Apple's 2015-2025 10ks.

2.10 Apple's device revenue is itself dominated by the sales of mobile devices, with iPhones accounting for 68% of device revenue in 2024, and iPads a further 9%.[14]

2.11 In the UK, Apple's total revenue in 2024 was £[✂] [£10-20] billion, of which at least £[✂] [£5-10] billion was earned from mobile products and services.[15]

Figure 2.2: Breakdown of Apple's 2024 global revenue



Source: CMA Analysis of Apple's 10K Filing. Note: Mobile Devices includes revenue from iPhone and iPad. Other devices includes Mac and Wearables, Home and Accessories. Apple notes that Services includes Advertising, AppleCare, Cloud, Digital Content (including the App Store) and Payment Services.

Previous CMA work

2.12 This investigation builds on significant prior CMA work connected to mobile ecosystems:

(a) First, in June 2021 the CMA commenced its Mobile Ecosystems Market Study (**MEMS**). This study considered in detail the key products and services within Apple's and Google's mobile ecosystems. The final report was published in June 2022 and found that Apple and Google hold an effective duopoly in mobile ecosystems.[16]

[14] In total, mobile device sales accounted for 77% of Apple's device revenues, and 58% of its total group revenues. CMA analysis of segmental revenue reporting in Apple 2024 10k, page 26. Device revenues calculated by reference to total revenues for Apple's Products reporting segment.
[15] Apple's response to section 69 notice [✂]. Converted from USD to GBP at an average GBP vs USD exchange rate of 1.2783 (Source: Bank of England exchange rates)
[16] MEMS, Final Report.

(b) Second, the CMA carried out investigations under the Competition Act 1998 into Apple's and Google's conduct regarding their policies related to how in-app payments work within native apps:

(i) An investigation commenced in March 2021 relating to Apple's conduct in relation to the distribution of apps on iOS and iPadOS devices in the UK, in particular the terms and conditions governing app developers' access to Apple's App Store.[17]

(ii) An investigation commenced in June 2022 relating to Google's conduct in relation to the distribution of apps on Android devices in the UK, in particular Google Play's rules which oblige certain app developers to use Google Play's own billing system for in-app purchases.[18]

(iii) Both these investigations were closed in August 2024 on the grounds of administrative priorities – noting that, should both of Apple and Google or one of them be designated as having SMS in connection with any digital activities in the mobile sector, the CMA would be able to use its new powers under the Act to consider the range of issues raised by parties more holistically than it otherwise could under the specific Competition Act 1998 investigations.[19]

(c) Third, the CMA made a market investigation reference on 22 November 2022 in relation to mobile browsers and cloud gaming (**MBCG MI**). The investigation concluded in March 2025, with the inquiry group finding 'adverse effects on competition' and making a recommendation to the CMA Board to consider the concerns raised and potential remedies as part of this SMS investigation.[20]

International context

2.13 Several competition authorities globally have investigated or taken action in relation to Apple's Mobile Platform in recent years. Although our SMS investigation is focused on Apple's activities in the UK, Apple's Mobile Platform operates globally, and we have sought to learn from international findings in conducting our own investigation.

(a) In the EU, under the DMA, the European Commission has designated Apple as a gatekeeper in respect of iOS, iPadOS, the App Store and Safari, meaning the obligations of the DMA apply. Further it has completed specification proceedings in respect of Apple's compliance with the

[17] Investigation into Apple AppStore - GOV.UK.
[18] Investigation into suspected anti-competitive conduct by Google - GOV.UK.
[19] https://assets.publishing.service.gov.uk/media/66c5991067dbaeb97a13e513/Case_closure_statement.pdf, https://assets.publishing.service.gov.uk/media/66c596e9808b8c0aa08fa861/Case_closure_statement.pdf.
[20] https://assets.publishing.service.gov.uk/media/67d1abd1a005e6f9841a1d94/Final_decision_report1.pdf.

interoperability provisions of the DMA.[21] The Commission has also launched non-compliance investigations, finding Apple non-compliant for its approach to steering[22] and provisionally finding it non-compliant for its approach to alternative app distribution.[23]

(b) In the EU, under antitrust enforcement in March 2024, the European Commission found that Apple had abused a dominant position in the market for the distribution of music streaming apps to iOS users through its App Store.[24] In July 2024, the European Commission also made preliminary findings that Apple had significant market power in the market for smart mobile devices and a dominant position in the in-store mobile wallet market on iOS and accepted commitments addressing Apple's refusal to grant rivals access to a standard technology used for contactless payments with iPhones in stores (Near Field Communication (NFC)).[25]

(c) A number of other jurisdictions are taking action to impose ex ante rules that affect the supply of mobile ecosystems, including in Japan, where new legislation, the Mobile Software Competition Act, prohibits anti-steering arrangements and the prevention of alternative app stores, alternative in-app payment systems and alternative browser engines.[26]

(d) The US Department of Justice has started an action against Apple in the US which alleges that Apple has monopolised smartphone markets through an exclusionary course of conduct and anti-competitive acts including contractual restrictions against app creation, distribution and access to application programming interfaces (API).[27]

(e) Apple's Mobile Platform is also the subject of a number of litigation proceedings in both the UK and other jurisdictions.[28]

Our investigation to date

2.14 Since launching our investigation, we have gathered a wide range of evidence from Apple, stakeholders across the digital economy, and the wider public:

(a) ITC: At the outset of the investigation, we published the ITC[29] inviting views on the scope and main avenues of the investigation. We received 54 ITC

[21] European Commission, Specification Proceedings Decision of 19 March 2025 – Final Measures, DMA.100203; European Commission, Specification Proceedings Decision of 19 March 2025 – Final Measures, DMA.100204.
[22] DMA.100109 - Apple - Online Intermediation Services - app stores - AppStore - Art. 5(4) accessed by the CMA, 25 June 2025.
[23] DMA.100206 - Apple – new business terms accessed by the CMA, 25 June 2025.
[24] AT.40437 - Apple - App Store Practices (music streaming) accessed by the CMA, 25 June 2025.
[25] AT.40452 - Apple - Mobile payments accessed by the CMA, 25 June 2025.
[26] MSCA_SubordinateLegislations_and_Guidelines.pdf
[27] *US and Plaintiff States v. Apple Inc. 24-cv-4055*. See Complaint: U.S. and Plaintiff States v. Apple Inc..
[28] See 'Regulatory and other developments' in Chapter 8.
[29] Invitation to comment.

responses from third parties and published non-confidential responses on the case page.[30]

(b) Engagement with Apple: The CMA engaged with Apple formally and informally throughout this initial stage of the investigation. Apple had multiple opportunities to present all material facts, make submissions in support of its position and comment on our emerging thinking. These opportunities included:

  (i) An invitation to respond to the ITC;

  (ii) In-person meetings with CMA decision-makers;

  (iii) Engagement with the case team and CMA senior executives, including through meetings and 'teach-ins'; and

  (iv) Responses to formal and informal requests for information which we sent to Apple. Through these requests we obtained qualitative evidence, internal documents, and quantitative data.

(c) Evidence from other market participants, in particular:

  (i) We requested information (including both qualitative and quantitative information) and/or held bilateral meetings with 126 market participants. This included large and small app developers, mobile browser vendors, companies that manufacture smartphones and/or tablets, firms that make connected devices such as wearables or smart speakers, companies that develop AI foundation model-based services, providers of payment services and digital wallets, telecoms operators and companies that provide app stores.

  (ii) We also held an app developer workshop to explore the issues and hear their views. It was attended by attended by 12 app developers and an industry association. A summary of the app developer workshop was published on our case page.[31]

(d) Consumer market research: we engaged an independent market research company (Accent Research) to conduct quantitative research to inform the investigation, focused on understanding:

  (i) consumer purchasing behaviour in the UK smartphone market;

  (ii) switching between smartphone brands and operating systems;

[30] SMS investigation into Apple's mobile ecosystem - GOV.UK
[31] SMS investigation into Apple's mobile ecosystem - GOV.UK

(iii) consumer behaviour in using apps; and

(iv) consumer behaviour in conducting online search activities.

(e) The findings of this research are published on the case page.[32]

(f) Engagement with experts and other regulators: We met with several subject matter experts and members of our Growth and Investment Council. We also liaised with fellow regulators including Ofcom, the Financial Conduct Authority, the Payment Systems Regulator, the Bank of England, and the Information Commissioner's Office.

2.15 In order to be proportionate and targeted, where we were aware of submissions and evidence obtained in other CMA investigations which we considered to be relevant to this investigation, we have used that information for the purposes of this investigation.[33] Throughout this proposed decision the provenance of all the information we are relying on is set out clearly in footnotes.[34]

[32] SMS investigation into Apple's mobile ecosystem - GOV.UK
[33] As envisaged by CMA194, paragraph 5.93.
[34] In particular, we have used information obtained by the CMA during the Mobile Ecosystems Market Study and the Mobile Browsers and Cloud Gaming Market Investigation which we considered to be relevant to the matters we are investigating as part of this investigation.

3. UNDERTAKING AND TURNOVER

3.1 This chapter is structured as follows:

(a) We first consider the Apple undertaking which is the subject of our proposed decision;

(b) We then consider whether the 'turnover condition' is met in relation to the Apple undertaking.

The Apple undertaking

This section describes the Apple undertaking which is the subject of our proposed decision. We provisionally consider that the Apple undertaking includes Apple Inc., Apple Distribution International Limited, Apple (UK) Limited, Apple Retail UK Limited, Apple Europe Limited and Apple Payments Services Limited.

3.2 The Act provides that the CMA may designate an 'undertaking' as having SMS in respect of a digital activity carried out by the undertaking (where the conditions in the Act are met).[35]

3.3 'Undertaking' has the same meaning as it has for the purposes of Part 1 of the Competition Act 1998.[36]

3.4 The concept of 'undertaking' covers any entity engaged in an economic activity, regardless of its legal status and the way in which it is financed. It is 'an economic unit even if in law that economic unit consists of several persons, natural or legal'.[37] An undertaking does not therefore correspond to the commonly understood notions of a legal entity or corporate group, for example under English commercial or tax law.[38]

3.5 Multiple persons (such as a parent company and its subsidiaries) will usually be treated as a single undertaking if they operate as a single economic entity. This will be the case where one exercises 'decisive influence' over another – for example, a parent company which decides the commercial policy of its subsidiaries.[39]

[35] Section 2(1) of the Act.
[36] Section 118(1) of the Act.
[37] C-97/08 *Akzo v Commission*, paragraphs 54 – 55.
[38] *Sepia Logistics Limited v Office of Fair Trading* [2007] CAT 13, paragraph 70.
[39] CMA194, footnote 2. Where a parent company holds all or virtually all of a subsidiary's share capital or all of its voting rights, there is a rebuttable presumption that it exercises decisive influence over, and therefore forms a single undertaking with, that subsidiary. See, for example, C-97/08 *Akzo v Commission*, paragraph 60; C-595/18 P *Goldman Sachs v Commission*, paragraphs 35-36.

3.6 The Act requires us to describe the undertaking to which any SMS designation would relate.[40] Our Guidance explains that where an undertaking comprises multiple companies, we will usually seek to identify the parent company and the main subsidiaries responsible for carrying on the digital activity, rather than providing an exhaustive list of the entities making up the undertaking at the relevant point in time.[41]

3.7 The Apple undertaking we propose to designate as having SMS in respect of its Mobile Platform includes (but is not limited to) Apple Inc., Apple Distribution International Limited, Apple (UK) Limited, Apple Retail UK Limited, Apple Europe Limited and Apple Payments Services Limited[42] – respectively the parent company and the main subsidiaries responsible for carrying on the Mobile Platform digital activity (and its component parts) that is the subject of this proposed decision. We provisionally consider that these entities form part of a single economic unit engaged in an economic activity and therefore constitute an undertaking within the meaning of the Act:

(a) Apple Inc. [✂];[43]

(b) Apple Distribution International Limited [✂];[44]

(c) Apple (UK) Limited provides various services to Apple Inc. and Apple Distribution International Limited, and other Apple entities, including research and development, technical support and other services;[45]

(d) Apple Retail UK Limited operates Apple's retail stores in the UK in which finished goods are sold to end consumers;[46]

(e) Apple Europe Limited provides services to Apple Distribution International Limited and other Apple entities, including sales support, marketing, and financial and administrative services relating to the EMEIA region;[47]

(f) Apple Payments Services Limited provides services to Apple Distribution International Limited to make account information services available to Apple consumers in the United Kingdom.[48]

[40] Section 15(3)(a) of the Act.
[41] CMA194, paragraph 2.104, footnote 78 and paragraph 2.90.
[42] We did not refer to Apple Distribution International Limited or Apple Payments Services Limited in the Investigation Notice. We propose to include them in our description of the Apple undertaking in light of their involvement in the activities described in this section.
[43] Apple's response to section 69 notice [✂].
[44] Apple's response to section 69 notice [✂].
[45] Apple's response to section 69 notice [✂].
[46] Apple's response to section 69 notice, [✂].
[47] Apple's response to section 69 notice [✂].
[48] Apple's response to section 69 notice [✂].

3.8 Each of Apple Distribution International Limited, Apple (UK) Limited, Apple Retail UK Limited Apple, Apple Europe Limited, and Apple Payments Services Limited is [✂].[49]

The turnover condition

This section considers whether the 'turnover condition' is met in relation to the Apple undertaking. We provisionally consider that the global turnover threshold and the UK turnover threshold (either of which would suffice) are both exceeded – and therefore the turnover condition is met in relation to the Apple undertaking.

3.9 The CMA may not designate an undertaking as having SMS in respect of a digital activity unless the 'turnover condition' is met in relation to the undertaking.[50]

3.10 The turnover condition is met in relation to an undertaking if the CMA estimates that:

(a) the total value of the global turnover of an undertaking, or where the undertaking is part of a group,[51] the global turnover of that group in the relevant period exceeds £25 billion (the '**global turnover threshold**'); or

(b) the total value of the UK turnover[52] of an undertaking, or where the undertaking is part of a group, the UK turnover of that group in the relevant period exceeds £1 billion (the '**UK turnover threshold**').[53]

3.11 The 'relevant period', in each case, means:

(a) the most recent period of 12 months in respect of which the CMA considers that it is able to make an estimate of the total value of the relevant turnover of the undertaking or group; or

(b) if the CMA estimates that the relevant turnover of the undertaking or group in the period of 12 months prior to the period in (a) above was higher, that earlier period of 12 months.[54]

3.12 Further details on the methodology for estimating turnover are set out in the Digital Markets, Competition and Consumers Act 2024 and Consumer Rights Act 2015

[49] A public listed company incorporated in California, United States of America headquartered at One Apple Park Way, Cupertino, California 95014, United States of America. The corporate structure charts Apple submitted in its response to section 69 notice [✂] indicate that [✂].
[50] Sections 2(3) and 7(1) of the Act.
[51] An undertaking is part of a group if one or more bodies corporate which are comprised in the undertaking are members of the same group as one or more other bodies corporate. Two bodies corporate are members of the same group if (a) one is the subsidiary of the other, or (b) both are subsidiaries of the same body corporate (section 117 of the Act).
[52] Turnover relating to UK users or UK customers: section 8(3) of the Act. 'UK user' and 'UK customer' are defined at section 118(1) of the Act as meaning any user or, as the case may be, customer who it is reasonable to assume (a) in the case of an individual, is normally in the UK; and (b) in any other case, is established in the UK.
[53] In each case, turnover arising in connection with any activities is taken into account: section 8(2) and (3) of the Act.
[54] Section 7(6) of the Act.

(Turnover and Control) Regulations 2024 (the **Turnover Regulations**), Schedule 1.

3.13 Our Guidance explains that the CMA's starting point for assessing relevant turnover will usually be the undertaking and/or group's latest published accounts.[55] Further, the CMA expects that the most recent period of 12 months in respect of which it is able to make an estimate of the total value of the relevant turnover of the undertaking or group will in most instances be the 12-month period covered by those accounts.[56]

3.14 For the reasons set out below, we provisionally consider that the global turnover threshold and the UK turnover threshold (either of which would suffice) are both exceeded – and therefore the turnover condition is met in relation to the Apple undertaking:[57]

(a) Apple Inc.'s most recent published accounts report revenues of more than $391 billion (£308 billion[58]) for the financial year ending 30 September 2024.[59]

(b) Apple Inc.'s published accounts also include a geographic breakdown of global revenues on a regional basis, based on the location of customers and sales through Apple's retail stores located in those geographic locations.[60] The UK is part of the Europe reporting segment,[61] which reported revenues of approximately $101 billion (£80 billion[62]) for the financial year ending 30 September 2024.[63]

(c) While Apple Inc.'s published accounts do not include UK-specific revenue figures, Apple has indicated to the CMA that its UK revenues are

[55] Where the CMA is assessing turnover for the purposes of the UK turnover threshold, this will include considering any geographic breakdown contained in the published accounts. See paragraph 2.37 of CMA194.
[56] See paragraph 2.39 of CMA194.
[57] Pursuant to section 7(2) of the Act, where the undertaking is part of a group, then the turnover of the whole group should be considered. For the avoidance of doubt, we have therefore considered the turnover of the Apple group as a whole (with Apple Inc. as the ultimate parent company) rather than just the turnover attributable to the main subsidiaries responsible for carrying on the relevant digital activity.
[58] Using the Bank of England average exchange rate for USD vs GBP of 1.2676 for the period from 1 October 2023 to 30 September 2024.
[59] Source: Form 10-K for Apple Inc., filed on 1 November 2024.Given the scale by which Apple's reported turnover exceeds the global turnover threshold, we have not conducted a more detailed assessment of its global turnover based on the methodology specified in the Turnover Regulations.
[60] Source: Form 10-K for Apple Inc., filed on 1 November 2024, Note 13.
[61] Source: Form 10-K or Apple Inc., filed on 1 November 2024, states that 'Europe includes European countries, as well as India, the Middle East and Africa' (page 2).
[62] Using the Bank of England average exchange rate for USD vs GBP of 1.2676 for the period from 1 October 2023 to 30 September 2024.
[63] Source: Form 10-K for Apple Inc., filed on 1 November 2024.

approximately (£[✂][64] [10-20] billion) for the twelve months ending 31 December 2024.[65] [✂].[66,67]

[64] Using the Bank of England average exchange rate for USD vs GBP of 1.2783 for the period from 1 January 2024 to 31 December 2024.
[65] Apple's response to section 69 notice [✂].
[66] Apple's response to section 69 notice [✂].
[67] We recognise there may be differences between the way a company accounts for UK turnover in its financial statements and the UK turnover threshold methodology set out in the Turnover Regulations. However, as Apple has confirmed that its UK turnover would exceed the UK turnover threshold if assessed under the Turnover Regulations, we have not conducted a full assessment of turnover relating to UK users or UK customers.

4. DIGITAL ACTIVITY

Introduction

This chapter sets out how we have described the digital activities which are the focus of this investigation. It sets out that we have provisionally concluded that:

(a) the relevant digital activities should be: (i) the Smartphone Operating System, (ii) the Tablet Operating System, (iii) Native App Distribution, and (iv) Mobile Browser and Browser Engine; and

(b) it would be appropriate to treat those activities as a single digital activity. We refer to this single activity as the Mobile Platform, whose purpose is to facilitate interactions between users and providers of digital content and services on Apple's mobile devices in order to allow users to access, view and engage with such content and services on their mobile devices.

This chapter also considers whether Apple's provision of its Mobile Platform is 'linked to the UK' and we provisionally conclude that it is.

4.1 The chapter is structured as follows:

(a) legal framework and Guidance;

(b) overview of the digital activities set out in the Investigation Notice;

(c) our approach to describing the Smartphone Operating System and Tablet Operating System activities;

(d) our approach to describing the Native App Distribution activity;

(e) our approach to describing the Mobile Browser and Browser Engine activity;

(f) our approach to grouping those activities; and

(g) our assessment that the Mobile Platform activity is linked to the UK.

Legal framework and Guidance

4.2 For the purposes of the Act, digital activities are:[68]

(a) the provision of a service by means of the internet, whether for consideration or otherwise;

[68] Section 3(1) of the Act.

(b) the provision of one or more pieces of digital content,[69] whether for consideration or otherwise; and

(c) any other activity carried out for the purposes of an activity within (a) or (b) above.

4.3 The CMA may treat (or 'group') two or more digital activities carried out by a single undertaking as a single digital activity where:[70]

(a) the activities have substantially the same or similar purposes; or

(b) the activities can be carried out in combination with each other to fulfil a specific purpose.

4.4 Where the CMA treats (ie groups) two or more digital activities carried out by an undertaking as a single digital activity, the SMS conditions will be applied to the grouped digital activity as a whole.[71]

4.5 The Act requires us to describe the digital activities with respect to which any SMS designation would have effect.[72]

4.6 Our Guidance explains that we will indicate which of the existing products offered by the firm we consider to be within the scope of the digital activity at the relevant point in time.[73]

4.7 In identifying a digital activity and considering which of the firm's products it may comprise we will typically look at how those products are offered and consumed. For example, we may consider how the firm structures itself and its business model, how businesses and consumers use and access its products, and any interlinkages among them. This will focus on factual information and will not require an assessment of the competitive constraints on the firm or a market definition exercise.[74] Our Guidance explains that identifying digital activities is a case-specific assessment and the CMA may vary its approach between investigations depending on the particular circumstances of a case.[75]

4.8 Our Guidance also explains that an SMS firm will need to assess on an ongoing basis during the designation period which of its products fall within the description of the digital activity – for example, as it adapts products over time, changes their functionality or introduces new ones. As such, other products not included in the list may nevertheless fall within the scope of the digital activity. While the CMA has

[69] 'Digital content' means data which is produced and supplied in digital form, section 330 of the Act. This includes software, music, computer games and apps, CMA194, paragraph 2.9.
[70] Section 3(3) of the Act.
[71] CMA194, paragraph 2.65
[72] Section 15(3)(b) of the Act.
[73] CMA194, paragraph 2.107.
[74] CMA194, paragraph 2.10
[75] CMA194, paragraph 2.11.

the ability in the course of a designation to revise the description of the designated digital activity if it changes its view of that activity (provided it remains substantially the same),[76] the CMA is not obliged to use this power each time the firm makes changes to its corporate structure or the way it carries out the digital activity. Instead, the SMS firm must assess the extent to which its activities fall within the scope of the designation whenever it makes any such changes.[77]

Overview of Apple's digital activities as set out in the Investigation Notice

4.9 In the Investigation Notice issued to Apple at the start of our investigation, we set out three activities, namely:[78]

(a) **Mobile Operating System**, described as the provision of 'a mobile operating system or equivalent, which acts as an intermediary between hardware and software on the mobile device, enabling software applications (referred to as applications or apps) and services to run on the device';

(b) **Native App Distribution**, described as the provision of 'a service which enables the installation, distribution and operation of native apps on mobile devices, which are apps written to run on the Mobile Operating System'; and

(c) **Mobile Browser and Browser Engine**, described as the provision of 'a mobile browser and mobile browser engine, which comprises:

(i) the provision of a software application that enables users of mobile devices to access and search the internet and interact with web content; and

(ii) the provision of a mobile browser engine, which is the underlying technology which native apps on mobile devices use to transform web page source code into content with which users can engage'.

4.10 The description of those three activities applied to 'mobile devices', which was defined to include both smartphones and tablets. In other words, each of the three activities described above encompassed both smartphones and tablets.

4.11 We also explained that each of those three activities (ie the Mobile Operating System, Native App Distribution, and Mobile Browser and Browser Engine), may be a digital activity within the meaning of the Act; and further that they may be treated as a single digital activity (ie 'grouped' together) 'as they can be carried out in combination with each other to fulfil the specific purpose of facilitating

[76] Section 15(4) of the Act
[77] CMA194, paragraphs 2.107 and 2.108.
[78] Investigation Notice, paragraph 3.

interactions between users and providers of digital content and services (as applicable) on mobile devices in order to allow users to access, view and engage with such content and services on their mobile devices'.[79]

4.12 The Investigation Notice also explained that, based on Apple's current business model, we considered that the main Apple services and digital content likely to be included in the provision of each of the three activities included:[80]

(a) for Mobile Operating System, the operating system currently known as iOS for smartphones and iPadOS for tablets;

(b) for Native App Distribution, both the pre-installation of first party apps on iOS and iPadOS mobile devices; and the installation, distribution and operation of third-party native apps through the App Store; and

(c) for Mobile Browser and Browser Engine, Apple's dedicated mobile browser, Safari, and its browser engine, WebKit; and in-app browsing technology.

4.13 In the ITC, we explained how we had arrived at these preliminary views.[81]

4.14 In the following sections we set out the evidence we have obtained since, and our provisional decisions in relation to:

(a) our descriptions of the relevant digital activities – Mobile Operating System, Native App Distribution and Mobile Browser and Browser Engine – and the scope of those activities;

(b) grouping the described digital activities as a single digital activity; and

(c) whether the relevant digital activity is linked to the UK.

Mobile Operating System

This section assesses the extent to which our initial description of the Mobile Operating System activity remains appropriate in light of submissions and evidence received. We provisionally consider that it is appropriate to describe, in place of a single Mobile Operating System activity, two separate digital activities:

(a) **Smartphone Operating System**: the provision of an operating system or equivalent, which acts as an intermediary between hardware and software on a smartphone, enabling software applications and services to run on the smartphone; and

[79] Investigation Notice, paragraphs 4-5.
[80] Investigation Notice, paragraph 6.
[81] ITC, pages 17-23.

(b) **Tablet Operating System**: the provision of an operating system or equivalent, which acts as an intermediary between hardware and software on a tablet, enabling software applications and services to run on the tablet.

4.15 When we launched the investigation, we explained that the Mobile Operating System is the pre-installed software layer on mobile devices, which acts as an intermediary between hardware and software on the mobile device, and with which all other software on a mobile device must interoperate.[82]

Submissions on our description and scope of Mobile Operating System

4.16 We asked in our ITC: 'Do you have any views on the scope of our investigations and descriptions of Apple's […] mobile ecosystem digital activities?'[83]

4.17 Apple submitted that its smartphone operating system (iOS) and tablet operating system (iPadOS) are distinct operating systems. In particular, it stated that:

(a) Apple separately designed iOS and iPadOS to support devices that serve distinct use cases for end-users;[84]

(b) they are each developed and customised to one Apple device;[85] and

(c) developing apps for each operating system requires additional work.[86]

4.18 Apple reiterated in a submission on [✂] its view that iOS and iPadOS are distinct, and that they should therefore not be treated as a single digital activity. It submitted in particular that:[87]

(a) iOS and iPadOS offer distinct hardware and software features and functionalities, and that Apple continuously develops them to create unique user experiences and optimally serve the distinct use cases.[88]

(b) A comparison of usage time for apps on iOS and iPadOS shows that they serve distinct use cases,[89] and sales data shows that customer groups prefer certain devices and their respective operating systems.[90]

[82] ITC, paragraphs 51-54.
[83] ITC, Box 4 on page 23.
[84] Apple Response to ITC, paragraph 1.4.
[85] Apple's response to section 69 notice [✂].
[86] Apple's response to section 69 notice [✂].
[87] Apple's submission [✂].
[88] Apple's submission [✂].
[89] Apple's submission [✂].
[90] Apple's submission [✂].

(c) Apple provides operating system-specific app design guidelines for iOS and iPadOS, and that app developers do in fact tailor their apps for specific Apple operating systems.[91]

(d) iOS and iPadOS are subject to different competitive conditions and should therefore be considered separately for the purposes of the CMA's assessment of digital activities.[92]

4.19 Third parties were broadly supportive of our proposed scope and descriptions of the Mobile Operating System digital activity. However, a few of them submitted that we should broaden or clarify the scope in certain respects. We received submissions on the following:

(a) **Whether 'middleware' and associated services should be in scope:** Epic Games submitted that our description should be broadened to include all complementary services such as associated middleware, APIs and interaction with hardware.[93]

(b) **Whether connectivity functionalities should be in scope**: Mobile UK considered that our description should include control over connectivity.[94]

(c) **Whether voice assistants (also known as virtual assistants)[95] should be in scope:** Radiocentre submitted that Apple's virtual assistant(s) should be seen as 'an integrated software element of operating systems',[96] while the BBC considered that they should fall within the scope of the investigation.[97]

(d) **Apple Pay and Apple Wallet**: A third party [✂] submitted that we should explicitly include within the Mobile Operating System: (i) Apple Pay and Apple Wallet and (ii) APIs and Software Development Kit (SDK) features 'needed to interact with hardware on mobile devices'.[98]

4.20 CCIA, on the other hand, stated that the overall breadth of our investigation presents a risk that it 'will include services that are subject to more or less competition, with a risk of the analysis neglecting competitive constraints that apply to some of these services'.[99] CCIA's submissions also apply to the Native App Distribution and Mobile Browser and Browser Engine activities.

[91] Apple's submission [✂].
[92] Apple's submission [✂].
[93] Epic Games Response to the ITC, pages 1-2.
[94] Mobile UK Response to ITC, paragraph 5.
[95] Both of these terms tend to be used interchangeably. Throughout this Proposed Decision we refer to voice assistants unless quoting a third party which used the term virtual assistant.
[96] Radiocentre Response to ITC, paragraph 2.3.
[97] BBC Response to ITC, paragraph 1.
[98] [✂] Third Party Response to ITC, paragraph 8.
[99] CCIA Response to ITC, page 1.

Our assessment

4.21 We set out our response to the above points in the section below.

Whether Apple's smartphone operating system (iOS) and tablet operating system (iPadOS) are distinct operating systems

4.22 We have considered Apple's submissions that iOS and iPadOS are distinct:

(a) In line with the Guidance, we have first considered how iOS and iPadOS are offered by Apple.[100] We note that Apple decided in 2019 to formally introduce a separate operating system for the iPad, iPadOS, thereby formally separating iPadOS from iOS.[101] This is reflected in the differences in the iOS and iPadOS codebases, although at present [✂] of those codebases still overlap.[102] Apple has explained that it develops and customises iOS and iPadOS for each device which results in each operating system and its corresponding hardware being inextricably linked, both in terms of the operating systems' compatibility limitations and of the specific hardware features which each operating system supports and enhances. Apple also stated that its operating systems are much more tailored to specific devices than most other companies' operating systems, such as Microsoft Windows or Google's Android.[103]

(b) Further, there are also a number of iOS- and iPadOS-specific features, which are designed for each device. The extent to which these features require substantial architectural differences in the underlying design of the operating system is unclear.

(c) The evidence on the extent to which apps are designed specifically for iOS or iPadOS is mixed. Apple identified a number of apps that are designed for iPad but not iPhone (and vice versa),[104] but acknowledged that it does enable iOS apps to run on iPadOS in 'Compatibility Mode' without making any modifications. However, Apple also submitted that 'Compatibility Mode' provides [✂] experience on iPad compared to running apps natively on an iPhone.[105] Accordingly, whilst some evidence indicates that iPhone apps can run on iPads and vice versa, there is also evidence of differentiation of apps across iPad and iPhone.

[100] As explained above, the Guidance explains that the CMA can adopt a functional approach to describing a digital activity by reference to the nature of the products and how they are offered and consumed: CMA194, paragraphs 2.10-2.11.
[101] Apple's response to section 69 notice [✂].
[102] Apple's response to section 69 notice [✂].
[103] Apple's response to section 69 notice [✂].
[104] Apple's response to section 69 notice [✂].
[105] Apple's response to section 69 notice [✂].

(d) In line with the Guidance, we have also assessed how iOS and iPadOS are consumed by users. Our description of the mobile operating system digital activity is that it acts as an intermediary between hardware and software on each mobile device, enabling apps and services to run on the mobile device. It does not follow from the presence of certain, different use cases on mobile devices that the mobile devices necessarily have different operating systems because: (i) other elements (eg hardware, middleware) also affect the use cases; and (ii) mobile devices with the same operating system can have different use cases.[106]

(e) In any case, the evidence provided by Apple, which seeks to show that users use iPhones and iPads for different purposes, is mixed. For example, [✂] was identified by Apple as a main use case for iPhones but not for iPads while [✂] was identified as a main use case for iPads but not for iPhones.[107] However, the survey and research cited by Apple also show overlaps in the main use cases for iPhones and iPads for UK end-users: eg email ([✂]% for iPhones and [✂]% for iPads) and browsing the web ([✂]% for iPhones and [✂]% for iPads).[108]

(f) In order to support its submissions in respect of different use cases for iPhones and iPads, Apple also submitted that iPhones and iPads are subject to different competitive conditions. As set out in the Guidance, the CMA's approach to identifying a digital activity will largely focus on factual information and will not require an assessment of the competitive constraints on the firm.[109]

4.23 Taking this evidence in the round, given the differentiation between the operating systems, we provisionally consider that for the purposes of this investigation, it is appropriate to describe, in place of a single Mobile Operating System activity, two separate digital activities: Smartphone Operating System and Tablet Operating System as follows:

(a) **Smartphone Operating System**: an operating system or equivalent, which acts as an intermediary between hardware and software on a smartphone, enabling software applications and services to run on the smartphone; and

(b) **Tablet Operating System**: an operating system or equivalent, which acts as an intermediary between hardware and software on a tablet, enabling software applications and services to run on the tablet.

[106] For example, Ulefone sells toughened Android phones with thermal imaging capabilities for industrial uses while Samsung sells Android tablets advertised for consumer productivity and creative use cases. These devices have the same OS but different use cases.
[107] Apple's response to section 69 notice [✂].
[108] Apple's response to section 69 notice [✂].
[109] CMA194, paragraph 2.10.

Whether middleware is within scope

4.24 As noted above, Epic Games asked us to clarify whether middleware and related features form part of the Mobile Operating System activity (now provisionally divided into the Smartphone Operating System and Tablet Operating System activities).

4.25 Middleware is a broad term and can cover a range of functionalities. We consider that there are specific functionalities as set out below which form part of the operating system because they act as intermediaries between the hardware and software of Apple's mobile devices and contribute to enabling apps to run on them. This encompasses, for example, Apple's Metal Framework, which comprises a set of APIs and other resources that allow third-party apps to access an iPhone's GPU (a key piece of hardware often used to run AI models on-device and mobile games).

4.26 As such, we consider that middleware and associated services are captured within our description of the Smartphone Operating System and Tablet Operating System digital activities.

Whether connectivity functionalities are within scope

4.27 APIs providing access to connectivity functionalities fall within our descriptions of the Smartphone Operating System and Tablet Operating System digital activities. These APIs play an intermediary role by providing applications and services with access to connectivity hardware and functionalities built on top of the hardware, including the ability to access the internet over a network connection.

Whether voice assistants are within scope

4.28 Voice assistants (VAs) are AI-based software which allow users to control their mobile device verbally.

4.29 As noted above, two respondents to the ITC asked us to clarify whether VAs form part of the Mobile Operating System activity.

4.30 In order to assess whether Apple's VA, marketed as 'Siri', forms part of the Smartphone Operating System and the Tablet Operating System activities, we have considered the extent to which Siri integrates with iOS and iPadOS and plays an intermediary role between hardware and software.

4.31 During a technical session [✂], Apple suggested that [✂].[110]

[110]Note of Apple technical session [✂].

4.32 We consider that supporting functionality that allows Siri to interact with other apps on Apple mobile devices, such as the Sirikit and App Intents framework, and Siri Suggestions, falls within our description of the operating systems, since it acts as an intermediary, providing access to mobile device data and other applications. However, the VA functionality of Siri, whilst embedded into the operating system does not fulfil an intermediary role between hardware and software,[111] and therefore does not fall within the scope of the Smartphone Operating System and Tablet Operating System activities.

Whether digital wallets are within scope

4.33 Functionalities supporting digital wallets fall within the Smartphone Operating System and Tablet Operating System activities. This is because these activities encompass all functionality intermediated on the mobile device by the operating systems, which includes functionality which is key for digital wallets such as access to the NFC chip. However, we do not consider Apple Wallet itself to be part of the operating system as, whilst it may be integrated with the operating system, it does not fulfil an intermediary role between hardware and software.

Native App Distribution

This section assesses the extent to which our initial description of the Native App Distribution digital activity remains appropriate in light of the submissions and evidence received. We provisionally consider that our description remains appropriate, subject to changes accounting for the division of the Mobile Operating System activity into the Smartphone Operating System and Tablet Operating System activities:

Native App Distribution: the provision of a service which enables the installation, distribution and operation of native apps on mobile devices, which are apps written to run on the Smartphone Operating System and/or the Tablet Operating System.

4.34 When we launched the investigation, we explained in the ITC that:[112]

(a) a ‘native app’ means an app that is written to run on a specific operating system;

(b) a ‘native app distribution platform’ means a platform for users to discover, download, and have apps automatically updated; and for businesses to have access to a large user base to whom they can distribute their apps and associated content; and

[111] We understand from our engagement with Ofcom that VAs may play an intermediary role between users and content under Part 6 of the Media Act 2024 for radio selection service users.
[112] ITC, paragraphs 55-58.

(c) the most common method for distributing apps is through a mobile app store such as Apple's App Store, which is pre-installed on Apple's mobile devices and is the only method for users to download native apps on Apple mobile devices.

Submissions on our description and scope of Native App Distribution

4.35 In its submissions dated [✂], Apple submitted that:

(a) App Store on iOS and iPadOS are distinct and should not be treated as a single digital activity, because:[113]

(i) the iOS App Store and iPadOS App Store were launched in July 2008 and April 2010, respectively, and can only be accessed using an iPhone and an iPad, respectively;[114]

(ii) end-user demand and types of apps downloaded differ significantly across the iOS and iPadOS App Stores. [%], the most popular apps on iPad by contrast are not typically used 'on the go'.[115] The different purposes the App Stores serve is also confirmed by the number of: (i) apps available on each UK storefront; (ii) transactors who downloaded an app through each UK storefront; and (iii) first-time downloads through each UK storefront;[116]

(iii) user experience differs across the iOS and iPadOS App Stores, taking into account elements of the user interface;[117]

(iv) the iOS and iPadOS App Stores serve different purposes from the app developers' perspective, as they often need to develop different versions of their app for each operating system to work optimally and be commercially successful on each mobile device;[118] and

(v) the iOS and iPadOS App Stores are subject to different competitive conditions in the UK.[119]

(b) **Pre-installation is not a standalone service.** It is a design component of Apple's integrated mobile devices and should not be included in the CMA's assessments of app marketplaces, because:[120]

[113] Apple's submission [✂].
[114] Apple's submission [✂].
[115] Apple's submission [✂].
[116] Apple's submission [✂].
[117] Apple's submission [✂].
[118] Apple's submission [✂].
[119] Apple's submission [✂].
[120] Apple's submission [✂].

(i) Apple pre-installs apps on iPhones and iPads to deliver a premium out-of-the-box experience, and that pre-installation is an inherent feature of any operating system;[121] and

(ii) app marketplaces, by contrast, provide users with a service that fulfils a distinct purpose for app developers and end-users, ie to allow users to seek out apps in addition to the limited set that is pre-installed.[122]

4.36 In response to the ITC, the following third parties provided submissions on our description and scope of the Native App Distribution digital activity. These focused on **developer tools**:

(a) Epic Games stated that app distribution involves a range of activities from app development to consumer use and that we should include all of these in our description of the Native App Distribution activity. Thus, our description and scope of the activity should include: developer tools for app developers, app distribution through channels outside app stores, discovery and review of apps, app updates, performance and design.[123]

(b) Qoria submitted that our description and scope of the Native App Distribution activity should cover the cloud management tools app developers must use to deploy and manage their apps.[124]

Our assessment

4.37 To account for the division of the Mobile Operating System activity into the Smartphone Operating System and Tablet Operating System activities, we provisionally consider that the description of Native App Distribution should be revised as follows: 'a service which enables the distribution, installation and operation of native apps on mobile devices, which are apps written to run on the Smartphone Operating System and/or the Tablet Operating System'.

4.38 We have also considered the submissions summarised above and provisionally consider that it is not necessary to further amend the description of the Native App Distribution activity. We explain our response to the points made below.

Whether Native App Distribution for the Smartphone Operating System and the Tablet Operating System form part of a single digital activity

4.39 We have considered Apple's submissions that the App Store on iOS and iPadOS is distinct and provisionally consider that we should continue to describe Native

[121] Apple's submission [✂].
[122] Apple's submission [✂].
[123] Epic Games Response to the ITC, pages 3-4.
[124] Qoria Response to the ITC, pages 3-4.

App Distribution in relation to the Smartphone Operating System and the Tablet Operating System as a single digital activity.

4.40 When describing the Native App Distribution activity and considering which of Apple's products and services fall within its scope, we have looked at how the App Store is offered by Apple and consumed by end-users and app developers:[125]

(a) Our provisional view is that the App Store constitutes a single app marketplace through which apps can be distributed to Apple devices, irrespective of the Apple mobile device through which it is accessed. The App Store is offered across all Apple devices on which it is available as one service for intermediating the distribution of apps and digital content: app developers offer apps and digital content within those apps to end-users, while end-users search, download or update those apps and purchase digital content within those apps. This view is supported by Apple's own description of the App Store as a single service across all Apple devices.[126]

(b) The fact that there may be some differences in end-user demand and types of apps downloaded on each device does not mean that App Store is not a single marketplace. We consider that these differences relate to the particularities of the different Apple devices (eg screen size) on which the App Store can be accessed.

(c) To the extent that the user experience differs across each App Store, we consider that such difference is not related to how the App Store is offered by Apple across its devices. In any event, we consider that there is strong evidence of significant similarities in relation to the user experience across each App Store, including:

(i) the App Store has common branding including the same app icon for the end-user on both iOS and iPadOS. End-users can use the same account (Apple Account, formerly known as Apple ID) to access App Store-related services across devices and to purchase in-app content.[127] Apple also offers the same family sharing features across

[125] As explained above, the Guidance explains that the CMA can adopt a functional approach describing a digital activity by reference to the nature of the products and how they are offered and consumed: CMA194, paragraph 2.10.
[126] For example, see Apple's 'App Store Features' page on its Developer page, available at https://developer.apple.com/app-store/features/. This includes the following wording indicating the App Store is referred to by Apple as a single service across all of its devices: 'The App Store makes it easy for users on iPhone, iPad, Mac, Apple TV, Apple Vision Pro, and Apple Watch to discover and download your apps, games, and sticker packs'; 'our worldwide team of editors tailors the App Store to the various devices users use to shop for apps'.
See also, for example, Apple's 'Get started with the App Store' page on its Developer page, available at https://developer.apple.com/app-store/get-started/. This includes the following wording indicating the App Store is referred to by Apple as a single service across all of its devices: 'The App Store is also a safe and trusted place for customers to discover apps and games across Apple platforms, on more than 2 billion Apple devices'.
[127] Available at https://support.apple.com/en-gb/apple-account. This default feature facilitates end-users' ability to access the App Store and purchase apps, irrespective of the device, by, for example, allowing them to store their payment information or app data, or manage purchases and subscriptions.

devices, allowing families to share apps, subscriptions and purchases with each other;[128]

(ii) Apple applies advertising policies for the App Store across devices which do not differentiate between the devices through which the apps are accessed by end-users;[129] and

(iii) Apple offers the same support service for the App Store across devices, which provides end-users with a single point of contact for issues or questions related to the App Store.[130]

(d) The App Store is considered as one service by app developers which they use to distribute their apps and digital content to end-users on Apple's mobile devices.[131] In particular, the following evidence shows that Apple offers the App Store to app developers in the same or similar way across Apple's devices, and that app developers use and access the App Store in the same or similar way across Apple's devices:

(i) Apple applies the same App Store Review Guidelines for the acceptance and review of apps submitted by app developers, irrespective of the device;[132]

(ii) a common set of agreements governs Apple's legal relationship with app developers, such as the Apple Developer Enterprise Program License Agreement[133] and the Apple Developer Agreement.[134] These agreements refer to a single App Store and apply to all app developers, irrespective of the device. Moreover, a common agreement governs the use of application development tools, in particular the Xcode and SDKs Agreement, irrespective of the device;[135]

[128] Apple's Family Sharing feature, available at https://www.apple.com/uk/family-sharing/.
[129] Apple Advertising Policies, available at https://searchads.apple.com/policies.
[130] Apple Support Page, available at https://support.apple.com/billing.
[131] We note that there has been speculation within the tech industry that Apple might split the App Store into two: one for gaming apps and another for all other apps, potentially with different applicable policies and fees. It is uncertain, however, whether this would take place and over what timeframe. Apple announced a new Games app at their latest Worldwide Developers Conference which took place between 9 June and 13 June 2025, prompting further speculation that this might create the conditions for splitting up gaming apps from the rest of the App Store.
[132] Apple's App Review Guidelines, available at https://developer.apple.com/app-store/review/guidelines/.
[133] The Apple Developer Enterprise Program License Agreement, available at https://developer.apple.com/support/downloads/terms/apple-developer-enterprise-program/Apple-Developer-Enterprise-Program-License-Agreement-20240610-English.pdf. This agreement refers to a single App Store, regardless of the operating system. For example, the agreement provides that: 'If You want to distribute applications for iOS, watchOS, tvOS, or visionOS to third parties or obtain an application from a third party, then You must use the App Store'.
[134] The Apple Developer Agreement, available at https://developer.apple.com/support/downloads/terms/apple-developer-agreement/Apple-Developer-Agreement-20250318-English.pdf.
[135] The Apple Xcode and SDKs Agreement, available at https://www.apple.com/legal/sla/docs/xcode.pdf.
This agreement refers to a single App Store, regardless of the operating system. For example, the agreement provides that: 'If You would like a third-party to use Your Application for iOS, watchOS, iPadOS, tvOS, or visionOS, or You would like to distribute Your Application for macOS through the App Store, then You must enter into a separate written agreement with Apple (the Apple Developer Program License Agreement)'.

(iii) Apple offers a range of tools to app developers in relation to the App Store, irrespective of the device to which the apps are distributed. App developers can upload, submit and manage their apps on the App Store, as well as access sales reports and analytics through a single tool, the App Store Connect;[136] and

(iv) App developers can offer their apps to end-users for all Apple devices, through a 'universal purchase', whereby end-users acquire an app that can be used in all their Apple devices with a single purchase.[137]

(e) In order to support its submissions in respect of different use cases for App Store on iOS and iPadOS, Apple also submitted that each App Store is subject to different competitive conditions in the UK. As noted above, the CMA's approach to identifying a digital activity will largely focus on factual information and will not require an assessment of the competitive constraints on the firm.[138] Further, we consider that the evidence presented above in relation to use cases does not provide a basis for treating App Store on iOS and iPadOS as separate digital activities.

4.41 No third party has specifically commented on our proposal to describe Native App Distribution as one digital activity irrespective of whether it relates to the Smartphone Operating System or the Tablet Operating System.

4.42 Accordingly, for the reasons set out above, we provisionally consider that we should continue to describe a single Native App Distribution digital activity which includes the App Store on iOS and iPadOS.

Whether pre-installation of apps is within scope

4.43 As noted above, Apple submitted that pre-installation is a design component of Apple's integrated mobile devices and should therefore not be included in our 'assessments of app marketplaces'.[139]

4.44 Our proposed revised description of the Native App Distribution activity is 'a service which enables the installation, distribution and operation of native apps on mobile devices, which are apps written to run on the Smartphone Operating System and/or Tablet Operating System'.

[136] Apple's App Store Connect, available at https://developer.apple.com/app-store-connect/.
[137] Apple's policy on 'universal purchase', available at https://developer.apple.com/help/app-store-connect/create-an-app-record/add-platforms/. Through this policy, Apple stated in a press release that app developers can 'distribute iOS, iPadOS, macOS, and tvOS versions of [their] app as a universal purchase' and that 'categories will be unified across the App Store and Mac App Store to align with this change, and to help make [their] apps more discoverable'. The press release is available at https://developer.apple.com/news/?id=02052020a. Furthermore, users can choose to have apps downloaded on one device automatically downloaded on another by enabling 'Automatic Downloads', if the devices are linked through the same Apple ID. This is explained, for example, at https://support.apple.com/en-euro/guide/iphone/iph3dfd91de/.
[138] CMA194, paragraph 2.10.
[139] Apple's submission [✂].

4.45 We consider that this description is appropriate taking account of the functional approach to describing the digital activities by reference to the nature of the activity and how it is offered and consumed. The methods by which native apps are distributed on mobile devices, including specifically pre-installation, are a form of distribution and therefore fall within the description of the digital activity. Identifying a digital activity requires a case-specific assessment. In the case of Apple, pre-installation is an important means by which Apple distributes apps to end-users.

Whether developer tools are within scope

4.46 As noted above, some third parties asked us to clarify whether tools, notably cloud management and developer tools, form part of the Native App Distribution activity.

4.47 Our proposed revised description of the Native App Distribution activity is 'a service which enables the installation, distribution and operation of native apps on mobile devices, which are apps written to run on the Smartphone Operating System and/or Tablet Operating System'. The developer tools mentioned by the third parties fall within the digital activity for the following reasons:

(a) The cloud management tools mentioned by third parties enable the installation and/or distribution of native apps on mobile devices, including tools such as App Store Connect and Apple Business Manager. Such tools fall within our description because they enable app developers to distribute native apps to smartphone and tablet devices, even if eligible devices or applications may be restricted in number or otherwise limited.[140]

(b) The developer tools mentioned by third parties support the development, testing and distribution of native apps, such as Xcode and TestFlight. Such tools fall within our description because they provide services such as cryptographic signing of apps and distribution of beta versions of apps which enable the installation, distribution and operation of native apps on smartphones and tablets.

(c) The APIs mentioned by third parties enable the installation, distribution and operation of native apps, including interfaces such as the App Store Connect APIs and Apple School and Business Manager API.[141] Such interfaces fall within our description because they enable app developers to automate aspects of application deployment and management, thereby enabling the

[140] For example, Apple states on its Apple Developer Enterprise Program webpage that 'the Apple Developer Program allows you to distribute public apps on the App Store, beta versions of apps through TestFlight, and custom apps to specific businesses, including your organization, through Apple Business Manager or Ad Hoc distribution.' This webpage is available at https://developer.apple.com/programs/enterprise/.
[141] Descriptions of these API interfaces are available at https://developer.apple.com/documentation/appstoreconnectapi and https://developer.apple.com/documentation/apple-school-and-business-manager-api.

installation, distribution and operation of native apps on smartphones and tablets.

Mobile Browser and Browser Engine

This section assesses the extent to which our initial description of the Mobile Browser and Browser Engine activity remains appropriate in light of the submissions and evidence received. We provisionally consider that it does:

Mobile Browser and Browser Engine: the provision of a mobile browser and browser engine which comprises:

(a) the provision of a software application that enables users of mobile devices to access and search the internet and interact with web content; and

(b) the provision of a mobile browser engine, which is the underlying technology which native apps on mobile devices use to transform web page source code into content with which users can engage.

4.48 When we launched the investigation, we explained that:[142]

(a) a 'mobile browser' translates website code into content that is shown on the mobile device screen to users. Mobile browsers have user-facing functionality such as favourite webpages and browsing history, and store users' data such as passwords and payment details. A default search engine is set as part of the browser;

(b) a 'mobile browser engine' is the underlying technology which browser applications on mobile devices use to transform web page source code into content which users can see and engage with. Browser engines are crucial for determining browser performance and functionalities;

(c) Apple's Safari browser is pre-installed on all Apple mobile devices and as of March 2024, had a share of 88% of usage on Apple mobile devices; all browsers operating on Apple mobile devices are required to use its WebKit browser engine;

(d) web content can also be accessed through native apps, in 'in-app browsers'. In-app browsers are used in apps such as Snapchat, Facebook, search widgets in Google search and email clients such as Gmail. In-app browsing appears to account for a substantial proportion of all browsing on mobile devices; and

[142] ITC, paragraphs 62-67.

(e) we would consider how in-app browsing technology is provided on Apple mobile devices.

Submissions on our description and scope of Mobile Browser and Browser Engine

4.49 In its submissions dated [✂], Apple submitted that Safari on iOS and iPadOS are distinct and should not be treated as a single digital activity, because:[143]

(a) they are designed to support the use cases of the devices on which they run and each browser has been designed to integrate into a different Apple form factor[144].[145] Apple pointed to sidebar as a significant feature that is available on iPad but not iPhone, and to functionalities that reflect the diverging use cases for accessing the web through Safari on iOS and iPadOS.[146]

(b) they support different user needs and preferences. Specifically, Apple stated that users typically use Safari on iOS when they want to quickly look up something, while Safari on iPadOS supports a larger screen, which lends itself better to in-depth browsing. [✂].[147]

(c) they are subject to different competitive conditions. It submitted that this reinforces that they serve separate purposes driven by distinct demand and should therefore be considered separately.[148]

4.50 In the same submission, Apple also stated that Safari and Webkit should be treated as separate digital activities.[149]

4.51 In response to the ITC, ACT/The App Association submitted that our discussion of in-app browsing should be expanded and made more precise, noting that '[i]t would be useful to clarify how the CMA defines in-app browsing, especially given that it plays an increasingly important role in digital interactions'.[150]

Our assessment

4.52 In light of the submissions and evidence we have received, we provisionally consider that the description of the Mobile Browser and Browser Engine activity set out in our Investigation Notice remains appropriate.

[143] Apple's submission [✂].
[144] Form factor refers to the physical characteristics of a device, which have implications for how a user might interact with the device. Such characteristics may also require adaptation in the operating system and software more generally. For example, a foldable smartphone has a different form factor compared with a non-foldable one.
[145] Apple's submission [✂].
[146] Apple's submission [✂].
[147] Apple's submission [✂].
[148] Apple's submission [✂].
[149] Apple's submission [✂].
[150] ACT/The App Association Response to ITC, page 3.

Describing Apple's Mobile Browser on iOS and iPadOS as part of a single digital activity

4.53 We first consider whether the mobile browser provided on the Smartphone Operating System and the Tablet Operating System forms part of a single digital activity. In the context of this investigation, that is a question of whether Apple's mobile browser on iOS and its mobile browser on iPadOS are part of a single digital activity. When describing the digital activity and considering which of Apple's products and services fall within its scope, we look at how the mobile browser is offered by Apple and consumed by end-users and website providers:[151]

(a) Apple develops and provides one version of the mobile browser as referred to in Apple's release notes across its devices. For example, Apple's release note from 31 March 2025 stated that 'Safari 18.4 is available for iOS 18.4, iPadOS 18.4, visionOS 2.4, macOS 15.4, macOS Sonoma, and macOS Ventura.'[152] Apple also promotes Safari as a single web browser rather than a browser designed for a specific device; and applies the same policies across iOS and iPadOS: for example the WebKit restriction applies to browsing on both iOS and iPadOS. Apple often does not distinguish between iOS and iPadOS features for WebKit: for example, in a [✂] submitted to the CMA, [✂].[153]

(b) Regarding the consumption of the mobile browser on iOS and iPadOS by end-users, it is used on both devices as a means of viewing and interacting with web content. Consumers also enjoy a similar user experience of the mobile browser across both iPhones and iPads, which reflects that Apple provides one version of the mobile browser as mentioned above. Further, website providers use the mobile browser to make websites accessible to end-users across both iPhones and iPads. Apple has not identified any significant differences in how website providers make websites accessible to end-users across iPhones and iPads.

(c) Apple has pointed to some differences in use cases, the user interface, the content browsed by users and the duration of browsing sessions on each device. However, as the digital activity which we are investigating is the provision of the Mobile Browser and Browser Engine, the relevant question is whether the Mobile Browser and Browser Engine on iOS and iPadOS is the same, or sufficiently similar, to fall under the provision of a single digital activity. The fact that there may be some differences in use cases does not mean that the mobile browser and browser engine is not a single digital activity. Our view is that the differences highlighted by Apple are attributable

[151] As explained above, the Guidance provides that the CMA can adopt a functional approach describing a digital activity by reference to the nature of the products and how they are offered and consumed: CMA194, paragraph 2.10.
[152] Safari 18.4 Release Notes | Apple Developer Documentation.
[153] Apple response to s174 notice [✂].

to the size, nature and shape of the devices, rather than the provision of the mobile browser.

(d) In order to support its submissions in respect of different use cases for the mobile browser on iOS and iPadOS, Apple also submitted that each version of the mobile browser is subject to different competitive conditions in the UK. As noted above, the CMA's approach to identifying a digital activity will largely focus on factual information and will not require an assessment of the competitive constraints on the firm. Further, we consider that the evidence presented above in relation to use cases does not provide a basis for treating the mobile browser on iOS and iPadOS as belonging to separate digital activities.

4.54 Taking the above evidence into account, we provisionally consider that it would be appropriate to describe a single Mobile Browser and Browser Engine digital activity which includes Safari on iOS and iPadOS.

Describing Apple's Mobile Browser and Browser Engine as part of a single digital activity

4.55 We have next considered Apple's submission that its mobile browser and browser engine should be treated as distinct digital activities. We note that Apple has not provided any specific evidence to substantiate this point.

4.56 The mobile browser and the browser engine are closely integrated services and digital content which are provided and consumed as a package and function as such on Apple's Mobile Platform. Our provisional view is that, taking account of how Apple provides the mobile browser and browser engine to users of its Mobile Platform and how these users consume them, they form part of a single digital activity. This is because in order to allow mobile browsing Apple supplies the following elements: (i) its back end browser engine, currently WebKit, which renders websites that users can see and engage with; together with (ii) its front end mobile browser, currently Safari, which provides user facing functionality. Indeed, while users may not always be aware of the existence of the browser engine, it is the core underlying software component of a mobile browser that handles the rendering and display of web content.[154]

4.57 We note that no third party has specifically commented on our proposal to describe Apple's mobile browser and browser engine on iOS and iPadOS, together as one digital activity.

[154] The browser engine is responsible for processing HTML, CSS, and JavaScript code, and rendering websites into the visual format that users see on their mobile devices. In practical terms, this means the browser engine provides important features which determine the speed and performance of the browser. See MBCG MI Final Report, paragraph 2.9-2.10.

4.58 Accordingly, for the reasons set out above, we provisionally consider that we should continue to describe the mobile browser and browser engine on iOS and iPadOS together under a single Mobile Browser and Browser Engine digital activity.

Clarifying our description of in-app browsing

4.59 As noted above, ACT asked us to clarify what we mean by in-app browsing. In-app browsing relies on an underlying browser engine to render web content. Thus, given its functional description, we provisionally consider that in-app browsing is captured within our description of the Mobile Browser and Browser Engine digital activity.

4.60 We provisionally consider that the description in the MBCG MI for in-app browsing remains appropriate: 'In-app browsing refers to the situation in which a user accesses web content while they are already in a native app that is not a dedicated mobile browser'.[155]

Proposed description of the digital activities

4.61 For the reasons set out above, we have provisionally decided to describe the following four digital activities for the purposes of this investigation:

(a) **Smartphone Operating System**, which we describe as the provision of an operating system or equivalent, which acts as an intermediary between hardware and software on a smartphone, enabling software applications and services to run on the smartphone.

(b) **Tablet Operating System**, which we describe as the provision of an operating system or equivalent, which acts as an intermediary between hardware and software on a tablet, enabling software applications and services to run on the tablet.

(c) **Native App Distribution**, which we describe as the provision of a service which enables the installation, distribution and operation of native apps on mobile devices, which are apps written to run on the Smartphone Operating System and/or the Tablet Operating System.

(d) **Mobile Browser and Browser Engine**, which we describe as the provision of a mobile browser and mobile browser engine, which comprises:

[155] MBCG MI Final Report, paragraph 2.55.

(i) the provision of a software application that enables users of mobile devices to access and search the internet and interact with web content; and

(ii) the provision of a mobile browser engine, which is the underlying technology which native apps on mobile devices use to transform web page source code into content with which users can engage.

4.62 Based on Apple's current business model, we provisionally conclude that the above digital activities include:

(a) for the Smartphone Operating System: (i) the operating system currently known as iOS; (ii) any middleware acting as an intermediary between hardware and software, such as Apple's Metal Framework; (iii) supporting functionality that allows Siri to interact with other apps on iOS devices, such as the Sirikit and App Intents framework, and Siri Suggestions; and (iv) all other functionality intermediated on the mobile device by the operating system; including functionality which is key for digital wallets such as access to the NFC chip;

(b) for the Tablet Operating System: (i) the operating system currently known as iPadOS; (ii) any middleware acting as an intermediary between hardware and software, such as Apple's Metal Framework; (iii) supporting functionality that allows Siri to interact with other apps on iPadOS devices, such as the Sirikit and App Intents framework, and Siri Suggestions; and (iv) all other functionality intermediated on the mobile device by the operating system;

(c) for Native App Distribution: (i) the pre-installation of first party apps on iOS and iPadOS mobile devices; and (ii) the installation, distribution and operation of third-party native apps through the App Store. This includes cloud management tools such as App Store Connect and Apple Business Manager; developer tools for developing, testing and distributing native apps such as Xcode and TestFlight; and APIs for enabling the installation, distribution and operation of native apps, including interfaces such as the App Store Connect APIs and Apple School and Business Manager API; and

(d) for Mobile Browser and Browser Engine: (i) Apple's dedicated mobile browser, Safari; (ii) Apple's browser engine, WebKit; and (iii) the in-app browsing technology that Apple provides to native apps to enable the integration and/or embedding of web mobile browsers in their apps.

Grouping Smartphone Operating System, Tablet Operating System, Native App Distribution and Mobile Browser and Browser Engine

This section assesses our proposal to group Apple's digital activities in light of the submissions and evidence received.

We provisionally conclude that the Smartphone Operating System, Tablet Operating System, Native App Distribution, and Mobile Browser and Browser Engine activities should be treated as a single digital activity, referred to as a Mobile Platform. Our provisional view is that these activities can be carried out in combination with each other to fulfil a specific purpose and/or have substantially the same or similar purposes.

4.63 When we launched our investigation, we explained that '[t]he provision of a mobile operating system, native app distribution and a mobile browser and browser engine could be considered as a single digital activity'.[156] This is because the individual digital activities 'can be carried out in combination with each other to fulfil the specific purpose of facilitating interactions between users and providers of digital content and services (as applicable) on mobile devices in order to allow users to access, view and engage with such content and services on their mobile devices'.[157]

Submissions on our grouping proposal

4.64 Apple submitted in response to the ITC that it does not consider its operating systems, the App Store, browser, and browser engine to be distinct products and that they are all aspects of iPhone, iPad, and other integrated Apple products.[158]

4.65 However, in its subsequent submissions dated [✂], Apple stated that these activities are distinct and should not be treated as a single digital activity. In particular, Apple submitted that:[159]

(a) The CMA's previous investigatory work in MEMS and MBCG MI demonstrates that operating systems, app marketplaces, web browsers, and browser engines serve distinct purposes and therefore do not satisfy the condition under section 3(3)(a) of the Act.[160]

(b) In the context of the EU Digital Markets Act (DMA), the European Commission has found that app stores, browsers, and operating systems individually constitute ways in which businesses reach users.[161]

[156] ITC, paragraph 69.
[157] Investigation Notice, paragraphs 4-5.
[158] Apple Response to ITC, paragraph 1.5.
[159] Apple's submission [✂].
[160] Apple's submission [✂].
[161] Apple's submission [✂].

(c) Apple's operating systems, App Store, web browser, and browser engine serve distinct purposes and therefore do not satisfy the section 3(3)(a) condition.[162] They cannot be used in combination to fulfil a specific purpose, and therefore do not fulfil the section 3(3)(b) condition because:[163]

(i) They are not 'usually "used in combination"' while section 3(3)(b) is aimed at digital activities that cannot usually be purchased or used without each other.[164]

(ii) The purpose set out in the Investigation Notice[165] would not be a legitimate basis on which to treat Apple's digital activities as a single digital activity because it describes a general, abstract purpose rather than a specific purpose.[166]

4.66 Third parties that commented on the grouping proposal in response to the ITC were supportive, including:

(a) Coalition for App Fairness which submitted that the digital activities have substantially the same purpose: 'the operation of an integrated ecosystem for mobile devices, and they are carried out in combination to fulfil that purpose'. It further submitted that the activities are 'closely interlinked' and grouping may be 'the most logical and proportionate approach as certain CRs may apply to more than one of the three product groups'.[167]

(b) Epic Games which submitted that we must take a 'holistic approach' to our investigation, which 'could mean grouping together some of the digital activities that have the same purpose or are often used in combination, in particular where this will make it harder for Apple […] to evade compliance with potential interventions'.[168]

(c) Movement for an Open Web which submitted that it welcomes our grouping proposal under section 3(3) of the Act.[169]

(d) Mozilla which submitted that:[170]

(i) Grouping the activities together would 'reflect the reality that Apple […] have market power across an ecosystem of products'.

[162] Apple's submission [✂].
[163] Apple's submission [✂].
[164] Apple's submission [✂].
[165] Investigation Notice, paragraph 5 ('facilitating interactions between users and providers of digital content and services (as applicable) on mobile devices in order to allow users to access, view and engage with such content and services on their mobile devices').
[166] Apple's submission [✂].
[167] Coalition for App Fairness Response to the ITC, page 2.
[168] Epic Games Response to the ITC, pages 1-2.
[169] Movement for an Open Web Response to ITC, page 2.
[170] Mozilla Response to ITC, page 4.

(ii) Otherwise, there are risks of 'an enforcement gap where, for technical reasons due to how particular digital activities have been defined, it may become difficult for the CMA to take enforcement action'.

(iii) 'Grouping together the activities as a mobile ecosystem provides greater flexibility that will enable the CMA to take into account future technological advances'.

Our assessment

Legal framework and Guidance

4.67 As set out above, the Act allows us to group two or more digital activities carried out by a single undertaking as a single digital activity where:[171]

(a) the activities have substantially the same or similar purposes; or

(b) the activities can be carried out in combination with each other to fulfil a specific purpose.

4.68 Our Guidance explains that the CMA will interpret these conditions broadly.[172] For example, the concept of purpose may refer to any relevant aspect of how the products are made, marketed, sold, accessed, or consumed, and may therefore relate to customer needs or preferences rather than technical complementarity.[173]

4.69 We therefore consider that a central consideration when assessing whether it would be appropriate to exercise our power to group digital activities is to consider the purpose of the activities and how the relevant digital activities are: (i) provided by Apple on the one hand; and (ii) consumed by users in practice on the other hand. This means that any grouping of digital activities needs to reflect how the relevant digital activities are carried out.[174]

[171] Section 3(3) of the Act.
[172] CMA194, paragraph 2.14.
[173] The Explanatory Notes to the Act also provide instructive grouping examples as follows: (i) a number of services under different brands with a common function, allowing users, such as advertisers and publishers, to communicate with each other under section 3(3)(a); and (ii) services and products which are part of the same supply chain, such as services selling advertisements and the provision of an advertising platform under section 3(3)(b).
[174] Whilst we have examined Apple's submissions concerning the prior cases relating to certain aspects of the mobile ecosystems under different legal frameworks and in different statutory contexts, we note that none of those cases involved the legal requirement to describe digital activities in respect of which a market power assessment must then be carried out. Under the Act, we are required to consider both the descriptions of the digital activities under section 3(1), and the question as to whether it would be appropriate to group those activities under section 3(3), taking a careful account of the facts and context relevant to our investigation. In other words, these prior cases under different legal regimes and in different statutory contexts in the past are not determinative of, and may not be necessarily instructive to, our consideration as to how we should treat the relevant digital activities for the purposes of this investigation.

The purpose of the digital activities

4.70 We provisionally consider that the relevant purpose that makes it appropriate for us to group Apple's digital activities as a single 'Mobile Platform' digital activity remains as described in the ITC: facilitating interactions between users and providers of digital content and services (as applicable) on Apple's mobile devices in order to allow users to access, view and engage with such content and services on their mobile devices.

4.71 The four relevant digital activities (the Smartphone Operating System, Tablet Operating System, Native App Distribution, and Mobile Browser and Browser Engine) in combination form a complementary package of services and digital content to fulfil the purpose described above of facilitating interactions between users and providers of digital content and services on Apple's mobile devices. This purpose is also reflected in each of the digital activities individually. Apple provides an integrated package encompassing these services and digital content to users and they are often consumed as an integrated package by users:

(a) Apple's iOS and iPadOS operating systems are pre-installed software that act as the intermediaries between its hardware (mobile devices) and software; this software facilitates interactions between users and providers of digital content and services;

(b) Apple's native app distribution, which includes the App Store and pre-installation of first party apps, provides the channel through which native apps are provided on Apple mobile devices; facilitating interactions between users and providers of digital content and services;

(c) Apple's mobile browser and browser engine, which includes Safari and WebKit, provides the route by which users access content provided on the web by businesses; again, this digital activity facilitates interactions between users and providers of digital content and services. While there are alternatives to Safari, they are all powered by Apple's WebKit and most consumers use Safari which is pre-installed and set as a default on their mobile devices.[175]

4.72 Consistent with our prior work in respect of mobile ecosystems,[176] evidence from Apple shows that its operating systems, app store and browser and browser engine across its mobile devices are tightly integrated:

(a) In as early as 2010, Apple's then-CEO Steve Jobs set out Apple's vision to 'tie all of our products together, so we further lock customers into our

[175] As described in Annex A – Market Outcomes, Safari has a share of supply of 86% on iOS, which has been consistent for many years.
[176] MEMS Final Report, Overview of Key Findings, section 2 and paragraphs 2.20 and 2.45.

ecosystem' and 'make Apple ecosystem even more sticky'.[177] In 2013, Apple's senior executives (in an internal email exchange involving now-CEO Tim Cook) reiterated this goal to 'get people hooked to the ecosystem'.[178]

(b) Apple's submissions in this investigation further support the tightly integrated nature of the individual digital activities. For example:

(i) In its ITC response Apple explained that it offers integrated products that combine hardware and software to create a highly differentiated user experience; iPhone and iPad include an operating system, the App Store, apps, and hardware components that Apple designed from scratch to maximise performance, usability, privacy, and security.[179]

(ii) Apple further noted that it does not consider its operating systems, the App Store, browser, and browser engine to be distinct products. Instead, these are all aspects of iPhone, iPad, and other integrated Apple products.[180].

(c) In its public filing, Apple similarly stated that it 'designs and develops nearly the entire solution for its products, including the hardware, operating system, numerous software applications and related services'.[181]

4.73 We have also taken into account other market participants' submissions which are consistent with our understanding of how the individual digital activities are offered by Apple and consumed by users. As set out above, the submissions were supportive of our grouping proposal and emphasised the appropriateness of grouping given the close interlinkages and seamless integration between the elements of the Mobile Platform in fulfilling the purpose of connecting users and content providers. Consistent with this integration, third parties also noted that grouping would facilitate the design of potential interventions that may apply to several of the individual digital activities and avoid potential circumvention.

4.74 In addition, we understand that the interlinkages between these digital activities are likely to remain in place and potentially become a more important characteristic of Apple's Mobile Ecosystem over the forward-looking assessment period of the next five years. We received multiple third-party submissions that technological developments such as AI and connected devices are likely to

[177] Don Reisinger, "Steve Jobs wanted to 'further lock customers' into Apple's ecosystem'", published on CNET on 2 April 2014, available at https://www.cnet.com/tech/tech-industry/steve-jobs-wanted-to-further-lock-customers-into-apples-ecosystem/. See also Sean Hollister, 'Sweetheart deals and plastic knives; All the best emails from the Apple vs. Epic trial', published on Verge on 19 August 2021, available at https://www.theverge.com/c/22611236/epic-v-apple-emails-project-liberty-app-storsteve%20-schiller-sweeney-cook-jobs.
[178] Sean Hollister, 'Sweetheart deals and plastic knives; All the best emails from the Apple vs. Epic trial', published on Verge on 19 August 2021, available at https://www.theverge.com/c/22611236/epic-v-apple-emails-project-liberty-app-storsteve%20-schiller-sweeney-cook-jobs.
[179] Apple's ITC response, paragraph 1.3.
[180] Apple's ITC response, paragraph 1.5.
[181] Apple Form 10-K for the fiscal year ended 28 September 2024.

enhance the importance of integration for competition in mobile ecosystems and for how users and developers interact with mobile devices. This is explained further in the 'Competition to Apple's Mobile Platform arising from other technological developments' section in Chapter 6.

4.75 Our provisional view is that the relevant purpose under section 3(3) should remain as described in the ITC: facilitating interactions between users and providers of digital content and services (as applicable) on Apple's mobile devices in order to allow users to access, view and engage with such content and services on their mobile devices.

Commonality of purpose between Smartphone Operating System and Tablet Operating System

4.76 As part of this overall assessment across the four digital activities, we have also considered whether and, if so, how the description of two separate digital activities for operating systems (the Smartphone Operating System and the Tablet Operating System) impacts our grouping assessment. In particular, we have assessed whether Apple and users may distinguish between the iPhone and the iPad. Our provisional view is that these activities, along with Native App Distribution and Mobile Browser and Browser Engine, can be carried out in combination with each other to fulfil the specific purpose and/or have substantially the same or similar purposes. In particular, we note that:

(a) Apple offers a tightly integrated suite of products across its devices with seamless engagement and user experience emphasised. This is reflected in Apple's marketing and design of its products which emphasise the commonality across devices. For example:

(i) On a webpage with the headline 'All your devices. One seamless experience', Apple describes how users 'can do so much more' when using Apple's devices together. It gives examples of that 'seamless experience', including: (i) a feature enabling a user to take and make iPhone calls on their iPad; (ii) a feature called 'Handoff' enabling a user to write an email on their iPhone and continuing on their iPad; and (iii) a feature called 'Universal Clipboard' enabling a user to copy images, video or text from an app on their iPhone or iPad and paste into an app on another device.[182]

(ii) Apple's cloud storage solution iCloud 'is built into every Apple device', which Apple characterises as providing 'one powerfully connected experience'. Among other things, iCloud enables a user to access files

[182] macOS - Continuity - Apple (UK)

and folders from the Files App on both iOS and iPadOS and keeps data on their iPhone and iPad automatically backed up.[183]

(iii) Each Apple device user has an Apple Account (formerly Apple ID) that gives them 'access to all Apple services and makes all of [their] devices work seamlessly'.[184] Apple specifically calls out iCloud and the App Store as services that users can access with their Apple Account.[185]

(iv) Apple also markets iOS and iPadOS as tightly integrated with each other to app developers. Specifically, Apple recommends that developers building apps for iPadOS should 'consider adding support for iOS at the same time', noting that 'iOS and iPadOS share many of the same technologies, making it easy to support both with the same executable.'[186]

(b) Correspondingly, users engage with Apple's offering in an integrated manner across devices. For example:

(i) [✂].[187]

(ii) An Apple internal document [✂].[188]

(c) The other digital activities (Native App Distribution and Mobile Browser and Browser Engine) are offered by Apple and consumed by users across mobile devices, as the App Store and Safari/WebKit are made available on both the iPhone and the iPad.

Provisional conclusion on grouping the relevant digital activities

4.77 We provisionally conclude that:

(a) Apple's Smartphone Operating System, Tablet Operating System, Native App Distribution, and Mobile Browser and Browser Engine activities can be carried out in combination with each other to fulfil a specific purpose.[189] The relevant 'purpose' is facilitating interactions between users and providers of digital content and services (as applicable) on Apple's mobile devices (iPhones and iPads) in order to allow users to access, view and engage with such content and services on their mobile devices. Indeed, our provisional view, taking account of Apple's submissions and our understanding of Apple's digital activities, is that not only *can* the activities be carried out in

[183] https://www.apple.com/uk/icloud/
[184] https://support.apple.com/en-gb/apple-account
[185] https://support.apple.com/en-gb/108647?device-type=iphone
[186] Get Started - iPadOS - Apple Developer
[187] Apple's submission [✂].
[188] Apple internal document [✂].
[189] Under section 3(3)(b) of the Act.

combination with each other to fulfil the specific purpose, but that they *are*, as a matter of fact, carried out in combination with each other by Apple to facilitate interactions between users and content providers as: (i) Apple provides an integrated package encompassing these products and services to users; and (ii) from the consumers' perspective, there is compelling evidence that iOS, iPadOS, App Store and Safari/WebKit constitute a package of integrated products and services which they use in combination with each other to access content and services on their mobile devices.

4.78 In light of our provisional conclusion that the relevant digital activities can and should be grouped as a single Mobile Platform digital activity under section 3(3)(b), it is not necessary to determine whether the activities also have substantially the same or similar purposes under section 3(3)(a). Nevertheless, on the basis of the evidence set out in this section, we provisionally conclude that Apple's Smartphone Operating System, Tablet Operating System, Native App Distribution, and Mobile Browser and Browser Engine activities have substantially the same or similar purposes.[190] iOS and iPadOS are pre-installed software that power iPhones and iPads, respectively, and act as the intermediary between hardware (mobile devices) and software. The App Store allows users to discover, download, and have apps automatically updated; and businesses to access a large user base to whom they can distribute their apps and associated content. Safari (powered by the mobile browser engine WebKit) enables users of mobile devices to access and search the internet and interact with web content provided by businesses. Each of these activities has the purpose of facilitating interactions between users and providers of digital content and services on Apple's mobile devices in order to allow users to access, view and engage with such content and services on their mobile devices, and therefore have substantially the same or similar purposes.

The digital activity is linked to the UK

This section considers whether Apple's provision of the digital activity is 'linked to the UK'. We provisionally conclude that each of the conditions in the Act (any one of which would suffice) is satisfied and therefore that Apple's provision of its Mobile Platform is linked to the UK.

4.79 The CMA may designate an undertaking as having SMS in respect of a digital activity carried out by the undertaking where the CMA considers that the digital activity is 'linked to the UK'.[191]

4.80 A digital activity is linked to the UK if:

[190] Under section 3(3)(a) of the Act.
[191] Section 2(1)(a) of the Act.

(a) the digital activity has a significant number of UK users;[192]

(b) the undertaking that carries out the digital activity carries on business in the UK in relation to the digital activity; or

(c) the digital activity or the way in which the undertaking carries on the digital activity is likely to have an immediate, substantial and foreseeable effect on trade in the UK.[193]

4.81 Based on the evidence we have obtained, we provisionally consider that each of the conditions in the Act (any one of which would suffice) is satisfied and therefore that Apple's provision of its Mobile Platform is linked to the UK. As set out below, this is the case across the component parts of its Mobile Platform: namely, its Smartphone Operating System, Tablet Operating System, Native App Distribution, and Mobile Browser and Browser Engine.

Smartphone and Tablet Operating Systems

4.82 Apple's Smartphone Operating System and Tablet Operating System each have a significant number of UK users:

(a) In 2024, there were [✂] [40-50] million accounts making transactions on iPhones (using iOS) and [✂] [10-20] million accounts making transactions on iPads (using iPadOS) in the UK.[194] This is a very significant number of users in the UK, particularly in the context of a UK population of 69 million.[195]

(b) Apple has consistently been one of the largest suppliers of each of smartphone operating systems and tablet operating systems in the UK for almost a decade. In each year from 2015 to 2024, [50 – 60%] [✂]% of active smartphones were iOS devices.[196] In each year from 2017 to 2024, [50 – 60%] [✂]% of active tablets were iPadOS devices.[197]

[192] There is no quantitative threshold for how many UK users can be considered 'significant': the CMA's assessment may consider the firm's absolute position and/or the number of UK users it has relative to other undertakings (CMA194, paragraph 2.22).
[193] Section 4 of the Act.
[194] Transacting accounts are those accounts that made a free or paid app download or paid in-app purchase or subscription across Apple's services in the calendar year 2024. Apple's response to section 69 notice [✂].
[195] According to estimates reported by Worldometer, in 2024, the UK population was around 69 million.
[196] The CMA has measured shares of supply on the basis of active devices. We note Apple's submission that its operating systems are not separate products from the devices they operate on and thus do not have distinct competitive conditions. Apple's response to section 69 notice [✂]. CMA analysis of data from market participants, in particular Apple's response section 69 notice [✂]; Google's response to section 69 notice [✂]; and Huawei's response to the section 69 notice [✂]. More detail on share of supply is set out in Annex A.
[197] The CMA has measured shares of supply on the basis of active devices. We note Apple's submission that its operating systems are not separate products from the devices they operate on and thus do not have distinct competitive conditions. Apple's response to section 69 notice [✂]. CMA analysis of data from market participants in particular Apple's response to section 69 notice [✂]; Google's response to section 69 notice [✂]; Amazon's response to section 69 notice [✂]; and Huawei's response to section 69 notice [✂]. More detail on share of supply is set out in Annex A.

4.83 Apple carries on business in the UK in relation to the provision of a Smartphone Operating System and a Tablet Operating System because it supplies its operating systems to users in the UK; and

4.84 As the provider of one of the main smartphone operating systems and tablet operating systems in the UK, and the only operating systems used on Apple smartphones and tablets, the effect on trade in the UK of Apple's provision of its Smartphone Operating System and its Tablet Operating System is likely to be immediate, substantial and foreseeable.

Native App Distribution

4.85 Apple's Native App Distribution has a significant number of UK users:

(a) Apple's App Store has a significant number of active users in the UK. For example in the UK in 2024, it had [✂] [20-30] million monthly active users (meaning users that download at least one app per month).[198]

(b) There are also a significant number of app developers listing apps on the App Store. For example, in 2024 in the UK, the average number of app developers with apps available on the App Store at the end of each month was approximately [✂] [0 – 1 million], and the average number of native apps available on the App Store at the end of each month was approximately [✂] [1-2] million;[199]

4.86 Apple carries on business in the UK in relation to Native App Distribution: In 2024, the value of customer billings and net revenues on the UK App Store were £[✂] [0 - 5] billion and £[✂] [0 – 2 billion] respectively;[200,201] and

4.87 Apple's provision in Native App Distribution is likely to have an immediate, substantial and foreseeable effect on trade in the UK: in its response to the CMA's ITC, Apple noted that, "[t]he App Store facilitated more than $1.1 trillion in billings and sales worldwide in 2022, with the UK alone enjoying $48 billion in billings and sales, by far the largest in all of Europe."[202]

[198] We have calculated the monthly active users for 2024 taking the average of the monthly data Apple provided. See Apple's response to section 69 notice [✂]. See Table A.1 in Annex A for further information.
[199] We have calculated monthly averages based on data from Apple. See Apple's response to section 69 notice [✂]. See Table A.1 in Annex A for further information.
[200] Apple's response to section 69 notice [✂]. See Annex A for further information.
[201] Customer billings means the value of user spend within apps via Apple's IAP and net revenue means the value of customer billings retained by Apple via its IAP. IAP refers to in-app purchase, Apple's proprietary payment system as described in Section 3.1.1 of Apple's App Review Guidelines.
[202] Apple's ITC response, paragraph 1.14

Mobile Browser and Browser Engine

4.88 Apple's Mobile Browser and Browser Engine have a significant number of UK users:

(a) In March 2025 in the UK, Safari had an 86% share of supply of browsers on iOS (including iPadOS).[203] In 2024, it had a share of supply across all mobile devices in the UK of 43%.[204]

(b) WebKit has a 100% share of supply for browser engines on Apple's Mobile Ecosystem in the UK due to the fact that WebKit is the only browser engine permitted to be used on Apple iPhone and iPad.

4.89 Apple carries on business in the UK in relation to the provision of its Mobile Browser and Browser Engine as it supplies them in the UK; and

4.90 As the provider of one of the two main Mobile Browsers and Browser Engines in the UK for mobile devices, and the main Mobile Browser and only Browser Engine used within Apple's Mobile Ecosystem in the UK, the effect on trade in the UK of Apple's provision of the Mobile Browser and Browser Engine is likely to be immediate, substantial and foreseeable.

[203] CMA analysis of publicly available Cloudflare data as set out in Annex A. Due to the specific methodology used, we note that some browser traffic on iPadOS may be captured under MacOS which means that these figures could be understated.
[204] CMA analysis of publicly available Statcounter data as set out in Annex A. Due to the specific methodology used, we note that some browser traffic on iPadOS may be captured under MacOS which means that these figures could be understated.

5. THE SMS CONDITIONS: OVERVIEW

In this chapter we provide an overview of the substantive conditions set out in the Act for determining whether an undertaking has strategic market status (SMS). We also explain the approach we have taken to our assessment as to whether Apple meets these conditions in respect of its Mobile Platform.

Our assessment is set out in the chapters which follow in which we consider: (i) the competitive constraints on Apple's Mobile Platform from rival Mobile Ecosystems; (ii) competitive constraints on Apple's mobile content distribution from alternatives within its Mobile Ecosystem, as well as non-mobile alternatives; and (iii) the final elements of our SEMP analysis as well as our POSS assessment.

For the reasons set out across these chapters, we provisionally consider that Apple meets both SMS conditions in respect of its Mobile Platform. For the avoidance of doubt, the evidence set out in this section also supports the conclusion that Apple would meet both SMS conditions in respect of each of the core components of the Mobile Platform.

5.1 This chapter covers:

(a) The legal framework and Guidance

(b) Our assessment approach.

The legal framework and Guidance

This section explains the legal framework and Guidance in respect of the SMS conditions. The CMA may designate an undertaking as having SMS in respect of a digital activity carried out by the undertaking where the CMA considers that the undertaking meets 'the SMS conditions' in respect of the digital activity.[205]

The SMS conditions are that the undertaking has:[206]

- substantial and entrenched market power; and
- a position of strategic significance,

in respect of the digital activity.

Substantial and entrenched market power

5.2 The first SMS condition requires an assessment of a firm's market power. This is largely an assessment of the available alternatives and the extent to which they

[205] Section 2(1)(b) of the Act.
[206] Section 2(2) of the Act.

provide a competitive constraint on the firm's product or service. This includes alternatives available in the present and possibilities for entry and expansion.

5.3 Our Guidance explains that:

(a) While 'substantial' refers to the extent of market power and 'entrenched' is intended to ensure a firm is not designated where its market power is only transient, our assessment of each element will typically draw on a common set of evidence.[207]

(b) Where a firm operates a two-sided (or multi-sided) platform serving distinct but related customer groups, we will generally consider both customer groups and the alternatives available to each; and the interlinkages between the sides of the platform, including the role of network effects.[208]

(c) Where the CMA 'groups' two or more of the firm's digital activities into a single digital activity, the SMS assessment will relate to the grouped activity as a whole. In practice, we may consider evidence relevant to market power of individual products and whether and how any interlinkages between these may contribute to market power across the digital activity; for example whether the firm's position in one activity in the group reinforces its position in another.[209]

5.4 To assess whether an undertaking has substantial and entrenched market power in respect of a digital activity, the CMA must also carry out a forward-looking assessment of a period of at least five years, taking into account developments that:[210]

(a) would be expected or foreseeable if the CMA did not designate the undertaking as having SMS in respect of the digital activity; and

(b) may affect the undertaking's conduct in carrying out the digital activity.

5.5 Our Guidance explains that when carrying out that forward-looking assessment, we will consider developments that may affect the firm's market power, including (1) market developments such as emerging technology, innovation and new entrants; and (2) regulatory developments.[211]

5.6 We will not seek to make precise predictions about the likely development of the industry. Instead, we will consider whether relevant developments are likely to be sufficient in scope, timeliness and impact to eliminate the firm's substantial market

[207] CMA194, paragraph 2.54.
[208] CMA194, paragraph 2.52.
[209] CMA194, paragraph 2.65. See also paragraph 2.16.
[210] Section 5 of the Act.
[211] CMA194, paragraph 2.59.

power.[212] Where the CMA has found evidence that the firm has substantial market power at the time of the SMS investigation, and where there is no clear and convincing evidence that relevant developments will be likely to dissipate the firm's market power, this will generally support a finding that market power is entrenched.[213]

Position of Strategic Significance

5.7 An undertaking has a position of strategic significance in respect of a digital activity where one or more of the following conditions is met:[214]

(a) the undertaking has achieved a position of significant size or scale in respect of the digital activity;[215]

(b) a significant number of other undertakings use the digital activity as carried out by the undertaking in carrying on their business;

(c) the undertaking's position in respect of the digital activity would allow it to extend its market power to a range of other activities;

(d) the undertaking's position in respect of the digital activity allows it to determine or substantially influence the ways in which other undertakings conduct themselves, in respect of the digital activity or otherwise.

5.8 Our Guidance provides further details as to how the CMA will assess each condition.[216]

Our assessment approach

This section sets out our approach to assessing whether Apple meets the SMS conditions in respect of its Mobile Platform. We set out the main users of Apple's Mobile Platform as well as how we have considered the link between Apple's Mobile Platform and wider Mobile Ecosystem. Finally, we explain how our assessment is laid out in the chapters which follow.

[212] CMA194, paragraph 2.60.
[213] CMA194, paragraph 2.62.
[214] Section 6 of the Act.
[215] A position of significant size could refer to the number of users in relation to the relevant digital activity. A position of significant size or scale may also depend on the undertaking's size relative to the digital activity. There is no quantitative threshold for when size or scale can be considered 'significant'. Explanatory notes to the Act, paragraph 114. See also CMA194, paragraph 2.70.
[216] CMA194, paragraphs 2.68 to 2.75.

Users of Apple's Mobile Platform

5.9 We set out in Chapter 4 that we consider Apple's Mobile Platform to consist of its iOS and iPadOS operating systems, its App Store and Safari browser and WebKit browser engine.

5.10 As illustrated in Figure 5.1 below, we consider there to be two main groups relevant to the consideration of competition in relation to Apple's Mobile Platform:

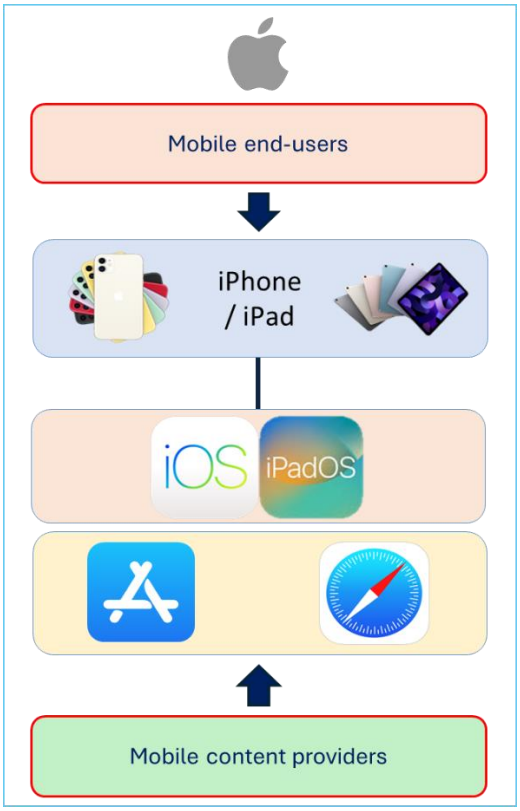
(a) **End-users who purchase mobile devices with Apple's Mobile Platform pre-installed:** When an end-user purchases an Apple mobile device – an iPhone or an iPad – it comes pre-loaded with Apple's Mobile Platform, Apple's operating system: iOS or iPadOS, as well as Apple's App Store and Safari browser using the WebKit browser engine. Each of the elements of Apple's Mobile Platform is used by end-users to access content on its mobile devices.

(b) **Content providers who use Apple's Mobile Platform to provide content to end-users:** App developers and providers of web content use Apple's Mobile Platform to provide their content and services to end-users.

5.11 As such, our assessment of the competitive constraint on Apple's Mobile Platform will consider this from the perspective of both user groups, in line with the approach set out in our Guidance.[217]

[217] See CMA194, paragraph 2.52, which notes that '[i]n digital markets, many firms operate two-sided (or multi-sided) platforms which serve two (or more) distinct but related customer groups. Where the potential SMS firm operates such a platform, the CMA will generally consider both customer groups and the alternatives available to each. The CMA will also consider the interlinkages between the sides of the platform, including the role of network effects and any role these may play in creating barriers to entry.' We consider that paragraph is equally applicable where (as here) a platform contains three distinct but related customer groups.

Figure 5.1: The main user groups of Apple's Mobile Platform



The link between the Mobile Platform and the wider Mobile Ecosystem

5.12 Mobile end-users purchasing a smartphone or tablet are buying into a Mobile Ecosystem which includes the mobile devices themselves, the Mobile Platform deployed on this hardware, as well as the digital content accessible via the platform. Our consumer survey results show that end-users purchasing a mobile device care about both hardware and software features across the wider Mobile Ecosystem.[218] When assessing the competitive constraint on Apple's Mobile Platform, it is therefore often necessary to consider the broader Mobile Ecosystem (especially the mobile device hardware), rather than only focus on the core software components that make up the Mobile Platform. This is reflected in our assessment.

5.13 Similarly, a wide range of digital content is accessible via Apple's Mobile Platform, including many products and services provided by third parties. Some of these apps could themselves provide a competitive constraint on Apple's Mobile Platform, or elements within it like the App Store or Safari. For example, Google's Chrome browser is offered as an alternative to Apple's Safari browser within

[218] For example, our consumer survey found that important factors when choosing a smartphone included the following: (i) 50% of iOS users and 53% of Android smartphone users mentioned 'camera'; (ii) 46% of iOS users and 56% of Android smartphone users mentioned 'battery life'; (iii) 41% of iOS users and 50% of Android smartphone users mentioned 'storage capacity/memory'; (iv) 36% of iOS users and 43% of Android smartphone users mentioned 'screen size'; (v) 23% of iOS users and 16% of Android smartphone users mentioned 'security features'; and (vi) 17% of iOS users and 11% of Android smartphone users mentioned 'privacy features'. Accent Mobile Consumer Survey, Figure 9.

Apple's broader Mobile Ecosystem. We therefore also take this into account in our assessment and consider the extent to which Apple's Mobile Platform, or elements within it, face competition from within its broader Mobile Ecosystem.

5.14 Where our overall analysis of Apple's Mobile Platform focusses on mobile devices, we draw out evidence for both smartphones and tablets. However, evidence in relation to the App Store, Safari or WebKit applies equally across smartphones and tablets, reflecting that we are assessing Native App Distribution and Mobile Browser and Browser Engine as single digital activities across both types of mobile devices.

Structure of our assessment

5.15 Our analysis of the SMS conditions is divided into three chapters.

5.16 The first SMS chapter of our analysis focuses on SEMP and **competitive constraints on Apple's Mobile Platform from rival Mobile Ecosystems.** We consider the competitive constraints in relation to each group of users (end-users and content providers) in turn.

5.17 We also consider barriers to entry and expansion for Mobile Platforms and the extent to which Apple faces a competitive constraint from the threat of a new Mobile Platform emerging, as well as market and technological developments which could impact competition to Apple's Mobile Platform over the next five years.

5.18 The second SMS chapter of our analysis focuses on SEMP and **competitive constraints on Apple's mobile content distribution** from alternatives **within its Mobile Ecosystem,** as well as **non-mobile alternatives**. As set out above, an Apple mobile device comes pre-installed with Apple's Mobile Platform. However, users may then access content in alternative ways, for example by choosing to use a third-party alternative to Apple's Safari browser. This section therefore focuses on alternatives to Apple's Native App Distribution and alternatives to Apple's Mobile Browser and Browser Engine. We also consider the extent of constraint exerted by non-mobile alternatives such as games consoles and desktop browsers. Finally, we consider the extent of any current competitive constraint from alternative content distribution and market and technological developments which could impact this over the next five years.

5.19 The third SMS chapter sets out the final elements of our SEMP analysis – regulatory developments and profitability analysis. It then presents our assessment of whether Apple has a position of strategic significance, before **concluding on whether Apple meets both SMS conditions.**

5.20 Our assessment draws on an analysis of shares of supply in mobile operating systems, evidence from Apple's internal documents, evidence from third parties, data from International Data Corporation (**IDC**), and our consumer survey.

6. SEMP: CONSTRAINTS ON APPLE'S MOBILE PLATFORM FROM RIVAL MOBILE ECOSYSTEMS

In this chapter, we consider the competitive constraints on Apple's Mobile Platform from rival Mobile Ecosystems. We assess competition between Mobile Ecosystems for end-users and for content providers and consider the constraint that this exerts on Apple's Mobile Platform. We also consider the extent to which Apple is constrained by the threat of entry and expansion of competing Mobile Ecosystems, and whether technological and market developments may exert a competitive constraint on Apple's Mobile Platform, both now and in the future.

We provisionally conclude that Apple's Mobile Platform faces limited competitive constraint from rival Mobile Ecosystems. Although there is evidence of competition between Apple's and Google's Mobile Ecosystems, the overall constraint imposed by Google on Apple's Mobile Platform is limited. Other non-Google Mobile Ecosystems do not impose a material competitive constraint and there are significant barriers to entry and expansion. In addition, we provisionally find that expected or foreseeable market and technological developments such as AI, connected devices and AR/VR products which may have an effect on Mobile Ecosystems are unlikely to be sufficient in scope, timeliness and impact to alter these findings in the next five years.

6.1 The analysis in this section is structured as follows. We assess the extent to which Apple's Mobile Platform is constrained by considering:

(a) competition between Mobile Ecosystems for end-users;

(b) competition between Mobile Ecosystems for content providers;

(c) the threat of entry or expansion by rival Mobile Platforms; and

(d) competition which may emerge from market and technological developments.

6.2 Finally, we provisionally conclude on the competitive constraint on Apple's Mobile Platform from rival Mobile Ecosystems.

Competition for end-users

This section assesses the extent to which Apple's Mobile Platform faces competition for end-users from rival Mobile Ecosystems. We provisionally conclude that Apple's Mobile Platform faces limited constraint when competing for end-users.

Our analysis of shares of supply demonstrate that Apple and Google have held high and stable shares over a sustained period, with other Mobile Ecosystems accounting for only a small share. In addition to the stable duopoly, we find that the two largest Mobile

Ecosystems have a different focus, with Apple holding a greater share of higher-priced mobile devices, and Google's Android holding a larger share of the sale of lower-priced mobile devices, which limits the extent to which they compete head-on for users. Consumer behaviour in the context of substantial barriers to switching further dampens competition and we find that end-users are often 'sticky' and disinclined to switch. We also find that revenue sharing agreements between Apple and Google limit their incentive to compete for users. Considered in the round, we find that these factors result in limited competition between Apple's and Google's Mobile Platforms. In line with this, when considering evidence on outcomes, we observe limited competition on price and quality between the two.

The only other Mobile Ecosystem with a material share of supply is Amazon. We consider that the evidence on market features and outcomes points towards it providing a weak constraint on Apple, as it only supplies tablets which are typically much cheaper than Apple's iPads and Amazon's tablets do not have access to the suite of Google's popular apps through Google Mobile Services (**GMS**).[219]

6.3 The section is structured as follows:

(a) First, we set out what we understand to be the key parameters of competition for mobile end-users.

(b) Second, we consider Apple's share of supply in Mobile Platforms relative to its rivals.

(c) Third, we assess the competitive constraint imposed on Apple by Google's Mobile Platform. This is divided into four sections:

(i) the level of differentiation between Apple and Google's Mobile Ecosystems;

(ii) the level of switching by end-users between Apple and Google;

(iii) outcomes of competition in terms of price and quality; and

(iv) the impact of Apple's agreements with Google.

(d) Fourth, we assess the competitive constraint imposed on Apple by other non-Google Mobile Platforms like Amazon and Huawei.

(e) Finally, we provisionally conclude on competition for end-users.

6.4 As set out in Chapter 4, we consider that smartphones and tablets using Apple's Mobile Platform differ slightly in terms of how they are consumed by users, mainly relating to certain differences in use case. We have assessed competition for

[219] GMS is a suite of Google applications and APIs that come pre-installed on Android mobile devices.

users with this in mind and we draw out below any differences in the evidence we have gathered for the two types of mobile devices.

6.5 Before we assess the extent of competition from Google, we first set out what we understand to be the key parameters of competition for mobile end-users.

Parameters of competition for end-users

6.6 With respect to a mobile end-user's purchase of a mobile device, we note that an end-user does not pick a Mobile Platform in isolation, but rather chooses a Mobile Ecosystem, considering the mobile device, the Mobile Platform and the content that can be accessed via that Mobile Platform. We have therefore set out the parameters of competition in relation to the Mobile Ecosystem but explained which parameters are mainly related to the Mobile Platform and therefore to our SEMP assessment.

6.7 Based on evidence from Apple, third parties, and from our consumer survey, we consider that Apple competes with alternative suppliers of Mobile Ecosystems over the following parameters.[220]

(a) **Price –** This includes both the price of the mobile device and the price of other fees more directly related to the Mobile Platform, like the cost of content consumed. As discussed in more detail in the 'Competition from Google for end-users: Level of differentiation' section below, our consumer survey showed that price was an important factor in users' smartphone purchase decision. The level of other fees within the Mobile Ecosystem appears relatively unimportant with only 3% iOS users and 4% of Android smartphone users selecting 'cost of apps/app subscriptions available on the device' as an important factor in their purchase decision.[221]

(b) **Quality –** End-users care about a number of factors related to the quality of Mobile Ecosystems, including:

(i) Features, functionality and performance: this includes factors such as the ease of use, security and privacy features, battery life, camera quality and screen size among others.[222] Manufacturers and Mobile Platform providers compete by innovating to provide new or improve existing features and functionalities.

[220] Apple's response to invitation to comment dated 12 February 2025, pages 2, 3 and 5 [link], and Apple's response to section 69 notice [✂]. 3 responses to section 69 notices: [✂].
[221] Accent Mobile Consumer Survey, Figure 9
[222] For example, our consumer survey found that important factors when choosing a smartphone included the following: (i) 50% of iOS users and 53% of Android smartphone users mentioned 'camera'; (ii) 46% of iOS users and 56% of Android smartphone users mentioned 'battery life'; (iii) 41% of iOS users and 50% of Android smartphone users mentioned 'storage capacity/memory'; (iv) 36% of iOS users and 43% of Android smartphone users mentioned 'screen size'; (v) 23% of iOS users and 16% of Android smartphone users mentioned 'security features'; and (vi) 17% of iOS users and 11% of Android smartphone users mentioned 'privacy features'. Accent Mobile Consumer Survey, Figure 9.

(ii) Content available on their mobile devices: generally, Mobile Ecosystems that allow end-users to access more and better quality content, whether via native apps or mobile browsers, will be more attractive to end-users. This will primarily depend on the app store(s) available to end-users on that mobile device.

(iii) Interoperability: for many end-users, the ability of the Mobile Platform to interoperate with a range of other devices that they have, be their other mobile devices or 'connected' devices such as smart watches, is an important factor. For example, our consumer survey found that 39% of iOS users and 20% of Android smartphone users cited 'compatibility with other personal devices' as an important reason for purchasing their smartphone.[223]

(c) **Brand** - For some end-users, the brand of the Mobile Ecosystem, including the associated mobile operating system, is an important factor in their choice of mobile device. End-users' perceptions of each brand will be driven by a variety of factors including past user experience, marketing and the parameters of competition outlined above. Our consumer survey found that 57% of iOS users and 45% of Android smartphone users mentioned brand as an important factor in their smartphone purchase decision, with 24% of iOS users and 12% of Android smartphone users selecting it as the most important factor.[224,225]

6.8 We focus on these parameters in our assessment of the competitive constraint on Apple's Mobile Platform set out below.

Shares of supply

6.9 We have considered shares of supply in the UK by looking at both: (a) the Mobile Ecosystem used;[226] and (b) the brand of the mobile device purchased. Mobile devices encompass both smartphones and tablets. We explain our methodology and the data we have used to calculate shares of supply in Annex A.

6.10 While our SMS assessment relates to Apple's Mobile Platform, which encompasses both smartphones and tablets, we have for completeness also

[223] Accent Mobile Consumer Survey, Figure 9
[224] Accent Mobile Consumer Survey, Figure 9, Figure 12, Figure 13.
[225] Our consumer survey results also indicate that the features of brand that are important to users are familiarity (cited by 24% of respondents), ease of use (cited by 23% of respondents), compatibility with other devices (cited by 16% of respondents) and trustworthiness/reliability (cited by 16% of respondents). Source: Accent Mobile Consumer Survey, Figure 14. Responses were unprompted.
[226] As set out in Chapter 4, a Mobile Ecosystem includes the Mobile Platform, the mobile devices themselves, and the digital content accessible via the platform. We consider users effectively make a choice as to which Mobile Ecosystem they use when purchasing a mobile device as that device will come pre-loaded with an operating system associated with a given ecosystem.

considered shares of supply for smartphones and tablets separately. Smartphones make up the majority of mobile devices in the UK (c. [✂]%).[227]

6.11 As explained further below, our shares of supply evidence indicates that:

(a) For smartphones, Apple and Google hold an effective duopoly in the UK. Smartphone suppliers using alternative Mobile Ecosystems have achieved negligible shares of supply (<1%). We find that the duopoly has remained stable with little change over a sustained period of time and this trend is consistent with a lack of effective competition.

(b) For tablets, Apple faces two competitors with non-negligible shares of supply (Google's Android and Amazon's Fire OS), but Apple remains the largest supplier of tablets, with over half of active tablets in 2024 being iPads. We consider that Apple's significant share of supply, which has experienced little change over a sustained period of time, is consistent with there being limited effective competitive constraint on Apple in tablets.

6.12 In the following sections (in particular, 'Competition to Apple's Mobile Platform arising from other technological developments' below and 'Regulatory developments' in Chapter 8), we find there are no foreseeable or expected market or technological developments that are likely to significantly change Apple's position, such that we do not anticipate substantial change to these shares of supply over the next five years.

Smartphone shares of supply

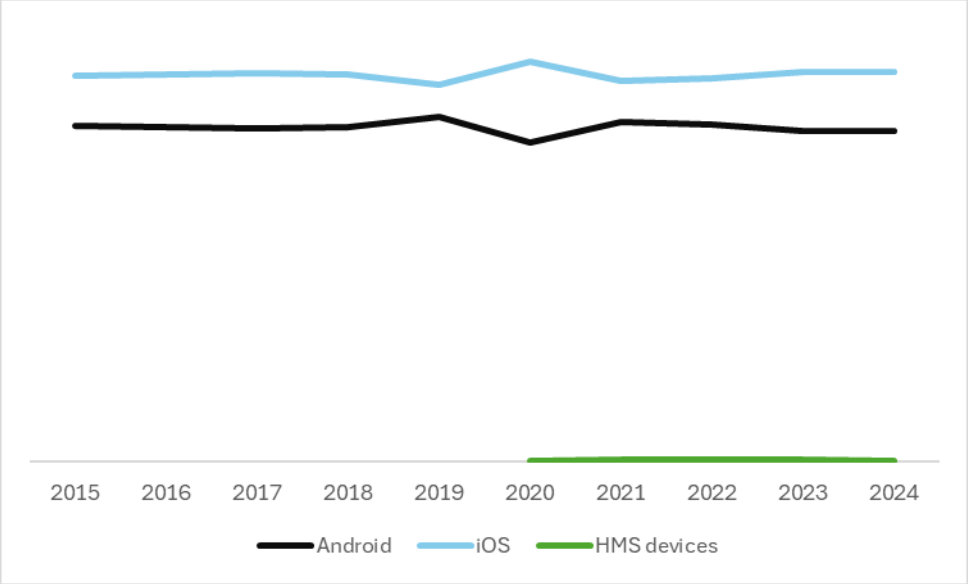
6.13 Smartphones using Apple's Mobile Ecosystem have accounted for a persistently material and stable share of supply in the UK in each of the last ten years. Figure 6.1 shows that, based on the volume of active smartphones in the UK, Apple's and Google's Mobile Ecosystems have been the two largest players in terms of shares of supply in the UK in the period 2015 to 2024.[228] Specifically:

(a) Apple's iOS devices have accounted for between [50 – 60%] [✂]% of active smartphones in each year;[229] and

(b) Android mobile devices have accounted for between [40 – 50%] [✂]% of active smartphones in each year.[230]

[227] CMA analysis of data from market participants. In particular: Google's response to section 69 notice [✂] and Apple's response to section 69 notice [✂].
[228] The following shares have been calculated based on data from market participants. In particular: Apple's response to section 69 notice [✂]; Google's response to section 69 notice [✂]; and Huawei's response to section 69 notice [✂].
[229] CMA analysis of data from market participants including Apple's response to section 69 notice [✂].
[230] CMA analysis of data from market participants including Google's response to section 69 notice [✂].

Figure 6.1: Mobile operating system shares of supply based on volume of active smartphones in the UK (2015-2024)



Source: CMA analysis of data from market participants. Notes: (i) For confidentiality purposes there is no y-axis on this graph. The lines plotted on the graph show the relative positions of market participants in terms of their shares of supply. (ii) HMS devices are devices that meet Google Android compatibility requirements but rely on Huawei's Huawei Mobile Services (instead of GMS). Huawei was only able to provide data from 2020.[231]

6.14 There are smartphones active in the UK using Mobile Ecosystems other than those of Apple and Google, such as /e/, and CalyxOS. However, each account for a negligible number of active smartphone users. We have found that there is no operating system provider in active smartphones besides Apple and Google that has a share of supply of more than [0 – 5%] [✂]% in any of the last 5 years,[232] and the data collected on Huawei's HMS devices indicates that it represented ([0 – 5%] [✂]% of active smartphones since 2020.[233]

6.15 Apple is by some distance the largest smartphone device manufacturer in the UK. Unlike for iOS which can only be used on smartphones manufactured by Apple, devices running Google's Mobile Ecosystem are manufactured by a number of different Original Equipment Manufacturers (**OEM**)[234] suppliers. Figure 6.2 shows that, based on the volume of new smartphones in the UK, Apple has held the largest share of supply in each of the last ten years from 2015 to 2024.[235] Specifically:

[231] MEMS, page 30, paragraph 3.6.
[232] CMA analysis based on data from market participants: Apple's response to section 69 notice [✂], Google's response to section 69 notice [✂]; Huawei's response to section 69 notice [✂], Statcounter data (see Mobile Operating System Market Share United Kingdom | Statcounter Global Stats) and IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker".
[233] Huawei was only able to provide this data from 2020 due to the availability of data in its database. CMA analysis of data from market participants based on Huawei's response to section 69 notice [✂].
[234] We use the terms OEM and device manufacturer interchangeably.
[235] The following shares have been calculated based on data from market participants. In particular: Apple's response to section 69 notice [✂]; Samsung's response to section 69 notice [✂]; Huawei's response to section 69 notice [✂]; and Google's response to of the CMA's section 69 notice [✂].

(a) Apple has been the leading manufacturer of new smartphones in the UK in each year of this period, with a share of supply between [✂]% [40 – 50%].[236,237]

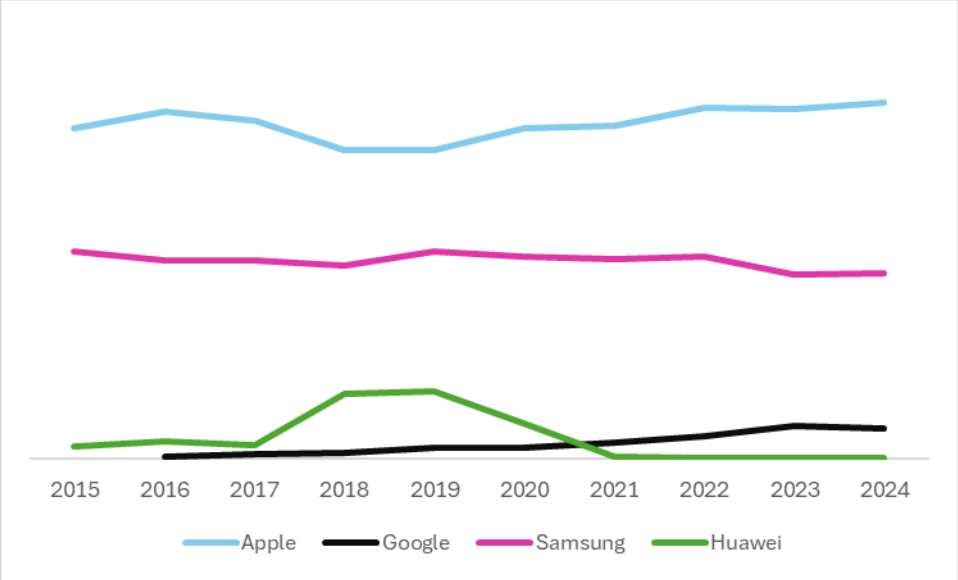
(b) Samsung has accounted for between [✂]% [20 – 30%] of new smartphones over this period, making Samsung the second largest smartphone manufacturer and largest manufacturer of smartphones running Google's Mobile Ecosystem.[238]

(c) Huawei's share of supply peaked at [✂]% [5 – 10%] in 2019. Its sales declined after it moved to using Huawei Mobile Services in 2019 and no new Huawei smartphone models have been made available in the UK market since early 2023.[239,240]

(d) Google has manufactured its own smartphones (the Google Pixel) since October 2016,[241] but these represent only a small amount of new smartphones, with its share of supply peaking at [✂]% [0 – 5%] in 2023.[242,243]

[236] CMA analysis of data from market participants including Apple's response to section 69 notice [✂]
[237] We note that the shares of supply set out here for Apple in its capacity as a device manufacturer differ to those set out above for Apple as an operating system provider. This is because the manufacturer shares of supply are based on sales of new devices, whereas the operating system shares of supply are based on active devices (which includes existing devices).
[238] CMA analysis of data from market participants including Samsung's response to section 69 notice [✂].
[239] CMA analysis of data from market participants including Huawei's response to section 69 notice [✂].
[240] Huawei's HMS mobile devices were first launched in 2019 following US legislation in May 2019 which meant that it could no longer access Google's apps and services, including GMS. Huawei's response to section 69 notice [✂]
[241] Google's response to section 69 notice [✂].
[242] CMA analysis of data from market participants including Google's response to section 69 notice [✂].
[243] In 2024, Google Pixel smartphones accounted for [5 – 10%] [✂]% of new Android smartphone sales and [✂]% of active Android smartphones. CMA analysis based on Google's response to section 69 notice [✂].

Figure 6.2: Manufacturer shares of supply based on volume of new smartphones in the UK (2015 – 2024)



Source: CMA analysis of data from market participants.
Notes: (i) As we have received data from a limited number of manufacturers, we have based the total volume of new mobile devices on operating systems data (which covers all mobile devices). As such, the shares shown for this set of manufacturers do not add to 100%. We have received data from smartphone manufacturers with a share of supply of at least 10% in any year since 2015 according to Statcounter data, and Google. (ii) For confidentiality purposes there is no y-axis on this graph. The lines plotted on the graph show the relative positions of market participants in terms of their shares of supply. (iii) Huawei's data includes both its GMS and HMS mobile devices. HMS mobile devices are mobile devices that meet Google Android compatibility requirements but rely on Huawei's Huawei Mobile Services (instead of GMS).[244]

6.16 Finally, Apple has the largest smartphone manufacturer share of supply in terms of value (between [✂]% and [✂]%) throughout 2022 to 2024, followed by Samsung ([✂]%).[245]

Tablet shares of supply

6.17 The position for tablets is slightly different to that of smartphones, due to the presence of Amazon's Fire OS, which is an Android Fork. Figure 6.3 shows tablets using Apple's Mobile Ecosystem are the largest in terms of active tablets in the UK for the period 2017 to 2024.[246] Specifically:

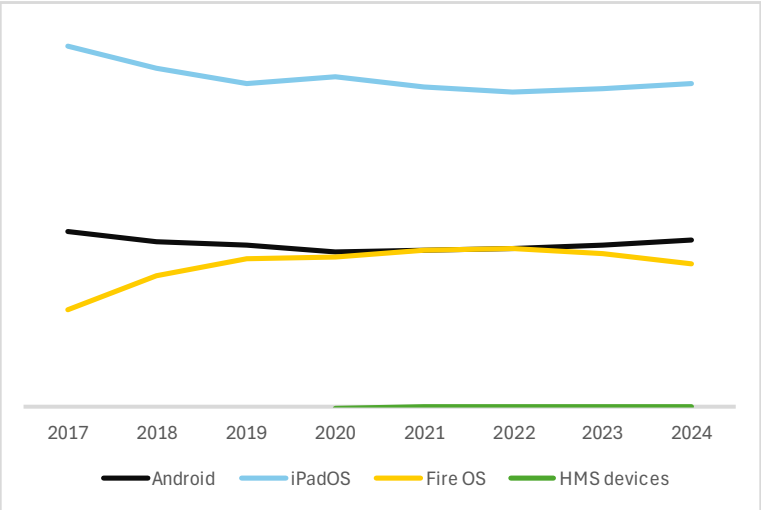
(a) Apple iPads have accounted for between [✂]% [50 – 60%] of active tablets in each year;[247]

(b) tablets running on Google's Mobile Ecosystem have accounted for between [✂]% [20 – 30%] of active tablets in each year;[248] and

[244] MEMS, page 30, paragraph 3.6.
[245] CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker". See Annex A for further details.
[246] The following shares have been calculated based on data from market participants. In particular: Apple's response to section 69 notice [✂] Google's response to section 69 notice [✂]; Amazon's response to section 69 notice [✂] and Huawei's response to section 69 notice [✂].
[247] CMA analysis of data from market participants including Apple's response to section 69 notice [✂]
[248] CMA analysis of data from market participants including Google's response to section 69 notice [✂]

(c) tablets running on Amazon's Mobile Ecosystem have accounted for between [✂]% [10 – 20%] and [✂]% [20 – 30%] in each year.[249]

Figure 6.3: Operating system shares of supply in active tablets in the UK (2017 – 2024)



Source: CMA analysis of data from market participants.
Notes: (i) For confidentiality purposes there is no y-axis on this graph. The lines plotted on the graph show the relative positions of market participants in terms of their shares of supply. (ii) HMS mobile devices are mobile devices that meet Google Android compatibility requirements but rely on Huawei's Huawei Mobile Services (instead of GMS). Huawei was only able to provide data from 2020.[250]

6.18 Figure 6.4 shows that, based on the volume of new tablets in the UK, Apple has also been the largest tablet device manufacturer since 2018.[251] Specifically:

(a) Apple has had a share of supply between [✂]% [30 – 40%] and [✂]% [40 – 50%] in the period 2015 to 2024.[252]

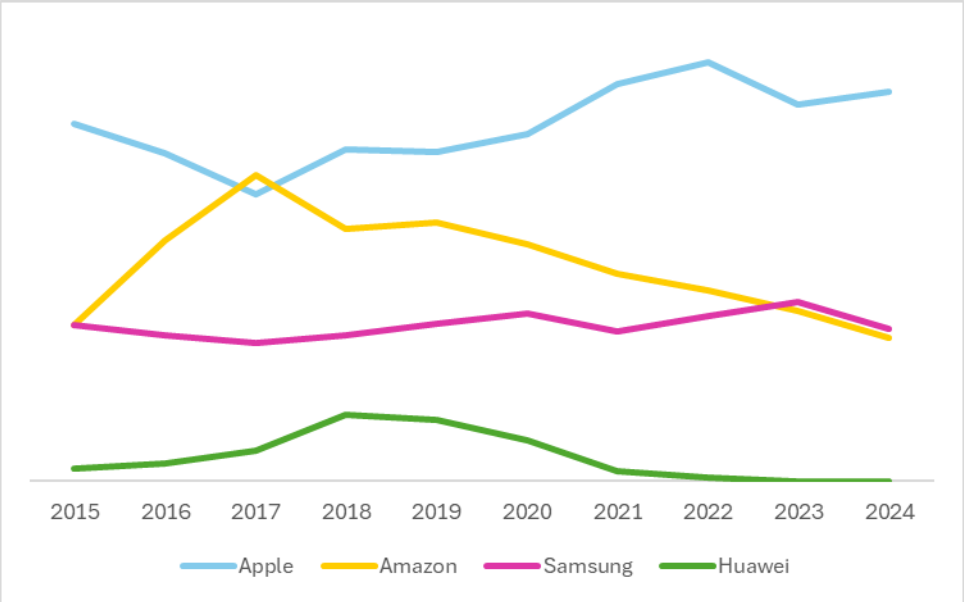
(b) Amazon has accounted for between [✂]% [10 – 20%] and [✂]% [30 – 40%] of new tablets over this period.[253]

(c) Samsung has accounted for between [✂]% [10 – 20%] and [✂]% [10 – 20%] of new tablets over this period.[254]

(d) Huawei's sales declined after it moved to using Huawei Mobile Services in 2019, with a very small share (between [✂]% [0 – 5%]) of new tablets being sold by Huawei since 2020.[255]

[249] CMA analysis of data from market participants including Amazon's response to section 69 notice [✂]
[250] MEMS, page 30, paragraph 3.6.
[251] The following shares have been calculated based on data from market participants. In particular: Apple's response to section 69 notice [✂]; Amazon's response to section 69 notice [✂]; Samsung's response to section 69 notice [✂]; Huawei's response to section 69 notice [✂]; and Google's response to section 69 notice [✂].
[252] CMA analysis of data from market participants including Apple's response to section 69 notice [✂]
[253] CMA analysis of data from market participants including Amazon's response to section 69 notice [✂].
[254] CMA analysis of data from market participants including Samsung's response to section 69 notice [✂].
[255] CMA analysis of data from market participants including Huawei's response to section 69 notice [✂].

Figure 6.4: Manufacturer shares of supply in new tablets in the UK (2015 – 2024)



Source: CMA analysis of data from market participants.
Notes: (i) As we have received data from a limited number of manufacturers, we have based the total volume of new mobile devices on operating systems data (which covers all mobile devices). As such, the shares shown for this set of manufacturers do not add to 100%. We have received data from tablet manufacturers with a share of supply of at least 10% in any year since 2015 according to Statcounter data, and Google and Huawei. Google has been excluded from this chart as it has had a very small share ([✂]% [0 – 5%]) in active tablets since it released its Pixel tablet in 2023.[256] (ii) For confidentiality purposes there is no y-axis on this graph. The lines plotted on the graph show the relative positions of market participants in terms of their shares of supply. (iii) Huawei's data includes both its GMS and HMS mobile devices. HMS mobile devices are mobile devices that meet Google Android compatibility requirements but rely on Huawei's Huawei Mobile Services (instead of GMS).[257]

Competition from Google's Mobile Platform for end-users

6.19 Given our finding that Apple's and Google's Mobile Platforms have acted as a stable duopoly for a number of years, this section considers evidence on the constraint on Apple from Google's Mobile Platform when competing for end-users. As set out earlier, our analysis here is split into four sub-sections:

(a) the level of differentiation between Apple's and Google's Mobile Ecosystems;

(b) the level of switching by end-users between Apple and Google;

(c) the outcomes we observe in terms of competition on price and quality; and

(d) the impact of Google's agreements with Apple.

[256] CMA analysis of market participant data including Google's response to section 69 notice [✂]. Google released its Pixel tablet in June 2023 (see Google Pixel Tablet Release Date, Price & Specs - Tech Advisor).
[257] MEMS, page 30, paragraph 3.6.

Competition from Google for end-users: Level of differentiation

6.20 We have analysed pricing data to determine whether Google and Apple compete for the same end-users or whether they are instead focused on different groups of customers.[258]

6.21 The analysis demonstrates that Apple and Google focus predominantly on different price segments, with Apple holding a higher share of higher-priced mobile devices, and Google holding a higher share of lower-priced mobile devices.[259] In particular, Figure 6.5 shows the proportion of new smartphones shipped into the UK by £100 price bands in 2024, separately for iOS and Android. As detailed further in the Annex A, the IDC pricing data indicates that:

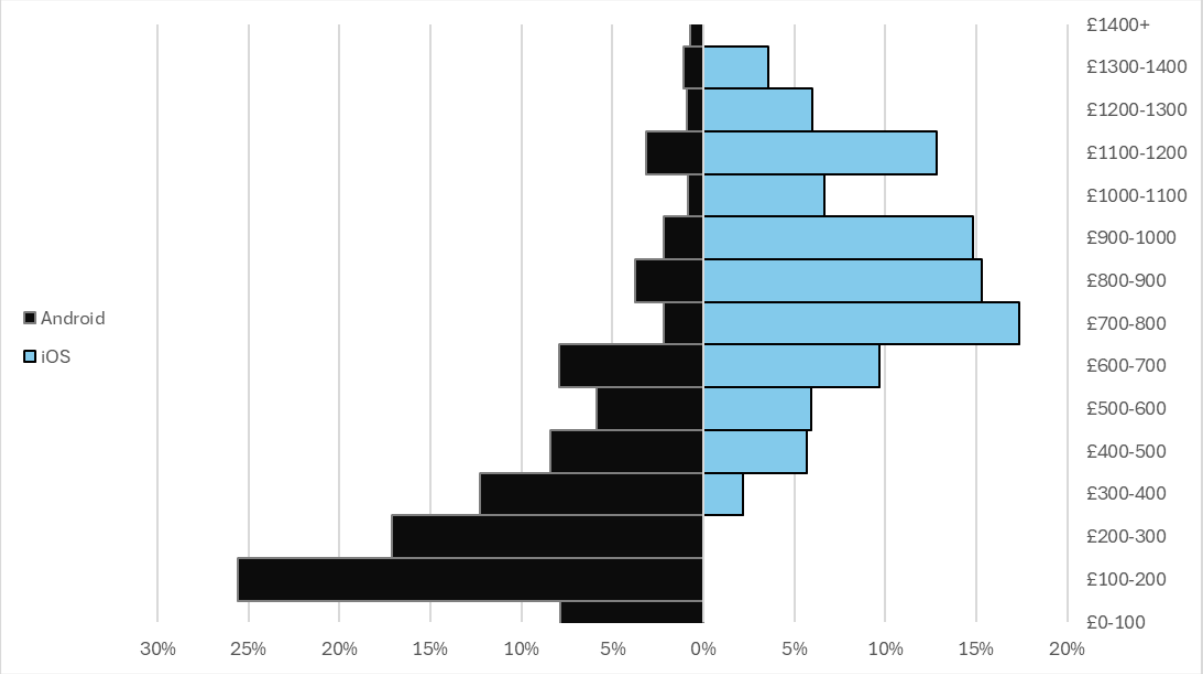
(a) No new iOS smartphones are sold for £300 or less, leaving smartphones using Google's Mobile Platform to account for 100% of new phones sold for less than £300. Further, 51% of new smartphones using Google's Mobile Platform were sold for £300 or less in 2024.[260]

(b) There is an overlap between iOS and Android in the range above £300. However, iOS smartphones accounted for 71% of new smartphone devices sold for over £300 in 2024, and new smartphones using Google's Mobile Platform accounted for 29%.[261]

(c) Apple is also absent from the very top price bracket of >£1400.[262]

[258] We have conducted an analysis of the prices of mobile devices using IDC data to inform our competitive assessment – focusing on comparing prices of Apple's mobile devices and devices using Google's Mobile Platform.
[259] We are unaware of any formal consistent definitions for whether, and if so how the smartphone market is segmented. However, we note that it is commonplace for stakeholders to refer to different 'segments', 'price bands' or 'tiers of devices'. Several third-party reports submitted by Apple break the market down into different price segments and contain [✂]. Different breakdowns we have seen include: [✂]. We note that $400 is equivalent to approximately £313 based on the Bank of England's year average exchange rate for Pounds Sterling against the US Dollar in 2024 (USD exchange rates | Bank of England | Database).
[260] CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker".
[261] CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker".
[262] CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker". We note that the >£1400 price bracket represents a very small proportion of overall sales.

Figure 6.5: Proportion of smartphones shipped into the UK by £100 price bracket for iOS and Android respectively (2024)



Source: CMA analysis of IDC data from "IDC Worldwide Quarterly Mobile Phone Tracker". Notes: For the purposes of this analysis, we have not split out Huawei's HMS mobile devices from mobile devices using Google's Mobile Platform.

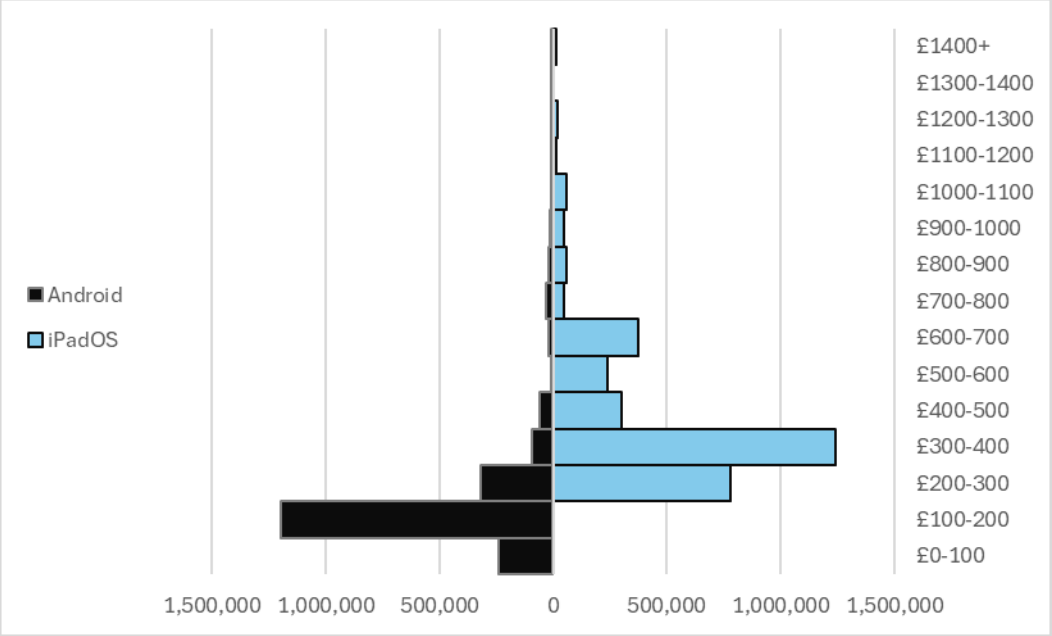
6.22 Figure 6.6 shows the volume of new tablets shipped into the UK by £100 price bands in 2024, separately for iPadOS and Android. As detailed further in Annex A, the IDC pricing data indicates that:

(a) The majority of new Android tablets (86%) were sold for £300 or less in 2024, compared to 24% of new Apple iPads.[263]

(b) There is more overlap between iPadOS and Android in the range above £300. However, 76% of new iPads sold for over £300 in 2024, compared to 14% of new Android tablets.[264]

[263] CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker"
[264] CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker"

Figure 6.6: Volume of tablets shipped into the UK by £100 price bracket for iPadOS and Android respectively (2024)



Source: CMA analysis of IDC data from "IDC Worldwide Quarterly Personal Device Tracker". Notes: For the purposes of this analysis, we have not split out Huawei's HMS mobile devices from mobile devices using Google's Mobile Platform.

6.23 Our provisional assessment that Apple and Google are focused predominantly on different price segments is also supported by Apple's internal documents and submissions, our consumer survey and evidence from third parties:

(a) Third-party reports submitted by Apple are consistent with our pricing analysis, including two presentations which show that: (i) [✂];[265] and (ii) [✂].[266] We note that this evidence is consistent with internal documents relied on by the US Department of Justice in its case against Apple, which indicated that Apple does not view entry-level smartphones as competing with the iPhone.[267]

(b) Our consumer survey results indicate that price is more important for Android smartphone users than iOS users, which is consistent with Google's Mobile Ecosystem holding a higher share of the sale of lower-priced mobile devices. For example, 58% of all Android smartphone users mentioned 'overall price' as an important factor in their decision to purchase a new smartphone, with 30% considering it the most important factor. In contrast, only 33% of iOS users mentioned it as an important factor, with 10% considering it the most important factor.[268] Similarly, 51% of Android smartphone users who did not switch to iOS at their last purchase mentioned iPhones being too expensive as a reason for not switching, compared to only 1% of iOS users who did not

[265] Apple's internal document [✂].
[266] Apple's internal document [✂].
[267] DoJ Apple complaint, paragraph 167.
[268] Accent Mobile Consumer Survey, Figure 9, Figure 12, Figure 13.

switch to Android reporting Android phones being too expensive as a reason for not switching. [269]

(c) Google and Samsung submitted that Apple mobile devices and mobile devices using Google's Mobile Platform compete with one another, with Apple and Android mobile devices available at most pricing points.[270] However, [✂] and Samsung recognised that Apple is particularly strong in premium segments.[271] Other OEMs provided limited evidence on the extent to which iOS and Android mobile devices compete on price.[272]

Competition from Google for end-users: End-user switching

6.24 We have found that Apple and Google's stable duopoly has been maintained over a substantial period of time and that they have a different focus across the market which limits the extent to which they compete head-on for end-users. This section considers the evidence on end-user switching, mainly based on our consumer survey evidence. We note that switching evidence alone may not provide a full picture of the level of competition and we have interpreted it carefully in the round alongside other evidence. We find that consumer behaviour further supports that there is limited competition between Google and Apple for end-users. In the context of substantial barriers to switching, we find that end-users are often 'sticky' and disinclined to switch from their current Mobile Ecosystem which further limits competition between the two Mobile Platforms.

6.25 Mobile end-users purchase a new mobile device relatively infrequently. Evidence indicates that UK end-users have increasingly been holding on to their mobile devices for longer before replacing them, with most users replacing their smartphone devices every four years, compared to every two years five years ago.[273,274] In respect of tablet devices, evidence suggests UK end-users replace their tablets less frequently than smartphones, with around a third of tablet users replacing their devices every five to six years.[275] Once a user has purchased a mobile device, they are therefore likely to be locked in to that Mobile Ecosystem for a substantial period of time.

6.26 Furthermore, the large majority of mobile device purchases relate to replacement mobile devices, meaning that most end-users are already currently within either Apple's or Google's Mobile Ecosystems.[276] This is especially the case for

[269] Accent Mobile Consumer Survey, Figure 36, Figure 35.
[270] Google's response to section 69 notices: [✂]; Google's position paper [✂]; and Samsung's response to section 69 notice [✂].
[271] Samsung's response to section 69 notice [✂]; and [✂];
[272] 3 responses to section 69 notices: [✂]
[273] vodafone.co.uk/newscentre/press-release/this-is-your-phones-life-lifetime-service-promise/
[274] We also note that most mobile devices receive software and security updates for around five to seven years. Smartphone Security: Check How Long A Phone Will Receive Security Updates - Which?
[275] 45% of smartphone owners would rather upgrade than repair | YouGov
[276] Based on the shares of supply set out in the 'Shares of supply' section above.

smartphones where most users purchase a replacement mobile device, with our consumer survey finding that for only 1% of users is their current smartphone their first smartphone.[277,278]

Level of switching

6.27 Our consumer survey specifically considered the degree to which end-users moved, or considered moving, between Mobile Ecosystems when they last replaced their smartphone.[279,280] As shown in Figure 6.7, our consumer survey results show that, while there is some switching between Apple's and Google's Mobile Ecosystems, the amount of switching is relatively limited and the large majority of customers did not even consider the alternatives available to them when they last replaced their smartphone and simply chose between mobile devices available within their current Mobile Ecosystem. In particular:

(a) For those end-users whose previous smartphone was an iPhone:

(i) 4% switched from iOS to Android.

(ii) 11% considered switching but ultimately did not do so.

(iii) 85% did not consider switching at all.

(b) For those end-users whose previous smartphone was based on Google's Android:

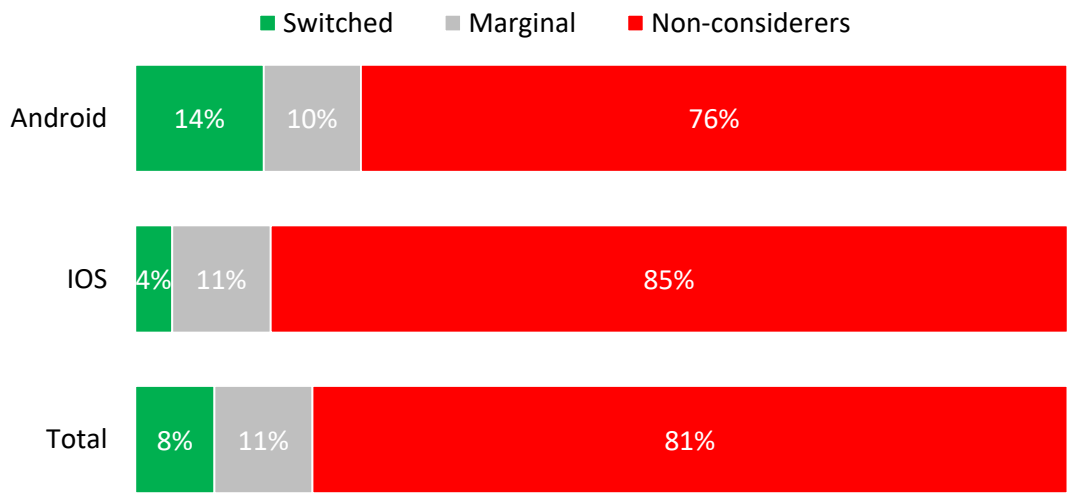
(i) 14% switched from Android to Apple's iOS.

(ii) 10% considered switching but ultimately did not do so.

(iii) 76% did not consider switching at all.[281]

[277] Accent Mobile Consumer Survey, page 27
[278] Our assessment of end-user switching focuses primarily on smartphones, due to the fact that smartphones account for around 80% of mobile devices in 2024 and the fact that the evidence we have received (including Apple's internal switching estimates and RFI responses) has focused predominantly on smartphones. We draw out differences for tablets where relevant.
[279] The consumer survey undertaken by Accent Research used a random probability methodology and surveyed 2,851 smartphone users.
[280] Our consumer survey did not target tablet users but did ask some questions which about barriers to switching where the presence of devices linked to the user's operating system was an option users could choose. Further detail can be found in Accent Mobile Consumer Survey.
[281] Accent Mobile Consumer Survey, Figure 27

Figure 6.7: Switching status based on the smartphone a customer owned prior to their current one



Source: Accent Mobile Consumer Survey, Figure 27.
Notes: Marginal users are users that considered switching operating system when purchasing a new smartphone but ultimately did not; Non-considerers are users that did not consider switching operating system when intending to buy a new smartphone; Switchers are users that switch operating system when purchasing a new phone.

6.28 These results show that end-users are less likely to switch from Apple's iOS smartphones to Google's Android than vice versa.

6.29 Apple submitted that it does not have its own comprehensive market-wide end-user switching data, but referred to a range of surveys conducted by third parties which consider the levels of switching by end-users of mobile devices.[282] We note that it is difficult to draw direct comparisons between the switching rates from our consumer survey and the switching rates from the third-party surveys referred to by Apple, as these are based on different methodologies. Nevertheless, we note that the switching rates in Apple's submitted surveys are of a similar order of magnitude to those we find in our consumer survey.

6.30 We also asked third-party OEMs about user switching behaviour. Google submitted that switching rates from mobile devices utilising its Mobile Platform to Apple's Mobile Platform were material and particularly high for higher-priced mobile devices.[283] However, other OEMs submitted that there is limited switching between Mobile Ecosystems.[284,285]

[282] Apple highlighted the following key findings from these surveys: (i) [✂]; (ii) [✂]; (iii) [✂]; and (iv) in relation to tablets, a [✂]. Apple's response to section 69 notices: [✂]
[283] Google's position paper [✂]
[284] 4 responses to section 69 notices: [✂].
[285] We note that in response to the Invitation to Comment: (i) Chamber of Progress highlighted that switching between Apple's and Google's ecosystems is viable and actively facilitated, for example by Google making core services like Chrome, Search, Gmail, and Maps available on Apple's mobile devices, which reduces switching costs for consumers (Chamber of Progress's response to invitation to comment dated 12 February 2025, pages 1 to 4.); and (ii) International Center for Law and Economics argued that there is high user churn between iOS and Android, with consumers frequently switching between the two and therefore not suffering from 'lock-in'. It further noted that data portability measures, such as Apple's 'Move to iOS' and Google's 'Data Transfer Tool', further reduce switching costs.(International Center for Law and Economics' response to invitation to comment dated 12 February 2025, page 3 to 6.)

6.31 There is little evidence to suggest that switching behaviour is likely to change over the next five years.

(a) Apple submitted that given the dynamic nature of competition in mobile devices, it cannot predict how user switching will change over the next five years, but that given users can easily switch, switching rates could rapidly change depending on relative attractiveness of competing mobile devices.[286]

(b) Google submitted that switching tools have the potential to lead to a greater number of users switching between Mobile Ecosystems in future, while also making Android a more attractive proposition for users switching between operating systems.[287]

(c) Huawei considered that user switching behaviour was [✂].[288]

(d) Motorola anticipated that ecosystem loyalty would continue.[289]

(e) Xiaomi suggested that some Apple mobile device users might be tempted to switch if mobile devices using Google's Mobile Platform continue to offer cutting-edge innovations, and conversely that Apple's innovations could further solidify Apple's position.[290]

Nature of switching

6.32 As set out earlier, evidence shows Apple and Google have differentiated offerings and focus on serving different mobile device price tiers. The evidence indicates that switching, when it does occur, often involves users upgrading or downgrading into a different price segment, rather than switching between similarly priced mobile devices. We consider that this pattern is consistent with the differentiated focus of Apple and Google's Mobile Ecosystems and a more limited form of competition. For example:

(a) A third-party report submitted by Apple suggests that Apple faces a limited threat of customers switching to Android when considering a similar premium mobile device price tier.[291]

(b) Google submitted a presentation from 2023 which illustrates the level of user switching between market segments. The document indicates that [✂] while [✂].[292]

[286] Apple's response to section 69 notice [✂].
[287] Google's response to section 69 notice [✂]
[288] Huawei's response to section 69 notice [✂].
[289]Motorola's response to section 69 notice [✂]
[290] Xiaomi's response to section 69 notice [✂]
[291] Apple's internal document [✂]
[292] Google's internal document, [✂]. Whilst this document refers to global switchers, we note that switching patterns appear to be broadly consistent for the UK (for example see Google's internal document, [✂]).

6.33 This indicates that users that switch to Apple are often those who are less constrained by price and are able to upgrade to a more expensive mobile device, and users switching away from Apple are more focused on price and are seeking a cheaper alternative to an Apple mobile device.

6.34 This is consistent with our consumer survey results, which show that 51% of Android smartphone users that did not switch Mobile Ecosystem when purchasing a new phone mentioned iPhones being too expensive as a reason for not switching.[293,294]

Consumer related drivers of the level of switching

6.35 We have also considered the factors driving these behaviours to better understand why end-users are often 'sticky' and disinclined to switch away from their current Mobile Ecosystem.

6.36 Evidence from our consumer survey, internal documents (from both Apple and Google) and third-party responses suggest the following factors may contribute to the lack of switching from Apple's to Google's Mobile Ecosystem.

(a) **Consumer disengagement**. Only 11% of users who had not switched considered switching Mobile Ecosystem during their most recent smartphone purchase, suggesting high levels of consumer disengagement.[295] In terms of reasoning for not switching, our consumer survey found that, of the users that did not switch, 33% of the iOS users and 38% of the Android smartphone users could not see significant benefits from switching, while 40% of those same iOS users and 23% of those Android smartphone users selected 'I just wanted a newer version of my previous phone'.[296] We consider that these responses are consistent with consumer disengagement.

(b) **User satisfaction**. Apple submitted that loyalty to mobile operating systems is driven by customer satisfaction and noted that evidence indicates customers are highly satisfied with iPhones and iPads.[297] Our consumer survey conducted for this investigation found that 47% of users that did not switch selected 'I was happy with/preferred my existing smartphone brand' as a reason for not switching.[298] However, while high satisfaction levels are one indicator of consumer experiences, they do not necessarily imply strong competition between Apple's and Google's Mobile Ecosystems. For example, a consumer that has never experienced the alternative Mobile Ecosystem

[293] Accent Mobile Consumer Survey, Figure 36.
[294] In comparison, only 1% of iOS users who did not switch mentioned Android phones being too expensive as a reason for not switching. Accent Mobile Consumer Survey, Figure 35.
[295] Accent Mobile Consumer Survey, Figure 34.
[296] Accent Mobile Consumer Survey, Figure 35 and Figure 36.
[297] Apple's response to section 69 notice [✂].
[298] Accent Mobile Consumer Survey, Table 13.

may not be fully informed on the options available. Additionally, while users may consider themselves satisfied based on current experience, that does not preclude that they could experience higher levels of satisfaction if there was greater competition between the Mobile Ecosystems (eg due to more innovations tailored to their preferences).

(c) **Brand loyalty**. Our consumer survey evidence suggests that brand is one of the main reasons why users decide not to change Mobile Ecosystem. For example, our consumer survey found that 44% of Android smartphone users that did not switch and 50% of iOS users that did not switch were happy with their existing brand. Further, 35% of those Android smartphone users identified more closely with Android than iOS, and the reverse was true also for 36% of iOS users that did not switch.[299]

(d) **Barriers to switching**. Barriers to switching are factors that may cause users to perceive switching to be difficult or costly (eg because they would pose a 'hassle'), discouraging potential switchers, and/or impose actual costs on users that do switch (eg financial, time or learning costs). Our findings on barriers to switching are as follows:

(i) We have found substantial evidence from our consumer survey, internal documents (from both Google and Apple) and third-party responses of material perceived barriers to switching related to: (i) learning costs associated with switching;[300] (ii) transferring data and apps across mobile devices;[301] and (iii) losing access to other devices (including connected devices) and having a worse experience of interacting with friends' and family's devices.[302,303]

(ii) Our consumer survey results indicate that material perceived barriers apply to switching both to iOS and to Android. However, barriers appear to be more significant for iOS users that did not consider switching than for the equivalent Android smartphone users, but 54% of Android smartphone users that did not consider switching mentioned at least one barrier.[304]

(iii) As well as perceived barriers to switching, our consumer survey found that 35% of all users that switched to iOS or Android experienced some difficulty with at least one aspect of the switching journey, implying

[299] Accent Mobile Consumer Survey, Figure 35 and Figure 36.
[300] For example: (i) a Google internal document from October 2022 stated: [✂]and (ii) an Apple internal document from September 2023 [✂].
[301] For example: (i) an internal document submitted by Google from May 2022 stated: [✂] and (ii) the Apple internal document cited in footnote 300 also found [✂].
[302] A number of Google internal documents recognised the importance of connected devices and the broader ecosystem for user retention. For example: (i) an undated internal document submitted by Google stated that [✂]; and (ii) another Google internal document [✂].
[303] Accent Mobile Consumer Survey, Table 13, Figure 35 and Figure 36.
[304] For iOS users that did not consider switching, 72% mentioned at least one barrier.

barriers to switching impose at least some actual costs on users that do switch.[305] We also found that actual barriers faced by those switching were similar to the perceived barriers among users that did not switch.[306]

(iv) Finally, we received little evidence to suggest that these barriers are likely to weaken over the next five years. Apple and Google told us they are jointly working on a new data migration tool that will provide a means for users to transfer data between Apple's and Google's Mobile Ecosystems when switching their mobile device. However, [✂].[307]

Competition from Google for end-users: Outcomes of competition in terms of price and quality

6.37 So far, we consider the evidence has shown that Apple's and Google's Mobile Platforms have acted as a stable duopoly for a significant period of time, pricing data demonstrates that their offerings are differentiated and therefore they only compete head-on to a limited extent. We have also considered user switching behaviour and found it demonstrates that users are 'sticky' and rarely consider switching between Mobile Ecosystems. We now consider the evidence on competitive outcomes in terms of price and quality.

Competition on price

6.38 Our overall assessment of the extent to which Apple competes with Google on price is set out above in the 'Competition from Google for end-users: Level of differentiation' section.

6.39 We have also considered whether there was evidence of price competition with Google in Apple's internal documents. However, we found no evidence of Apple adjusting its prices in response to competition from Google in its internal documents.

6.40 We also note that Google does not directly control the price of most Android mobile devices.[308] Google's own Pixel devices make up only a small proportion of mobile devices in the Android Mobile Ecosystem and the majority of Android

[305] Accent Mobile Consumer Survey, page 64.
[306] In particular, the percentage of users that did not switch who were concerned with specific barriers to switching was similar to the percentage of users that did switch who experienced difficulties with those barriers. For example: (i) 18% of users that did not switch were concerned about losing data and 19% of users that did switch had experienced some difficulty in transferring data; and (ii) 8% of users that did not switch were concerned about accessing apps they used and 10% of users that did switch had experienced difficulty accessing their apps. The exception to this pattern was in reconnecting to other devices, where concerns of users that did not switch were notably greater than the experiences of those who did switch (25% of users who did not switch selected 'I had other devices linked to my current phone/operating system' as a reason for not switching; by comparison, just 6% of users who did switch experienced difficulty with 'reconnecting to other devices (eg smartwatch, smart home devices, wireless headphones)'.) Accent Mobile Consumer Survey, Table 13, Figure 50.
[307] Apple's response to section 69 notice [✂]; Google's response to section 69 notice [✂].
[308] Android mobile devices refer to mobile devices in Google's Mobile Ecosystem.

mobile devices are supplied through third-party OEMs who set the price for their Android mobile devices.[309]

Competition on quality

6.41 As set out in the 'parameters of competition' section above, users will also focus on the quality of the Mobile Ecosystem both in terms of the quality of the mobile device, the Mobile Platform and features of the wider Mobile Ecosystem. We have considered in our assessment: (i) whether there is evidence of material improvements in the quality of Apple's Mobile Platform over time; and (ii) what is driving any such improvements and whether they are being driven by Apple responding to competitive threats.

6.42 Apple submitted that it faces strong competitive pressure from the Google Mobile Platform to innovate and that it must continuously innovate or risk losing customers to competitors.[310] Apple provided several examples of where it has responded to competition from the Play Store by enhancing the services and features offered to users on the App Store – for example, by introducing 'offer codes' for app subscriptions, after Google launched promo codes; or launching App Clips[311] in response to Google's Instant Apps in 2020.[312] Apple submitted that it is also incentivised to improve Safari and WebKit, noting that this is demonstrated by its extensive investments in marketing Safari's privacy features.[313]

6.43 The evidence demonstrates that both Apple and Google have made improvements to the quality of their Mobile Platforms over time.[314] These include: (i) new Android and iOS or iPadOS releases; (ii) introducing AI functionality (ie Apple's Apple Intelligence and Google's Gemini); (iii) improvements to the quality and quantity of content, services and features offered through app stores and browsers; and (iv) greater focus on security and privacy.

6.44 We consider there are factors other than competition which are likely driving some or all of Apple's improvements to its Mobile Platform. First, Apple's business model provides it with an incentive to improve its products and services over time. As set out in Annex B, Apple makes the majority of its revenues from selling devices and, as almost all mobile devices purchased in the UK are replacement devices, Apple has a strong incentive to offer some new features and functionality to encourage iPhone and iPad end-users to buy a new mobile device.

[309] Google's Pixel devices accounted for [0 – 5%] [✂]% of active Android devices in the UK in 2024. CMA analysis [✂].
[310] Apple's response to section 69 notice [✂].
[311] App Clips allow users to try lightweight versions of apps without having to download the app to their mobile device.
[312] Apple's response to section 69 notice [✂].
[313] Apple's submission [✂].
[314] Apple's response to section 69 notice [✂]; and Google's response to section 69 notice [✂].

6.45 Second, Apple is incentivised to generate more money from the existing user-base of its Mobile Ecosystem beyond the purchase of replacement mobile devices.[315,316] Mobile Platform suppliers have an incentive to innovate in ways that increase the usage of mobile devices by end-users (eg in terms of engagement or time spent) or increase the offerings available through apps (if innovations allow app developers to offer additional services or features that are charged for). This increases opportunities for generating additional revenue and may be of increasing importance given the more limited opportunities for further revenue growth in hardware sales to new end-users.[317] As set out in Annex B, we note that Apple's revenue mix has been increasingly shifting away from devices and towards services.

6.46 We also consider that competition is unlikely to be the main factor driving improvements because:

(a) As discussed in the 'Competition from Google for end-users: End-user switching' section, user switching between Apple's and Google's Mobile Ecosystems imposes only a limited competitive constraint on Apple. In particular, we found that both Mobile Ecosystems have 'sticky' customer bases, with the vast majority of end-users not even considering the alternatives available to them when they last replaced their smartphone.

(b) While Apple's internal documents show that it monitors the offerings on mobile devices using Google's Mobile Platform, we have not found any evidence that Apple is materially concerned about its end-users switching away or that Apple changes its commercial strategy in response to competitive threats.[318] With respect to content distribution, Apple's internal documents covering the past three years provide only very limited evidence of Apple monitoring competition from Google's Play Store or Google's Chrome (or other mobile browsers) on Android in relation to quality of services and features offered to users.[319,320]

(c) From the point of view of app store innovation and improvements, the evidence suggests this is not a significant factor in driving user switching. Evidence from our consumer survey indicates that only 14% of users who

[315] We note that improvements driven by these other incentives are less likely to be beneficial for customers over time as it is competition and the process of rivalry to win customers over time that delivers quality improvements and innovations that are aligned with customer preferences and maximise consumer welfare.
[316] MEMS, paragraph 3.73.
[317] Almost all mobile devices purchased in the UK are replacement devices, with our consumer survey finding that for only 1% of users is their current smartphone their first smartphone. Accent Mobile Consumer Survey, page 27.
[318] For example, Apple submitted an email from a third-party analyst from October 2022 discussing [✂]. Apple's internal document, [✂].
[319] We have seen only one internal document relevant to this. Specifically, this was an internal email chain containing a link to an external news article about [✂]. Apple's internal document, [✂].
[320] There are limited references to competition between Chrome and Safari in the internal documents submitted by Apple. Of the internal documents that referenced Chrome, [✂]; another internal email attached an external news article discussing AI developments [✂]; Documents submitted by Google separate out analysis and commentary based on iOS and Android for example [✂].

switched selected 'I thought iOS/Android had access to a wider range of mobile app/the apps I wanted to use' as a reason for switching (8th most popular reason cited) and an even smaller proportion of users (2%) cited this as the most important factor.[321]

(d) The strength of Apple's brand may result in it facing less pressure to compete on quality. Although a strong brand can bring benefits for users (particularly where users have to make complex purchasing decisions with limited information),[322] brand loyalty can also strengthen market power by creating a barrier to switching and leading to consumer disengagement which can raise barriers to entry and expansion for rivals.[323]

(e) The CMA's previous work has identified a range of areas where innovations have been held back in Mobile Ecosystems due to a lack of competition. For example, the MBCG MI found that Apple's ban on alternative browser engines in its Mobile Platform, and therefore the lack of competition faced by Apple's WebKit browser engine, had materially limited the capabilities of mobile browsers and web apps.[324] We consider that this evidence is not compatible with strong competition driving incentives to improve the quality of Apple's and Google's Mobile Platforms.

(f) In support of its finding that Apple can and does profitably forego innovation without fear of losing customers to competitors, the US District for the District of New Jersey cited Apple's vice president of iPhone marketing who explained in February 2020: 'In looking at it with hindsight, I think going forward we need to set a stake in the ground for what features we think are 'good enough' for the consumer. I would argue were [sic] already doing *more* than what would have been good enough.' After identifying old features that 'would have been good enough today if we hadn't introduced [updated features] already', she explained, 'anything new and especially expensive needs to be rigorously challenged before it's allowed into the consumer phone.'[325]

6.47 We consider that quality improvements do not necessarily indicate that Apple's Mobile Platform is facing material competitive constraints. Indeed, weak competition does not necessarily mean these kinds of improvements and innovations will stop entirely and, as explained above, they are also driven by factors other than competition. The most damaging impact of sustained weak competition in key digital markets is the brake that this applies to the pace of

[321] Accent Mobile Consumer Survey, Figure 47; Accent Mobile Consumer Survey, Technical Use and Behaviour Data Tables, Q24.
[322] The brand will, to some extent, reflect perceived differences in quality and the value that consumers place on different features of the Mobile Ecosystem.
[323] We further discuss the importance of brand as part of the 'Competition from Google for end-users: End-user switching' section.
[324] See MBCG MI, paragraphs 4.287 to 4.296.
[325] DoJ case, paragraph 187.

innovation and progress over time, especially where potentially disruptive new technology and business models are held back. This can be hard to measure, and where innovation is being held back in some way, it may well not be apparent to consumers that they are missing out and reports from consumers of being satisfied are not necessarily evidence that markets are delivering the best possible outcomes.[326,327]

6.48 We therefore consider that, although Apple has made improvements to its Mobile Platform over time, the evidence in the round suggests that this is unlikely to be strongly driven by Apple responding to competition. If Apple were to face stronger competition from Google, or a more plausible threat of facing effective competition from another rival or new entrant, it would likely have stronger incentives to invest, innovate and further improve its Mobile Platform.

Competition from Google for end-users: Impact of Apple's agreements with Google

6.49 The evidence above of limited competition between Apple and Google is further reinforced by revenue sharing agreements between Apple and Google which significantly limit their incentive to compete for users.

6.50 Apple has an agreement with Google known as the Information Services Agreement ('ISA') which was first agreed between Apple and Google in 2002. Under the ISA:

(a) Apple sets Google Search as the default search engine on the Safari, Siri and Spotlight search access points on all Apple devices (including Apple mobile devices) in several territories including the UK, EEA and US.[328]

(b) In return, Google pays Apple a significant proportion of its search advertising revenue for searches conducted via Google Search on Apple devices (including Apple mobile devices) in several territories including the UK, EEA and US, using Apple's Safari, Siri and Spotlight and Google's Chrome browser.[329]

6.51 Being the preset default general search engine is valuable because end-users rarely change the preset default.[330]

[326] The CMA made similar points in MEMS. See MEMS, paragraph 7.14 and 7.22.
[327] See 'Competition from Google for end-users: End-user switching' section for a discussion of user satisfaction.
[328] MBCG MI, paragraph 9.1 and 9.48; SMS Proposed Decision in respect of Google's general search services, paragraph 5.74 and 5.143; and Apple's response to section 174 [✂]
[329] MBCG MI, paragraph 9.1 and 9.48; Google's response to section 69 notice [✂] and Apple's response to section 174 [✂]. Under the ISA, Google pays Apple a significant percentage of its net advertising revenue from traffic that takes place via Safari and Chrome. In 2022, this amounted to USD 20 billion globally (MBCG MI, paragraph 9.4). In 2024, Google paid Apple approximately £[✂] [£1-3 billion] under the ISA in relation to search access points on Safari, Chrome [✂] across all Apple mobile devices in the UK. CMA analysis [✂].
[330] For more detail see SMS Proposed Decision in respect of Google's general search services, User access and default positions section (paragraph 5.134 to 5.154).

6.52 The level of revenue share paid to Apple - and hence the revenue retained by Google - does not differ significantly depending on whether Apple's Safari or Google's Chrome browser is used.[331]

6.53 The Final Report in the CMA's MBCG MI concluded that the terms and interplay of this significant revenue sharing between the two main browser vendors in Apple's Mobile Platform limit Apple's and Google's financial incentives to compete in mobile browsers on Apple's Mobile Platform. They alter the normal process of rivalry between Apple and Google as they significantly reduce the financial benefit of successfully winning a customer from their key rival.[332]

6.54 While the MBCG MI focussed on the impact of the ISA on competition in relation to mobile browsers, we consider it likely that the revenue sharing provisions of the ISA affect the competitive dynamics between Apple and Google more broadly. This is because the revenue that can be made from mobile end-users through mobile search advertising is an important income stream for a supplier of a Mobile Ecosystem more generally. As discussed in Annex B, the scale of Google's payments to Apple under the ISA makes Google one of Apple's largest sources of revenue and profits, and revenue from mobile search (including through the ISA) accounts for the majority, [✂]%, of Google's mobile revenues[333] in the UK.[334] The ISA covers various products and services provided by Apple and Google (including their respective mobile browsers and Apple's virtual assistant) which are in competition via their respective Mobile Ecosystems.

6.55 The terms of the ISA whereby Google is set as the default on a number of access points on Apple devices mean that, if an Android end-user using Google Search switches to an Apple mobile device, Google is likely to retain that user as a user of Google Search. Therefore, the financial consequence on Google of losing a user from its Mobile Ecosystem are diminished compared to a situation in which the revenue-sharing provisions are not in place.

6.56 In addition to the reduced incentive to compete for users with Apple at the margin, Google has a wider incentive not to disrupt its relationship with Apple by competing with it head-on. The ISA allows Google to be the default search provider for users of Apple's Mobile Ecosystem, where Safari accounts for c.43% of mobile browser users in the UK. In combination with the extensive use of

[331] It receives: (i) 36% of Google's advertising revenue derived from Safari search traffic; and (ii) a lower but similarly significant proportion of Google's search advertising revenue derived from Chrome. (MBCG MI, paragraph 9.5).
[332] MBCG MI Chapter 9 summarises Apple's and Google's submission on their rationale for the ISA as well as their views on its impact on competition among mobile browsers on Apple mobile devices specifically. As set out in MBCG MI, paragraph 9.90, we consider that the extent of the revenue-sharing between Apple and Google is so significant that the incremental revenue derived from winning a customer from each other is significantly limited. This is because, while the percentage revenue shares are not identical, they are similarly significant, in that a greater difference between the two would translate into greater financial incentives for Apple and Google to compete.
[333] CMA estimate of revenue related to Google's Mobile Ecosystem includes the following revenue categories: mobile Search, Play Store (including Play Store Advertising), other mobile advertising, Pixel devices. Google's response to section 69 notice [✂]
[334] See SMS Proposed decision in respect of Google's Mobile Platform, Annex B.

Chrome on Android mobile devices using Google's Mobile Platform (see Chapter 8), Google Search is used on the large majority of mobile devices in the UK. The result is that Google Search has a very high share of mobile users. Safari has a c.43% share of browser usage on mobile devices in the UK, and Chrome has a c.46% share, meaning that together they account for over 89% of the browser usage on mobile devices in the UK.[335] This plays an important role in entrenching its highly profitable position in general search and makes it more difficult for general search rivals to compete.[336] In this context, it is unlikely to be in Google's interest to disrupt its financially and strategically important relationship with Apple.

6.57 Accordingly, our provisional view is that, in addition to the stable duopoly market structure, Apple's and Google's financial incentives to compete in the provision of their Mobile Platforms are significantly reduced by the revenue sharing provisions within the ISA. This limits the competitive constraint imposed on Apple by Google.

Competition from non-Google Mobile Platforms for end-users

6.58 In this section, we assess the extent to which Apple's Mobile Platform faces competitive constraints from non-Google Mobile Platforms for end-users, such as those operated by Amazon and Huawei.

6.59 Apple submitted that the Mobile Platform market is dynamic and that its Mobile Platform is subject to a number of competitive constraints beyond Google's Android. Apple submitted that:

(a) iPad faces fierce competition from devices including: (i) forked Android devices, most notably Amazon's Fire OS; (ii) Microsoft's tablets and laptop-tablet hybrid devices; and (iii) ChromeOS devices.[337]

(b) The mobile market is dynamic and there have been a number of new market entrants providing alternative operating systems, including: HarmonyOS, Funtouch OS, SteamOS, ChromeOS, Windows, Meta's custom form of Android for its Meta AI glasses, KaiOS, Sailfish OS, PureOS, PostmarketOS, Ubuntu Touch, LineageOS, /e/, and CalyxOS.[338]

6.60 We also received some submissions from third parties who considered that potential entry of new mobile operating systems from firms such as Huawei, Samsung, Xiaomi, Microsoft and Oppo may weaken Apple's position – including in relation to the iOS and iPadOS operating systems and the App Store.[339]

[335] See Annex A.
[336] The importance of default positions and the impact of these on competition in general search is discussed in SMS Proposed Decision in respect of Google's general search services, User access and default positions section (in particular see paragraph 5.146 to 5.154).
[337] Apple's submission [✂].
[338] Apple's response to section 69 notice [✂].
[339] 6 responses to section 69 notices: [✂].

6.61 Amazon's Mobile Platform holds a material share of supply in tablets in the UK. As set out in our shares of supply analysis above, Amazon's Fire OS is the third largest in terms of active tablets, with the proportion of active tablets running on Fire OS ranging between [✂] [10 – 20%] and [✂] [20 – 30%] in the period 2017 to 2024.[340] However, we consider that Amazon's Mobile Platform presents a limited constraint on Apple's Mobile Platform for the following reasons:

(a) Amazon's Mobile Platform is only available on tablet devices and not smartphones. Tablet devices represented only 21% of all active mobile devices in 2024.[341]

(b) Evidence suggests that Amazon's Fire OS tablets and Apple's iPads are focused on different price segments. In particular, Fire OS are lower end devices, with 100% of Fire OS tablets being sold for £300 or less over the period 2019 to 2024, whereas Apple's iPads hold a higher share of higher-priced devices, accounting for between 85% and 90% of tablets sold for more than £300 over this period.[342]

(c) While Fire OS is an Android fork, it does not include the GMS suite of apps. The evidence we have collected indicates that the proprietary app store of Amazon's Fire OS tablets had around half as many apps as Apple's App Store in 2024.[343]

(d) [✂].

6.62 With respect to Huawei's operating system, historically the company did have a larger presence in the UK and supplied mobile devices with its own version of Android. Huawei supplied devices using 'Huawei Mobile Services' from May 2019 following US legislation being passed which meant that Huawei could no longer access Google's apps and services, including GMS.[344] The last Huawei smartphone device model was sold in early 2023, and subsequently no new Huawei smartphone models have been available in the UK market.[345]

6.63 There is evidence that Huawei is putting significant effort and resources into its own operating system, HarmonyOS, and this alternative Mobile Platform does appear to have gained some traction in China.[346] We discuss this in the 'Barriers to entry and expansion in Mobile Platforms' section below. However, Huawei told

[340] CMA analysis of data from market participants including Amazon's response to section 69 notice [✂].
[341] CMA analysis of market participant data based on Apple's response to section 69 notice [✂] and Google's response to section 69 notice [✂].
[342] CMA analysis of IDC data from 'IDC Worldwide Quarterly Personal Device Tracker'.
[343] Amazon's Appstore in the UK in 2024 had an average monthly number of approximately [✂] [0 - 1] million native apps, Amazon's response to section 69 notice [✂]. Apple's App Store in the UK in 2024 had an average number of native apps available on the UK App Store at the end of each month of approximately [✂] [1 - 2] million. Apple's response to section 69 notice [✂]
[344] MEMS, paragraph 3.6.
[345] Huawei's response to section 69 notice [✂].
[346] Huawei's response to section 69 notice [✂].

us that it remains subject to restraints on its ability to compete which have had a major impact on its smartphone business in the UK.[347] Huawei explained that [✂].[348] Huawei therefore provides very little constraint on Apple's Mobile Platform in the UK and there are no expected or foreseeable developments which are likely to change that position in the next five years.

6.64 With respect to the other operating system entrants mentioned by Apple, none of these poses a material constraint to Apple's Mobile Platform:

(a) Our shares of supply analysis shows that these alternative Mobile Platform providers have achieved negligible shares of supply in the UK (collectively less than 1%).[349]

(b) Many of the alternatives mentioned are not consistent with our description of mobile operating systems in Chapter 4 – for example: (i) Microsoft does not consider Windows to be a mobile operating system;[350] (ii) Google supplies ChromeOS on laptops and desktops, but not on mobile devices;[351] and (iii) SteamOS is designed for gaming on PCs.[352]

(c) Where the alternatives mentioned do relate to mobile devices, they appear to target niche segments which typically make them poor alternatives for end-users of Apple's mobile devices. For example, KaiOS targets feature phones with limited smartphone capabilities.[353]

(d) We have also seen no mention of these other non-Google Mobile Platform providers in Apple's internal documents.

6.65 Furthermore, in the later section titled 'Competition to Apple's Mobile Platform arising from wider technological and market developments' third parties generally do not consider that the overall position of Apple's Mobile Platform will significantly change over the next five years, which further supports the view that operating system entrants are unlikely to impose a significant competitive constraint in this period.

Provisional conclusion on competition for end-users

6.66 Overall, our provisional conclusion is that Apple's Mobile Platform faces limited constraint from other Mobile Platforms when competing for mobile end-users. In particular:

[347] Following US legislation from May 2019, Huawei can no longer access Google's apps and services, including GMS. (MEMS, paragraph 3.6)
[348] Huawei's response to section 69 notice [✂].
[349] Please see Annex A for further details.
[350] Microsoft's response to section 69 notice [✂].
[351] Google's response to section 69 notice [✂].
[352] Apple's response to section 69 notice [✂].
[353] Home - KaiOS

(a) Apple's Mobile Platform has held a stable share of supply over the past ten years for smartphones and past seven years for tablets, operating in a stable duopoly with Google.

(b) Apple's Mobile Ecosystem faces limited competitive constraint from Google for end-users. This is based on our provisional findings that:

(i) Apple's and Google's Mobile Ecosystems focus predominantly on different price segments, with Apple's holding a higher share of higher-priced mobile devices, and Google's holding a higher share of the sale of lower-priced mobile devices.

(ii) User switching between Apple's and Google's Mobile Ecosystems poses a limited competitive constraint on Apple. In particular, we found that both Mobile Ecosystems have large sticky customer bases, with the vast majority of customers not even considering the alternatives available when they last replaced their smartphone, and that there are material barriers to switching. Further, evidence suggests that, when switching does happen, it often appears to be driven by users upgrading or downgrading into a different price segment, rather than switching between similarly priced mobile devices, consistent with the differentiated focus of Apple's and Google's Mobile Ecosystems.

(iii) While we observe that Apple has made improvements to its Mobile Platform over time, the evidence considered in the round suggests that this is driven by a range of factors and is unlikely to be strongly driven by Apple responding to competition. There is some evidence that innovations could have been greater if there was more competition. Indeed, as discussed in the 'Competition on quality' section, the CMA's previous work has identified a range of areas where innovations have been held back in Mobile Platforms due to a lack of competition.

(iv) Apple's and Google's financial incentives to compete in the provision of their Mobile Platforms are significantly reduced compared to a situation absent the revenue sharing provisions of the ISA agreement and this limits the competitive constraint imposed on Apple by Google.

(v) Other Mobile Platforms pose only a limited competitive constraint. Amazon's Mobile Platform in tablets offers limited competition to Apple's Mobile Platform and there is even less constraint from other non-Google Mobile Platforms which have negligible shares of supply (collectively less than 1%).

(c) Finally, the above provisional findings take account of expected or foreseeable market developments over the next five years. They are

consistent with our provisional findings elsewhere in this report that there are no expected or foreseeable market or technological developments that are likely to significantly change the position of Apple's Mobile Platform in terms of competition for end-users over the next five years (see sections titled, 'Competition to Apple's Mobile Platform arising from other technological developments' below and 'Regulatory developments' in Chapter 8).

Competition to attract content providers

In this section we consider the extent of competition that Apple's Mobile Platform faces from other Mobile Ecosystems to attract content providers.

We provisionally conclude that Apple's Mobile Platform faces limited competitive constraint from other Mobile Ecosystems to attract content providers. As set out above, Google and Apple have a duopoly and we provisionally find that content providers typically distribute their content on both Google's and Apple's Mobile Ecosystems in order to reach all mobile users. This means there is a limited constraint from content providers switching between them. We also consider that other non-Google Mobile Ecosystems provide limited competition for content providers. We have not seen evidence of expected or foreseeable developments suggesting competition for content providers is likely to change over the next five years.

6.67 As set out above in the 'Background on Apple and its Mobile Ecosystem' section in Chapter 2 content providers include both app developers who distribute their native apps predominantly through app stores (eg Apple's App Store), and web developers who distribute their content through web browsers.

6.68 We expect a Mobile Platform to be more valuable to a content developer the more users they can access through it. This means that Mobile Platforms can compete for content providers both directly (eg in terms of the services they offer) and indirectly, by attracting users to their Mobile Platforms. Therefore, we also consider how the competitive constraint that Apple's Mobile Platform faces for content providers is impacted by the competition between Mobile Platforms for users. For example, where relevant, below we consider the extent to which limited constraint from end-user switching might also limit the constraint from content providers switching between Apple's Mobile Platform and other Mobile Platforms.

6.69 This section considers the following:

(a) Competition from **Google's Mobile Ecosystem**, and in particular:

(i) the extent to which Apple's App Store faces competitive constraints from Google's Play Store in competing to attract **app developers;** and

(ii) the extent to which Apple's Mobile Platform faces competitive constraints from Google's Mobile Ecosystem in competing for **web content.**

(b) The extent of competitive constraint from **other, non-Google Mobile Ecosystems**.

(c) **Provisional conclusions** on the competition Apple's Mobile Platform faces to attract content providers.

6.70 This section focuses on the extent to which Apple competes for content providers against other Mobile Ecosystems – for example the extent to which the App Store competes with the Play Store. This is different to the extent to which Apple's Mobile Platform faces competition from alternative forms of content distribution within its Mobile Ecosystem, for example, from cloud-based gaming, super apps, and web-based content distribution. This is covered in the next chapter on alternatives to Apple's mobile content distribution.

Competition from Google's Mobile ecosystem

Competition from Google's Play Store to attract app developers

6.71 App developers consider a range of factors when deciding to develop and distribute their content on a Mobile Platform. These include the size of a user base, user experience, costs and time required to develop apps, and functionality available.[354] Many of these factors will be determined by the quality of services provided by an app store provider: for example, the tools and support it provides to app developers which may reduce the costs related to app development, the access to functionality to enable app developers to innovate on new app features, means to increase apps' discoverability and user reach. App developers' choice will also be influenced by the fees (ie commission rates) charged by an app store provider.

6.72 In this section, we first provide an **overview of competition to Apple's App Store** from Google's Mobile Ecosystem and establish Google's Play Store as the closest competitor to the App Store. We then consider three interrelated elements of competition from the Play Store for app developers:

(a) We first consider the extent to which the App Store might be constrained by (the threat of) **app developers switching** to the Play Store.

[354] Size of a user base was the most frequently cited factor. See for example, 12 parties responses to section 69 notices; [✂].

(b) We then consider the extent to which there is **competition on price** between the App Store and the Play Store.

(c) We finally consider the extent to which the App Store faces competition from the Play Store on **quality of services**.

Overview of competition from app stores on Google's Mobile Ecosystem

6.73 Apple submitted that the App Store faces competition from competitor platforms which enable app transactions, and that these competitors include the Play Store as well as other app stores available on Google's Mobile Ecosystem, such as the Oppo Store and Samsung's Galaxy Store.[355] Apple submitted that it consistently monitors the risks, threats and activity of its App Store competitors and that it responds to this competition by improving the App Store experience for end-users and app developers.[356]

6.74 As set out in more detail in the 'Native App Distribution' section in Chapter 4, the evidence shows that the App Store constitutes a single app marketplace through which apps can be distributed to Apple mobile devices. For native app developers, the App Store is the route to all users of Apple devices, including both smartphones and tablets. In addition, app developers face the same commission rates, App Review Guidelines, legal agreements governing their relationship with Apple and can access the same tools on the App Store for both smartphones and tablets. We have therefore assessed competition for app developers by considering mobile devices as a whole.

6.75 Of all app stores we gathered evidence from,[357] the Play Store is by far the largest app store on Google's Mobile Ecosystem across a range of metrics set out below and is the only app store that has a comparable scale to the App Store. For example, in 2024 and across all mobile devices in the UK:

(a) The average number of native apps available on the App Store at the end of each month was approximately [✂] [1 - 2] million. The Play Store hosted [✂] [2 - 3] million.[358]

(b) The average number of app developers across both app stores was similar. The average number of app developers with apps available on the App Store

[355] Apple's response to section 69 notice [✂]
[356] Apple's response to section 69 notice [✂]
[357] Data for the volume of first-time downloads, the number of active users, the number of native apps available through the app store, the number of app developers with a native app available through the app store, and revenue earned by app stores from customer billings through the proprietary payment system was received from Apple, Google, Samsung, Amazon, Huawei. App store providers Xiaomi, Oppo, and Aptoide provided data for the volume of first-time downloads, the number of native apps available through the app store, and the number of app developers with a native app available through the app store. The data covered the period from January 2015 to December 2024 – with some differences between metrics and parties.
[358] Apple's response to the section 69 notice [✂]. Google's response to section 69 notice [✂].

at the end of each month was approximately [✂] [0 – 1] million. There were approximately [✂] [0 - 1] million with apps available on the Play Store.[359]

(c) The average monthly number of active users on the App Store was approximately [✂] [20 – 30] million.[360] Google's data indicates that on average the Play Store had approximately [✂] [2 – 3] million users download an app each day in 2024.[361] Although, due to underlying differences in the formats of the data we received, we do not consider these figures to be directly comparable.

(d) The App Store's annual net revenue[362] from customer billings[363] was £[✂] [0 – 2] billion. The Play Store's net revenue from customer billings was £ [✂] [0 – 2] billion.[364]

6.76 On the other hand, the other app stores on Google's Mobile Ecosystem, such as Samsung's Galaxy Store, are materially smaller in scale compared to the App Store. For example, Samsung's Galaxy Store had an average monthly number of approximately [✂] [0 – 1] million native apps, [✂] [0 – 50,000] app developers, [✂] [0 – 1] million active users and generated approximately £[✂] [0 - 50] million in net revenue from customer billings in 2024.[365] We also note that Amazon's Appstore will no longer be supported on Android from August 2025.[366]

6.77 The above implies that alternative app stores on Google's Mobile Ecosystem, which host materially smaller numbers of users, app developers and/or apps are less attractive to app developers and users[367] compared to the Play Store. The above is consistent with third-party evidence suggesting that generally app developers view Google's Play Store as an essential distribution channel and alternative app stores on Google's Mobile Ecosystem are generally considered to be inferior substitutes.[368] We therefore consider that out of the alternative app stores available on Google's Mobile Ecosystem, the Play Store is the closest competitor to Apple's App Store.

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[359] Apple's response to section 69 notice [✂]. Google's response to section 69 notice [✂].
[360] Data on number of active users of Apple's App Store relates to number of transacting accounts that download at least one native app per month. Apple's response to section 69 notice [✂].
[361] Google provided daily data for the number of active users. We have not aggregated this data to calculate a monthly number as at least some users are likely to have downloaded native apps on multiple days during the period. Google's response to section 69 notice [✂].
[362] Net revenue refers to the total value of revenue earned by app stores through commission fees applied on customer billings through the proprietary payment system.
[363] Customer billings refers to the total billings processed through app store's proprietary payment systems.
[364] Apple's response to section 69 notice [✂]. Google's response to section 69 notice [✂].
[365] Samsung's response to section 69 notice [✂].
[366] Upcoming changes to Amazon Appstore for Android devices and other programs.
[367] Based our consumer survey results, users with an Android smartphone when asked about the main reasons for using app distribution methods that they use, most frequently cited 'this is most convenient', 'this gives me the choice of apps I need' and 'this was on my phone when I got it'. Accent Mobile Consumer Survey, Table 18.
[368] View supported by just under half of large [15/36] native app developers and over a quarter [5/19] of small app developers. The remainder did not submit specific views on this point. 21 parties total including 18 RFI responses and 3 call notes. 18 responses to section 69 notices: [✂]. 3 notes of meetings: [✂]

Constraint from app developers' switching

6.78 In general, the competitive constraint placed on the App Store by Google's Play Store ultimately depends on whether app developers would switch away from the App Store in response to, for example, an increase in price. They could do so either by delisting from the App Store entirely or by prioritising the Play Store over it, for example, making new innovative content or features available first in the Play Store rather than the App Store.

6.79 The evidence we have received from third parties suggests that app developers consider both the App Store and the Play Store as 'must-have' and distinct distribution channels. Therefore, they are unlikely to delist or deprioritise their listings on the App Store.

(a) Currently the App Store provides app developers access to [✂] of active smartphone and tablet users in the UK and [✂] of customer billings generated from these users.[369] Therefore, if an app developer delisted from or deprioritised the App Store, it is likely that this would have significant negative impact on the developer's user base and revenue opportunities overall, given that its decision to switch to the Play Store or not support the App Store with the latest features is unlikely to trigger significant switching on the user side to Google's Mobile Ecosystem. This is in particular because, as discussed above in the section on 'Competition from Google for end users: outcomes of competition in terms of price and quality', users do not tend to consider availability and/or quality of content as an important factor when switching between Apple's and Google's Mobile Ecosystems.

(b) The above is consistent with evidence we gathered from third parties. Over a quarter (15 out of 55) of native app developers submitted that distributing via the App Store and Play Store is the only way to access a large and distinct set of users, indicating both are 'must-have' distribution channels (the remaining native app developers did not give a view).[370] In addition, we asked 29 native app developers what the likely impact would be if they stopped distributing via the App Store (and the Play Store). In response, all but one submitted it would have a significant impact on their ability to serve their customers on mobile devices.[371] For example, one large native app developer stated that losing access to the Play Store would mean losing access to roughly half the UK market.[372] Another large native app developer submitted that it would not withdraw its apps from the App Store if Apple

[369] Shares of customer billings is based on data from Apple, Google, Samsung, Amazon, and Huawei. Apple's response to section 69 notice [✂]; Google's response to section 69 notice [✂]; Samsung's response to section 69 notice [✂]; Amazon's response to section 69 notice [✂]; Huawei's response to section 69 notice [✂].
[370] 16 parties total. 14 parties responses to section 69 notices: [✂]. 2 notes of meetings: [✂].
[371] Some responses did not distinguish between the impact of leaving just the App Store, while most noted impact of leaving both the App Store and the Play Store. 28 parties total. 26 parties responses to section 69 notices: [✂]. 2 notes of meetings: [✂]
[372] [✂] response to section 69 notice [✂].

increased its commission charges by 5-10%, noting it is an essential method of distribution.[373] Further, there is a range of evidence which indicates that app developers, particularly large app developers with the most popular apps, typically distribute apps on both the App Store and the Play Store.[374]

(c) Apple submitted that content providers may prioritise other digital platforms, such as game consoles or Android, and allocate investment away from, postpone their entry on, or even completely avoid iOS and iPadOS.[375] However, we have seen limited evidence that app developers do this.[376]

6.80 Developers of new or less established apps in principle have greater scope to prioritise one app store over the other, in that they can seek to grow their user base and/or revenue within a given Mobile Ecosystem (ie such app developers' ability to switch is less reliant on their users also switching Mobile Ecosystem). As explained above, however, most app developers are likely to ultimately consider it necessary to distribute on both app stores.

6.81 Further, we consider that, to the extent there are a small proportion of app developers who choose to distribute only on Apple's Mobile Platform, these app developers are unlikely to see Google's Mobile Platform as a substitute since, as set out above, it offers access to a distinct set of users. In addition, there are material costs to redeveloping apps for use on the Play Store which may affect app developers' distribution choices.[377]

6.82 The evidence suggests it is unlikely that app developers' switching to the Play Store could materially constrain the App Store over the next five years. Indeed, out of the native app developers who commented on their future expectations for how they distribute apps on mobile, most did not expect any substantial change by 2030 (as set out in the section titled: 'Competition from web apps' in Chapter 7), nor did any party suggest any plans to stop multi-homing across both the App Store and the Play Store.[378]

[373] [✂] response to MEMS RFI notice [✂]. Note that this was submitted in response to MEMS, but the party submitted to the CMA's SMS investigation that this response holds true today, [✂] response to section 69 notice [✂].
[374] Apple submitted that of the top 25 free apps on its App Store as of 21 February 2025, 24 were available for download on the Play Store. Apple's response to section 69 notice [✂]. Similarly, according to a survey commissioned by Google of 500 app developers across the UK and EU, [✂]% [80 – 90]% of app developers distribute via two or more app stores, including Apple's App Store and Google's Play Store. Google's response to section 69 notice [✂]. All but one of the 55 native app developers we gathered evidence from (including 35 large and 20 small native app developers) confirmed that they distributed their apps via both the App Store and the Play Store. 55 parties total. 47 parties responses to section 69 notices; [✂]. 8 notes of meetings; [✂].
[375] Apple's response to section 69 notice [✂]
[376] Only one small app developer submitted to us that it prioritises the Play Store over other app stores (ie Apple's App Store) or that it views the Play Store as its 'primary' distribution channel on mobile overall. [✂] response to section 69 notice [✂].
[377] A number of app developers submitted that cost and time required to develop content is an important parameter affecting their content distribution choices. 7 parties responses to section 69 notices [✂].
[378] 30 parties responses to section 69 notices: [✂].

6.83 On the basis of the above evidence, we provisionally conclude that the competitive constraint on the App Store from app developers' switching to the Play Store is limited and this does not look likely to change in the next five years.

Competition on commission fees for app developers

6.84 This section considers the extent to which Apple's App Store competes with Google's Play Store on price (in the form of commission fees) for app developers. We consider (i) whether there is evidence of material reductions in the price of distributing content via Apple's Mobile Platform over time; and (ii) what is driving any such reductions and whether they are being driven by Apple responding to competitive pressure.

6.85 Apple submitted that it analyses and benchmarks its commission rate against rival marketplaces, including the Play Store, Amazon and Samsung, to remain attractive for app developers.[379]

6.86 Apple currently charges a headline commission of 30% for payments for digital content made via Apple IAP billing system. It also charges a lower commission rate in certain circumstances, for example, where an app developer is eligible to those lower rates under the Small Business Program[380] or where rates apply to subscription renewals.[381] The evidence shows that over time Apple has made changes to its commission rates for app developers:

(a) Apple submitted that it has reduced its commission rate over time and narrowed its application to ensure that Apple remains an attractive platform to app developers and provided a number of examples of such changes in the past.[382]

(b) We note that our analysis set out in the Annex A on Market Outcomes shows that the App Store's annual average commission rate per transaction decreased from [✂]% [20 – 30]% to [✂]% [20 – 30%] in the period between 2015-2024.[383]

(c) Further data analysis set out in the Annex A on Market Outcomes also suggests that over the period from 2020 to 2024, the proportion of app developers which pay reduced rates has increased,[384] whereas the

[379] Apple's response to section 69 notice [✂]
[380] In January 2021, Apple introduced the Small Business Program (see App Store Small Business Program), where app developers that earn no more than $1 million in the previous year pay 15% on in-app transactions.
[381] In 2016, Apple reduced the commission on subscriptions after their first year to 15%. Auto-renewable Subscriptions - App Store - Apple Developer
[382] Apple's response to section 69 notice [✂].
[383] Apple's response to section 69 notice [✂]
[384] From 2020 to 2024, the proportion of app developers who pay an average rate of 15-19.99% has increased by [✂] percentage points [0 – 10]%. See Annex A on Market Outcomes

proportion of app developers who primarily pay headline rates has decreased.[385]

6.87 However, we do not interpret Apple's reductions in the App Store commission rates to be reflective of strong competition on price because:

(a) The App Store's annual average commission rate of [✂]% [20 – 30%] remains relatively close to the headline rate of 30%. This implies that the reduced rates apply only to a small proportion of the total value of transactions and the vast majority of revenue earned by app developers is charged at the headline rate of 30% - which has not been reduced since Apple launched the App Store in 2008.[386] No major changes to the App Store's commission rates have been announced in the last four years, ie since 2021.

(b) Furthermore, we understand that some of the most recent changes to Apple's commission rates including the Small Business Program[387] and the changes to the 'Reader Rule' in 2021[388] may have come, at least in part, due to other factors unrelated to competition such as regulatory, legislative, and enforcement pressure.

(c) In addition, contrary to Apple's submission above, we did not find evidence in Apple's internal documents from 2022 to 2024 of Apple monitoring Google's fees or responding to competition from Google in setting its own fees in the UK.

(d) This is consistent with our provisional view that app developers have limited ability to switch, including switching to app stores which offer lower commission rates. Indeed, 24 out of 55[389] app developers indicated that existing commission rates are too high, while only three[390] indicated that they

[385] From 2020 to 2024, the proportion of app developers who are subject to an average rate of 29% or higher has decreased by [✂] percentage points [0 – 10]%. See Annex A on Market Outcomes.
[386] Apple's response to section 69 notice [✂].
[387] Apple's CEO, Tim Cook, stated during the testimony in the Epic case that the reduction to 15% for the Small Businesses Program in 2021 was driven by a desire to help small businesses during Covid-19, while also being aware of pressure from on-going lawsuits and other investigations. Apple CEO pressed by judge about competition during Epic Games US antitrust trial. The Verge, 'Tim Cook faces harsh questions about the App Store from judge in Fortnite trial' dated May 2021, accessed by the CMA 11 July 2025.
[388] 'Reader Rule' which allows app developers of pre-defined reader apps (magazines, newspapers, books, audio, music, and video) to allow a user to access previously purchased content or content subscriptions. has been first introduced by Apple 2011. It initially prohibited 'reader' apps from including external links that directed users to the relevant website if they wanted to create a new, or manage an existing, account. Apple proposed changes to the 'Reader Rule', effective from early 2022, which allowed 'reader' apps to provide a single in-app link to an external website where the users could set up and manage their accounts. These changes have been proposed in order to close an investigation by the Japan Fair Trade Commission under the provisions of the Antimonopoly Act in Japan since October in 2016. [Japan Fair Trade Commission closes App Store investigation - Apple]
[389] 24 parties total. 22 parties responses to section 69 notices: [✂]. 2 notes of meetings; [✂].
[390] 3 parties total. 2 responses to section 69 notices; [✂]. Note of call with [✂] on [✂]

felt the rates were fair. The remaining 29 app developers did not explicitly comment on the level of commission rates.[391]

(e) This is also consistent with our profitability analysis showing that Apple was and is expected to continue to make high profits and that Apple is not being forced to erode those profits by responding to competition, eg through reductions in commission rates.

6.88 We therefore provisionally conclude that competition between the App Store and the Play Store on commission rates is limited. This is consistent with our finding that app developers have very limited ability to switch between these two largest app stores that are viewed as must-have routes to distribution.

Competition on quality

6.89 This section considers the extent to which Apple's App Store competes with Google's Play Store on the quality of services and features offered to app developers. We have considered in our assessment: (i) whether there is evidence of material improvements in the quality of Apple's Mobile Platform over time; and (ii) what is driving any such improvements and whether they are being driven by Apple responding to competitive pressure.

6.90 Apple submitted that the App Store faces competition from many other platforms and it competes on a range of non-price parameters in that context, including service features (for example, security features), relative performance, service quality and reliability, innovation, marketing and distribution capability, service and support (on the app developer side), and corporate reputation.[392]

6.91 The evidence demonstrates that Apple has implemented certain quality improvements to the App Store over time. Apple provided several examples of developments and innovations which have benefitted app developers and users, including examples of improvements that it claimed have been launched on the App Store in response to competition from the Play Store; for example, enhancements to Apple's Game Centre in 2021[393] and introduction of Benchmarks for App Analytics in 2022.[394]

6.92 However, similar to our view above in relation to improvements to quality for end-users (see the section 'Competition from Google for end-users: outcomes of

[391] Of the remaining 29 responses, 11 indicated that the commission rates impacted their business, but did not explicitly indicate that they felt the rates were too high and one indicated that the commission rates were relevant but not impactful. 17 app developers either did not provide a comment (8) or indicated that commission rates were not relevant to their business (9).
[392] Apple's response to section 69 notice [✂].
[393] Apple's response to section 69 notice [✂].
[394] In 2022, in response to many analytics services offered by other platforms, Apple also introduced Benchmarks for App Analytics as a tool that enables app developers to gain valuable insights on their app's performance relative to similar apps (at no additional charge). Apple's response to section 69 notice [✂].

competition in terms of price and quality'), the evidence suggests that factors other than competitive pressure are likely to have an impact on Apple's incentives to make product improvements for app developers. For example, improvements in features available to [✂] discussed in Apple's internal document below suggest Apple sought to increase user engagement or revenue opportunities, as opposed to winning app developers and/or end-users from Google's Mobile Platform.

6.93 Furthermore, those improvements do not appear to be driven by strong competition from the Play Store:

(a) In our assessment of Apple's internal documents covering the past three years, we identified only one internal document from 2022 that directly compares the App Store's marketing functionalities with the functionalities available on Google's Play Store. The document concludes that for the App Store '[✂]' and that '[✂]'.[395] Further, the examples that Apple provided of its key improvements to the App Store set out above pre-date 2022.

(b) In addition, whilst some third-party evidence indicates that there is some competition on quality between Google's Play Store and Apple's App Store,[396] and that the App Store does bring benefits to app developers, for example in terms of discoverability[397] and user trust,[398] evidence in the round indicates that there are material concerns regarding the quality of services on the App Store. Specifically, 33 out of 55 native app developers[399] submitted that they have concerns in relation to how Apple operates the App Store, and these concerns relate to several key aspects of app distribution, such as app discoverability, listing or updating apps, and Apple's use of app developers' data. We do not consider this is indicative of strong competition between Apple and Google on quality to attract app developers.

6.94 We therefore provisionally conclude that while we observe that Apple has made improvements to its Mobile Platform over time, in terms of services and features offered to app developers, the evidence considered in the round suggests that this is driven by a range of factors and is unlikely to be strongly driven by Apple responding to competition from the Play Store. This is consistent with our finding that app developers have very limited ability to switch between these two largest app stores that are both must-have routes to distribution on mobile devices.

[395] Apple's internal document dated September 2022, [✂] We have also identified a few of Apple's internal emails containing news article summaries which refer to developments in the mobile space more generally, including [✂]. Apple's internal documents; [✂].
[396] Two other third parties (industry associations) submitted views that the App Store faces strong competition on quality from the Play Store. Parties responses to invitation to comment dated 23 January 2025; Chamber of Progress (pages 1,2 & 4); Communications Industry Association (page 3).
[397] 6 parties responses to section 69 notices [✂].
[398] For example see 3 parties responses to section 69 notices [✂]
[399] 29 parties responses to section 69 notices: [✂]. 3 notes of meetings: [✂]; One party's response to section 174 notice in relation to MBCG MI RFI: [✂]

Competition from Google's Mobile Ecosystem to attract web developers

6.95 In this section we consider the extent to which Apple's Mobile Platform faces competition from Google's Mobile Ecosystem to attract web developers.

6.96 As set out in more detail in Chapter 4, the evidence shows that Apple provides one version of Safari across its mobile devices and users consume Safari on both mobile devices as a means of viewing and interacting with web content on both iPhones and iPads. Consistent with the scope of the digital activity, we have assessed competition for web content by considering mobile devices as a whole.

6.97 In relation to web content, content providers or web developers write content once for distribution across platforms (eg the Apple and Android mobile operating systems), across devices (eg mobile, desktop, or console), and across browsers (eg Chrome, Safari, Firefox etc).[400] Content providers therefore do not choose whether to distribute on one platform or another, as by its nature web content is broadly available. As a result, web content providers cannot 'switch away' from either mobile platform, and Apple and Google therefore do not compete for web content to be made available on their Mobile Platforms.

6.98 In limited circumstances, compatibility issues mean that web content may not work as intended with certain browsers or browser engines.[401] This could impact the quality of web content available on a platform. For example, if WebKit encountered significant web compatibility issues, this would reduce the quality of web content accessible on Apple's Mobile Platform. Mobile Platforms may therefore compete to be prioritised by web developers for compatibility testing, which would reduce the risk of compatibility issues arising on the platform.

6.99 Evidence from web developers indicates that they tend to test for compatibility against the browsers with the most users. This means that they mainly test against Chrome and Safari, and to a lesser extent smaller less popular browsers such as Firefox, Edge, and Brave.[402] Evidence also indicates that compatibility issues with browsers are less frequent than in the past, and any issues tend to be minor.[403]

6.100 Any competition to be prioritised for compatibility testing is therefore in the form of having more users of the browsers and browser engines on a platform. Given the significant number of users of Safari and WebKit, and Chrome and Blink, both tend

[400] Jigsaw Research (2024), Qualitative Research with Developers on Mobile Browsers and Mobile Browser Engines, page 5. [link]
[401] Apple's response to section 69 notice [✂] and Google's response to section 174 notice [✂].
[402] Jigsaw Research (2024), Qualitative Research with Developers on Mobile Browsers and Mobile Browser Engines, page 7; [link] See Annex A for more detail on shares of supply in mobile browsers.
[403] Jigsaw Research (2024), Qualitative Research with Developers on Mobile Browsers and Mobile Browser Engines, pages 8 and 25; [link]. Responses to section 69 notice: [✂]; Response to section 174 notice in relation to MBCG MI [✂]; Response to section 174 notice in relation to MEMS [✂].

to be prioritised by web developers for compatibility testing, although there is some evidence of Safari and WebKit having greater issues with compatibility.[404]

6.101 Consequently, our provisional view is that the extent of any competition between Apple and Google to ensure that web content providers make their content available on Apple's and Google's Mobile Platforms respectively is limited, as web content is generally made available cross-platform. To the extent that there is competition, this is in the form of having more users and therefore being prioritised by web developers in compatibility testing. Additionally, we have not seen evidence to suggest this is likely to change significantly over the next five years.

Competition from non-Google Mobile Ecosystems to attract content providers

6.102 In this section we consider the extent to which Apple's Mobile Platform competes to attract content providers with other, non-Google Mobile Ecosystems, such as those operated by Amazon and Huawei.

6.103 With regard to native app content, we consider that Apple's App Store faces limited constraint from non-Google Mobile Ecosystems, including from Amazon's Appstore (on Fire OS) and Huawei's AppGallery:

(a) As set out above, app developers consider both the App Store and the Play Store as 'must-have' and distinct distribution channels and as such are unlikely to impose a constraint on the App Store by switching or threatening to switch to rival app stores on non-Google Mobile Ecosystems.

(b) No app developer we gathered evidence from suggested they would prioritise their native app distribution on non-Google Mobile Ecosystems and only a small number of app developers identified app stores on these platforms as options they actively use – eg 7 out of 55 of app developers who we received evidence from submitted that they distribute their native apps on Amazon's Appstore[405] and 2 submitted that they distribute on Huawei's AppGallery.[406] Of the app developers who submitted that they distribute their apps on these app stores, more than half (5 out of 8) consider them as complements to the App Store.[407]

(c) Both Amazon's Appstore and Huawei's AppGallery have significantly smaller user bases and generate significantly less net revenue from customer

[404] MBCG MI Appendix A, paragraph 4. [link]
[405] 7 total parties. 5 parties responses to section 69 notices: [✂]. 2 notes of meetings: [✂].
[406] 2 parties responses to section 69 notices: [✂].
[407] 5 total parties.3 parties responses to section 69 notices [✂]. 2 notes of meetings: [✂]

billings,[408] indicating that for app developers, these app stores act as inferior substitutes to the App Store.

(d) Despite Apple's submission that it competes against platforms such as Amazon's Appstore, [✂].

(e) Finally, the above is consistent with our provisional conclusion that Apple does not face strong constraint to improve on outcomes for app developers through reductions in commission rates and/or improvements to quality (discussed in the section 'Competition from Google's Play Store to attract app developers'), neither from Google's Mobile Platform nor from non-Google Mobile Ecosystems.

6.104 With regard to web content, as described above, this is made broadly available by content providers and as a result, Apple does not compete with non-Google Mobile Ecosystems for this content to be made available on its Mobile Platform.

Provisional conclusions on competition to attract content providers

6.105 Overall, our provisional view is that any competitive constraint on Apple's Mobile Platform from other Mobile Ecosystems in relation to attracting content providers is limited:

(a) App developers generally distribute on both Apple's and Google's Mobile Platforms, as must-have and distinct distribution options because each of these platforms provides access to a very significant proportion of users in the UK and because there is limited user switching between those platforms. As such, there is a limited constraint on the App Store from app developers switching to the Play Store.

(b) Consistent with the above, Apple's App Store is unlikely to be constrained by app developers switching to smaller rival app stores on non-Google Mobile Ecosystems.

(c) Whilst there have been some reductions in Apple's App Store commission rates, this has been relatively limited and does not appear to reflect strong price competition. This is consistent with our profitability analysis that suggests that Apple is not being forced to erode its profits by responding to competition, eg through reductions in commission rates.

[408] Amazon's Appstore had an average monthly number of [✂] [0 – 1] million active users and generated approximately £[✂] [0 - 50] million in net revenue from customer billings in 2024. Amazon's response to section 69 notice [✂]. Huawei's AppGallery had an average monthly number of [✂] [0 - 1] million active users and generated approximately £[✂] [0 - 50] million in net revenue from customer billings in 2024. Huawei's response to section 69 notice [✂]. This compares against [✂] [20 - 30] million monthly active users on the App Store which generates £[✂] [0 - 2] billion of net revenue in 2024. Apple's response to section 69 notice [✂]

(d) Likewise, although there is some evidence of quality improvements, evidence in the round does not demonstrate that there is strong constraint on the App Store to compete on quality.

(e) With regard to web content, this is made broadly available by content providers and as a result, Apple does not compete for content to be made available on its Mobile Platform.

(f) Finally, we have seen no evidence to suggest that the above findings are likely to change significantly over the next five years. This is consistent with our findings elsewhere in this report that there are no expected or foreseeable market or technological developments that are likely to significantly change Apple's position in terms of competition for content providers over the next five years (see section 'Competition to Apple's Mobile Platform arising from other technological developments' below).

Barriers to entry and expansion in Mobile Platforms

In this section, we consider the extent to which Apple is constrained by the threat of entry and expansion of competing Mobile Platforms. We provisionally conclude that there are significant barriers to entry and expansion in providing a competing Mobile Platform and that therefore Apple faces limited constraint from the threat of such entry or expansion occurring.

6.106 Apple submitted that the presence of several alternative mobile operating systems indicates that there are no significant barriers to entry or expansion, and it is not aware of any reason why these conditions would not continue for the next five years.[409]

6.107 However, we have provisionally found that there are significant barriers to entry and expansion in providing a competing Mobile Platform. This is illustrated by the exit or unsuccessful entry of well-resourced companies in smartphones such as Microsoft and Amazon and the difficulties faced by those using versions of Android without GMS – for example, Huawei's share of new sales declined materially after it could no longer access Google's apps and services, including GMS.[410]

6.108 In the analysis which follows, we consider, in turn, four main categories of barriers to entry and expansion that a rival supplier of Mobile Platforms may face:[411]

[409] Apple's response to section 69 notice [✂]
[410] MEMS, paragraph 3.126.
[411] We here assess the likelihood that a rival can enter or expand with a Mobile Platform like those of Apple and Google. The possibility of disruptive entry by a rival with a different offering or business model, potentially linked to technological developments such as AI, is covered in the section 'Competition to Apple's Mobile Platform arising from wider technological and market developments' below.

(a) **Indirect network effects**: which result from the fact that a Mobile Platform is a two-sided platform connecting mobile device users with content providers.

(b) **Barriers to providing individual components of a Mobile Platform**: as noted above, Apple's Mobile Platform comprises interconnected components, namely: (a) a mobile operating system (for smartphones and tablets respectively); (b) native app distribution; and (c) a mobile browser and browser engine. Therefore, in order to compete effectively with Apple's Mobile Platform, a rival would need to be able to provide (either itself or by outsourcing to a third party) a version of each of these components, in which they are configured to work together.

(c) **Barriers relating to mobile devices**: a rival will also need mobile devices for its Mobile Platform to be installed upon. In other words, it would need to either produce its own mobile devices, or license its Mobile Platform to third-party mobile device OEMs.

(d) **Ecosystem-wide barriers**: in addition to the barriers inherent in producing individual components of a Mobile Platform, there are additional barriers which apply at the Mobile Ecosystem level.

Indirect network effects

6.109 Mobile Platforms exhibit strong indirect network effects which act as a barrier to entry and expansion. This is because, as set out in Chapter 4, a Mobile Platform is a two-sided platform connecting end-users with mobile content providers. The more end-users can access mobile content through the Mobile Platform, the more they value the Mobile Platform. In turn, content providers value a Mobile Platform more the greater the number of end-users using that Mobile Platform.

6.110 The presence of indirect network effects therefore creates a 'chicken and egg' problem where a Mobile Platform needs a critical mass of end-users to attract content providers, but it equally needs to offer a critical mass of mobile content to attract end-users. This means it is difficult for a new entrant to gain traction as it cannot attract one set of customers without the other.

6.111 A range of stakeholders confirmed the importance of indirect network effects as a barrier to entry and expansion in Mobile Platforms:

(a) Apple submitted that a mobile operating system's success depends on the value it offers to third parties and end-users and it competes strongly to attract both users and developers to its mobile devices,[412] but focuses on

[412] Apple's response to invitation to comment dated 12 February 2025, page 2, paragraph 1.6.

attracting app developers as part of its commercial strategy since a vibrant app offering is a driving factor of devices sales.[413]

(b) Microsoft, Samsung and Mozilla all submitted that their attempts to enter failed because they were unable to attract enough app developers to create apps for their Mobile Platforms.[414] In addition, one of the reported reasons for the lack of success of Amazon's Fire Phone, which used Amazon's Fire OS and launched in the UK in September 2014 but exited a year later, was its narrow selection of apps, including its inability to offer the GMS suite of apps.[415]

(c) Third parties confirmed that indirect network effects constitute a very significant barrier to entry. Most (9 out of 13)[416] third-party OEMs and app store providers that responded to our information requests confirmed that network effects were an important feature of Mobile Platforms. Many app developers (28 out of 55)[417] also confirmed this or submitted that the number of users they can reach influences where they choose to distribute their apps. Most browser vendors submitted that web compatibility can limit the ability of smaller browsers to grow.[418] Web compatibility generates an indirect network effect as web developers maintain compatibility with browsers with enough users, which limits smaller browsers' ability to grow.

6.112 We note that the strength of these indirect network effects depends to some extent on the type of mobile content. In particular, a distinction can be made between:

(a) Content that is consumed through native apps where many content providers develop their application specifically for use on a given operating system. As set out in the 'Competition from alternatives to Apple's Native App Distribution' section in Chapter 7, to distribute its app via a new Mobile Platform, each individual app developer would need to substantially recreate its native app(s) for the operating system of the alternative Mobile Platform and incur significant development costs; and

(b) Mobile content that is consumed through a mobile browser or web-based applications where web developers need to create their content only once using web programming languages (ie common standards of the open web)

[413] Apple's response to section 69 notice [✂]
[414] 3 responses to section 69 notices: [✂] from Microsoft [✂] from Samsung [✂] from Mozilla, [✂]
[415] MEMS, paragraph 3.56, footnote 109.
[416] Some OEMs are also app store providers. The count for number of app store providers therefore overlaps with the OEM count. 9 responses to section 69 notices: [✂]
[417] 23 parties responses to section 69 notices: [✂] One party's submission [✂]; 4 notes of meetings: [✂]
[418] 5 responses to section 69 notices; [✂]; 1 response provided in the context of the CMA's MBCG MI; [✂]

and have it work across all consumer devices that can access the web through a web browser.[419,420]

6.113 In light of the foregoing, our provisional view is that there are strong indirect network effects, especially for native apps, which act as a barrier to entry and expansion for rival Mobile Platform providers. We take this into account below in our assessment of the barriers to entry and expansion for each component and the Mobile Platform as a whole.

Barriers to providing individual components of a Mobile Platform

6.114 A new Mobile Platform would need to be able to offer each component of the platform, whether through developing its own software or accessing existing alternatives. Therefore, we consider in this section the barriers to providing a mobile operating system, native app distribution services, and a mobile browser and browser engine. Broader possibilities for entry and expansion by alternatives to these components (for example from AI) are considered in latter sections.

Mobile operating system

6.115 A rival Mobile Platform would broadly have two options for supplying a mobile operating system: (a) licensing an existing operating system; or (b) developing a new operating system.

6.116 Our provisional view is that there are high barriers to supplying a mobile operating system as part of a new Mobile Platform because:

(a) **Options for licensing are limited:** Apple's iOS and iPadOS and Amazon's Fire OS are currently used exclusively as part of their own Mobile Platforms[421] and while Google does license its Android operating system to third-party OEMs, it only does so conditional on those mobile devices meeting Google's compatibility criteria (ie entering into the Android Compatibility Commitment (ACC) and complying with the definition of the Android operating system set out in the Compatibility Definition Document (CDD)). [422] As such, mobile devices using a version of the Android operating system would be limited in their ability to differentiate their offering and thereby compete with existing providers of Mobile Platforms.

[419] Although compatibility issues may result in some web content not functioning correctly with all browsers, we understand the vast majority of web content works with all browsers.
[420] Mobile browsers are themselves a type of native app which need to be written for each specific operating system, but a Mobile Ecosystem supplier could self-supply a mobile browser or would need only one third-party provider to make its mobile browser available on its mobile operating system, to allow end-users to access web-based content.
[421] Apple's response to section 69 notice [✂]; and Amazon's response to section 69 notice [✂].
[422] See Brand guidelines | Google Play | Android Developers and Android Compatibility program overview | Android Open Source Project.

(b) **Developing and maintaining a new operating system requires significant time and financial resources**: a significant portion of these costs are fixed and do not vary with the number of users of the operating system, making it more difficult for a new entrant to compete against established operating systems with large numbers of users and therefore lower costs per user.[423] New entrants do not necessarily need to develop a mobile operating system from scratch due to the availability of open-source solutions - including Android where the source code is publicly available. For example, Amazon entered the UK market with its own operating system (Fire OS) which was forked from Android. Using one of these existing open-source solutions may facilitate time and cost savings. However, Amazon noted that its Android fork operating system has required substantial investments.[424]

(c) **Mobile operating systems are subject to strong indirect network effects** (see 'Indirect network effects' section above) given their function as an intermediary between hardware and software on a mobile device. A successful mobile operating system therefore needs both a critical mass of end-users and content providers.

Native app distribution

6.117 Native apps are the primary way that end-users consume content on their mobile devices and therefore being able to offer a wide range of native apps is important for a Mobile Platform to be attractive to users.[425] Native apps are most commonly accessed by users via an app store[426] and so as part of their offering, Mobile Platform providers will typically need to provide an equivalent app marketplace.[427,428]

6.118 We have considered the ease with which a new Mobile Platform provider could supply native app content, either by using an existing app store or developing its own app store. Our provisional view is that there are high barriers to supplying native app content as part of a new Mobile Platform because:

(a) **Native apps are written to run on a specific operating system**: so a new Mobile Platform provider with its own operating system could not use an app store (or the associated catalogue of apps) from an existing Mobile

[423] Apple submitted that it has invested billions of dollars in its mobile operating systems and that a portion of the costs are fixed (i.e. do not depend on the size of the user base). Apple's response to section 69 notice [✂]; and Google submitted that Android is the product of effort and investment. Google's response to section 69 notice [✂].
[424] Amazon submitted that it had considered [✂]. It submitted that the total cost of developing and maintaining its Android fork FireOS, the devices that run it, and its native apps [✂]. Amazon's response to section 69 notice [✂].
[425] For example, in March 2023 users in the UK spent on mobile apps over five times the hours they spent on mobile web browsers. See UK time spent on browsers and apps 2023| Statista.
[426] We note that an app store is required as it would be very difficult for one firm to develop a wide range of native apps themselves.
[427] For example, on Apple mob devices, the App Store is the only way to access native apps.
[428] For example, Apple's 'App Store', Google's 'Play Store' and the 'Amazon Appstore'.

Platform.[429] This might be less of an issue if the rival Mobile Platform provider were able to use one of the existing established operating systems. However, as set out above, options for this are limited.

(b) **There are very strong indirect network effects related to native app distribution (as set out in 'Indirect network effects' section above):** it is likely to be difficult for a new entrant to convince third parties to develop their apps for its nascent Mobile Platform which only has a small number of end-users.

(c) **Apple and Google own a number of the most popular mobile apps and are able to restrict access to these apps**: Google's first party apps, in particular, are among the most used mobile apps – for example in the UK in 2024, [✂].[430] A new entrant's competitive offering will be materially weakened if it is unable to offer these apps that are important for end-users.[431,432]

(d) **A new entrant will incur material costs related to the development and ongoing operation of an app store**: a significant portion of these costs are fixed and do not vary with the number of users of the app store, making it more difficult for a new app store to compete against established app stores, with large numbers of users and therefore lower costs per user, and who have already sunk these costs.

(e) As set out in Chapter 7, we do not consider that any of the alternatives to native app distribution via an app store (eg web apps) provide a viable substitute at present and this is unlikely to change over the next five years.

Mobile browsers

6.119 Mobile browsers are, alongside native apps, the main avenue through which end-users consume mobile content on their mobile devices. A rival Mobile Platform would therefore need to include a mobile browser to allow users to access web content, either by gaining access to an existing browser or developing its own mobile browser.

[429] We understand that an operating system that has been forked from Android may retain some compatibility with Android apps but apps will typically not work or will only work with reduced functionality if they utilise Google APIs. This is the case for the majority of the most popular apps on the Play Store. [✂] response to section 174 notice in relation to MEMS [✂]
[430] Apple's response to section 69 notice [✂]
[431] We note that Apple typically does not allow its first party apps to be used outside of its Mobile Ecosystem (with some exceptions including Apple TV, Apple Music and Move to iOS).
[432] For example, as set out in the 'Competition from non-Google Mobile Platforms for end-users' section, Amazon's Fire OS does not have access to Google's suite of apps (available to Android compatible versions of its operating system through the GMS suite of apps) which materially weakens the strength of its tablet offering.

6.120 While there are some challenges and costs[433] associated with doing so, our provisional view is that these challenges are unlikely to pose a significant barrier to a rival Mobile Platform provider because:

(a) **The strength of the indirect network effects is more limited for web content:** only one mobile browser needs to be developed as a native app to allow end-users to access all web-based mobile content. A rival Mobile Platform would therefore only need to persuade one or a small number of third-party browser providers to develop for its mobile operating system, or it could self-supply the browser. As set out in the 'Competition from alternatives to Apple's Mobile Browser and Browser Engine' section of Chapter 7, there are various browser vendors that are active in the UK which a rival Mobile Platform may be able to partner with to provide a mobile browser eg through an upfront payment to cover the cost of porting the browser to a new operating system.[434]

(b) **The costs related to developing a browser for use on the new Mobile Platform are likely to be relatively modest** given the existence of open-source browsers and browser engines, and existing mobile browsers on other Mobile Platforms which could be adapted for the new operating system. Using an existing open-source browser engine eg Blink, WebKit, or Gecko, provides a relatively low-cost entry route for new mobile browser entrants.[435] The main cost for a new Mobile Platform entrant or rival (or, indeed, for a browser vendor operating on other platforms) would therefore be the cost of porting an existing open-source browser engine to the new operating system. Google submitted that it would need around [✂] [<20] FTE engineers for a year to develop a competitive Blink-based version of Chrome for iOS, which it described as a [✂] investment.[436] This indicates that the cost of porting an existing browser and browser engine to a new operating system is relatively limited. Amazon supplies its own mobile browser 'Amazon Silk' on its Amazon Fire tablets.

Barriers relating to mobile devices

6.121 A Mobile Platform needs to be installed on a mobile device. We have therefore considered the ease with which a rival Mobile Platform could secure this by licensing its platform to an existing OEM or would be able to develop its own mobile devices.

[433] The browser developer will incur both initial one-off costs (for example, costs of software developers and engineers with the necessary technical expertise) to develop and operate the mobile browser, and future recurring costs to maintain and update the browser code.
[434] Porting refers to the process of taking software developed for one operating system, and adapting it to work on another operating system.
[435] Apple's submission [✂], Google response to section 174 notice [✂]; Google response to section 69 request [✂]; Google response to MBCG MI Working Paper 1, paragraph 39. [link]
[436] Google's response to section 174 notice in relation to MBCG MI [✂].

6.122 Our provisional view is that there are high barriers to supplying mobile devices as part of a new Mobile Platform for the following reasons:

(a) **Options for licensing to existing OEMs are limited:** Apple, Google and [✂] [Third Party] manufacture mobile devices to be used exclusively with their own Mobile Platforms.[437] Other third-party OEMs (such as Samsung and Oppo) are unlikely to switch away from using Google's Mobile Platform because:

(i) OEMs will only want their mobile devices to use a new Mobile Platform if it offers their end-user customers what they want across the parameters of competition set out in the 'Parameters of competition' section above. The various barriers to entry and expansion set out in this section means that this is unlikely to be the case;

(ii) OEMs told us that they would face significant financial[438] and resource/time costs[439] if they switched away from Google's Android operating system; and

(iii) many OEMs receive substantial payments from Google under the revenue sharing agreements which are detailed in Annex C in SMS Proposed Decision in respect of Google's Mobile Platform.[440] A rival Mobile Platform would be unlikely to be able to replicate Google's payments because of the importance of scale in the search market.[441] As set out in our SMS investigation into Google in relation to its provision of general Search services, Google is by far the largest provider of services in general search and search advertising.[442] Its leading position in search advertising means that Google is able to extract more value per mobile end-user than a rival who is able to access the same data.[443]

(b) **Manufacturing a mobile device requires significant resources and expertise:** modern mobile devices are relatively high-tech pieces of hardware, requiring the sourcing and assembly of many components including the touchscreen, camera, processor, memory, speaker, and microphone. Producing mobile devices efficiently requires the establishment of a well-organised production process. [444,445]

[437] Apple's response to section 69 notice [✂]; [✂] and Google's response to section 69 notice [✂].
[438] 3 responses to section 69 notices: [✂].; and [✂]
[439] 3 responses to section 69 notices: [✂].; and [✂]
[440] [✂].
[441] See SMS Proposed Decision in respect of Google's general search services, paragraph 5.153 for more detail.
[442] SMS Proposed Decision in respect of Google's general search services, Figures 5.1 and 5.4.
[443]See SMS Proposed Decision in respect of Google's general search services, paragraph 5.128 for more detail.
[444] Financial Times, 'Why Trump can't build iPhones in the US', dated 28 April 2025, accessed by the CMA on 4 June 2025 [https://ig.ft.com/us-iphone/]; and Apple's response to section 69 notice [✂]
[445] For example, see The Best Supply Chain in the World — Apple Inc | by armachat | Medium.

Mobile Ecosystem level barriers

6.123 We note that the barriers identified for each component above have a cumulative effect in the sense that a rival Mobile Platform would need to provide all of these components. Furthermore, there are additional barriers which apply at the combined Mobile Ecosystem level as follows:

(a) **The component parts need to be integrated effectively so that they work well together as a Mobile Ecosystem**: our consumer survey results indicate that when purchasing a smartphone, end-users look for a product that combines what they want across the hardware and software components we have considered above.[446]

(b) **Getting end-users to switch from their existing Mobile Ecosystem is likely to be challenging**: this is because, as set out above in 'Competition from Google for end-users: End-user switching', end-users are often 'sticky' and disinclined to switch Mobile Ecosystem due to a combination of (i) barriers to switching; (ii) consumer disengagement; (iii) reported user satisfaction; and (iv) brand loyalty.

(c) **Some mobile end-users value being part of a wider ecosystem which includes products and services beyond the Mobile Platform:**[447] for example, we note that Google's Mobile Ecosystem extends well beyond the core components of its Mobile Platform; it includes devices like the Pixel Watch, Pixel Buds, Google Nest devices, Fitbit devices and services such as Google Search, Gmail, Google Drive and Google Photos. A new entrant is likely to be at a competitive disadvantage if it is not able to offer a Mobile Platform that enjoys these broader connections. These products and services are also costly to develop.

(d) **The absence of a wider Mobile Ecosystem may also limit the ability of the entrant to monetise or support its Mobile Platform**: as set out in more detail in our SMS investigation into Google in relation to its provision of general Search services, we note that Google, in particular, is able to use its market power in general search services[448] to support its Mobile Platform.

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[446] In particular, both iOS and Android users mentioned hardware and software features as being important in their smartphone purchase decision. For example: (i) in relation to hardware features, camera was mentioned by 50% of iOS users and 53% of Android smartphone users, and battery life was mentioned by 46% of iOS users and 56% of Android smartphone users; and (ii) in relation to software features, the operating system was mentioned by 35% of iOS users and 37% of Android smartphone users. Accent Mobile Consumer Survey, Figure 9.

[447] For example, our consumer survey found that: (i) 39% of iOS users and 20% of Android smartphone users selected compatibility with other devices as an important factor in their smartphone choice; and (ii) 80% of iOS users had at least one other Apple device and 53% of Android smartphone users had a least one other Google device. Accent Mobile Consumer Survey, (i) Figure 9, (ii) page 77.

[448] As set out in SMS Proposed Decision in respect of Google's general search services Annex B: Market outcomes (paragraph B.15 and Figure B.5) Google's share of supply in general search on mobile devices had been between [90 – 100%] and [90 – 100%] throughout the last seven years; and as set out in SMS Proposed Decision in respect of Google's general search services (paragraph 5.94 and Figure 5.4), Google's share of UK search advertising by providers of general search all devices has exceeded [90 – 100%] in every year since 2020).

Google is able to monetise the consumption of content on its Mobile Platform directly through its search advertising businesses in a way that would not be possible for a rival Mobile Platform.[449]

6.124 Additionally, in the section below entitled 'Competition to Apple's Mobile Platform arising from wider technological and market developments', we present evidence that ecosystem-level barriers to entry and expansion in mobile may strengthen over the next five years due to technological developments such as the integration of AI in Mobile Platforms and growth in connected and AR/VR devices.

Provisional conclusion on barriers to entry and expansion

6.125 The foregoing analysis demonstrates that a rival Mobile Platform provider would face significant barriers to entry and expansion in providing a competing Mobile Platform. Therefore, we provisionally consider that Apple faces limited constraints by the threat of entry and expansion of competing suppliers of Mobile Platforms.

6.126 We consider below whether there are any market or technological developments that are likely to impact Apple's position over the next five years despite these barriers to entry and expansion.

Competition to Apple's Mobile Platform arising from wider technological and market developments

We have also considered the extent to which wider technological and market developments may exert a competitive constraint on Apple's Mobile Platform, both now and in the future. We provisionally conclude that there are no expected or foreseeable developments that are likely (whether individually or in combination) to be sufficient in scope, timeliness and impact to eliminate Apple's substantial market power in relation to its Mobile Platform over the next five years.

6.127 In this section we consider wider technological and market developments that could potentially impact competition in Mobile Platforms. These were identified from previous CMA horizon scanning[450,451] and the evidence on these was informed by Apple and third parties.

6.128 Apple submitted that its Mobile Platform and wider Mobile Ecosystem faces fierce competition from a variety of sources, including firms seeking to harness some key technological developments in mobile such as AI, edge computing, privacy-focused technologies, AR/VR devices and handheld gaming devices. In particular,

[449] See Barriers to Monetisation (paragraph 5.179 to 5.183) of SMS Proposed Decision in respect of Google's general search services.
[450] Top 10 technologies – a CMA horizon scanning perspective – Competition and Markets Authority
[451] Trends in Digital Markets: a CMA horizon scanning report - GOV.UK

Apple submitted that AI has a profound and growing impact on competition for mobile devices.[452]

6.129 We asked Apple for its internal documents that relate to the competitive trends affecting its Mobile Ecosystem over the next five years, as well as to any potential disruptions to its competitive position in this period. Apple submitted various documents, one of which was a third-party document which referred to [✂]. Another third-party document that Apple submitted referred to [✂].[453]

6.130 We also asked third parties what they considered to be the key technological and market developments in Mobile Platforms over the next five years. As a result, we received evidence relating to the potential impact on Apple's position from certain key developments in Mobile Ecosystems. These developments include AI, connected devices such as smartwatches and AR/VR devices, edge computing, advances in network connectivity, and cross-platform gaming (eg handheld gaming devices).

6.131 We discuss these key developments in turn, in particular, setting out the evidence relating to whether these developments are likely to significantly change Apple's position in respect of its Mobile Platform over the next five years.

Artificial intelligence (AI)

6.132 AI features, such as foundation model (FM) services (ie services that rely on large machine learning models trained on vast amounts of data) are increasingly being integrated into mobile devices, enhancing applications as well as web-based content and OS-level features.

6.133 Evidence suggests AI is the technological trend with the greatest potential impact in the supply of Mobile Platforms over the next five years.[454] This is because AI has a wide range of potential use cases in mobile and it could alter how users interact with their mobile devices (eg instead of performing tasks from within native apps, users may rely increasingly on agentic AI voice assistants to perform these tasks on their behalf). AI may therefore have an impact on competition in the supply of Mobile Platforms as well as for different components within Mobile Platforms.

[452] Apple's response to section 69 notice [✂]; Apple's response to the CMA's invitation to comment, paragraph 1.16 [link]
[453] Apple's third-party documents submitted to the CMA: [✂].
[454] Parties including Apple and Google rated the expected impact of technological developments such as AI on competition in Mobile Ecosystems over the next five years. 16 parties expected AI will have a 'very substantial' impact with a further 4 parties expecting it to have a 'substantial impact'. Only 2 parties expected that AI will have a less-than-substantial impact. We also asked parties about the potential impact of other technological trends, but overall parties did not rate the potential impact of any other trend as highly as AI. Apple's response to section 69 notice [✂]. Google's response to section 69 notice [✂]. 20 parties responses to section 69 notices: [✂].

6.134 The evidence in the round does not suggest that AI-related developments are likely to disrupt Apple's position in respect of its Mobile Platform over the next five years:

(a) Apple submitted that AI has intensified competition in the supply of Mobile Platforms [✂]. Apple also submitted that the impact of AI is likely to grow in future.[455]

(b) Some third parties submitted that AI could enhance competition in operating systems – for example, by creating scope for operating systems to incorporate new AI-based features and functionality.[456] Some third parties also submitted that AI could weaken Apple's position in mobile browsers or native app distribution[457] which we discuss in the following chapter.

(c) However, many third-party views were that AI is not likely to substantially disrupt Apple's position in respect of its Mobile Platform over the next five years.[458] This is consistent with evidence from Apple's internal documents, which only included very limited mention of AI as a potential threat to its position in respect of its Mobile Platform.[459]

6.135 Furthermore, evidence suggests that Apple may be able to use AI to strengthen its position in respect of its Mobile Platform and wider Mobile Ecosystem:[460]

(a) The trend towards increased integration of AI into mobile devices is likely to reinforce barriers to entry and expansion in Mobile Platforms (discussed above in the section titled 'Barriers to entry and expansion in Mobile Platforms'). Creating a highly integrated platform that facilitates smooth interactions between different products and services across the operating system to compete effectively with Apple's Mobile Platform offering[461] can be costly.[462]

[455] Apple's response to section 69 notice [✂].
[456] Parties responses to section 69 notices: [✂].
[457] Parties who referred to AI's impacts on NAD and Browsers. Parties responses to section 69 notices: [✂].
[458] 16 Parties total. 11 parties responses to section 69 notices: [✂] 3 parties responses to the CMA's invitation to comment: DMG Media (paragraph 2); Coalition for App Fairness (page 3); [✂] Financial services firm B (page 8). 2 parties notes of meetings: [✂]
[459] Apple's internal documents: dated May 2024 [✂] dated May 2023 [✂].
[460] Note that we are aware of on-going public discourse relating to Apple's AI efforts in mobile, which suggest Apple's strategy is evolving in relation to AI – for example, potentially by partnering with third parties. For examples, see: Apple might win the AI race after all | Fortune, Apple + Anthropic?, Apple's Fall, Apple's Options – Stratechery by Ben Thompson, Apple's Surprising AI Strategy for Siri, accessed by the CMA on 9 July 2025.
[461] For example, see Apple Intelligence - Apple (UK), for examples of use cases of AI on Apple's mobile devices, accessed by the CMA on 10 June 2025.
[462] [✂] response to section 69 notice [✂]; and see also public articles which suggest Apple and Google are spending a significant amount to develop and integrate AI for their Mobile Ecosystems. For example: Apple will spend more than $500 billion in the U.S. over the next four years - Apple, accessed by the CMA on 11 June 2025; and Google plans $75B investment to build out cloud AI capacity | CIO Dive, accessed by the CMA on 11 June 2025.

(b) Many third parties submitted that Apple may be able to use AI to strengthen its position in respect of its Mobile Platform and wider Mobile Ecosystem.[463] For example, Apple's position as the operating system provider may enable it to gain a competitive advantage relative to third-party providers of FM services and wider content,[464] particularly if Apple can use AI to disintermediate between end-users and third party content and service providers.[465]

(c) Finally, evidence we reviewed from third-party investor reports is consistent with the view that AI is more likely to strengthen rather than weaken Apple's position in respect of its Mobile Platform. We reviewed a selection of third-party investor reports published between September 2024 and March 2025.[466] Out of 14 reports that commented on Apple's expected financial performance, six mentioned AI. Five out of six of these reports indicated they expected future growth in Apple's financial performance as a result of Apple releasing new AI features in updates to the iPhone.[467]

Connected devices and AR/VR products

6.136 The evidence does not suggest that the developments related to connected devices and AR/VR products are likely to significantly change Apple's position in respect of its Mobile Platform:

(a) Apple submitted that AR/VR products and AI-powered wearable devices will exert increasing competitive pressure on mobile device markets in the next decade and rivals like Meta are expanding in this space. Apple is responding to this competitive pressure, launching the Vision Pro in 2024.[468] Additionally,

[463] 13 parties total. 7 parties responses to section 69 notices: [✂]. 3 parties responses to the CMA's invitation to comment: Coalition for App Fairness (page 3); [✂] Financial services firm B (page 8); BBC (page 5). 1 party note of meeting [✂]
[464] 2 parties responses to section 69 notices: [✂]
[465] 6 parties total. 5 parties responses to section 69 notices: [✂]. 1 party's response to the CMA's invitation to comment: BBC (paragraph 25).
[466] We produced this selection by searching for more recent versions of the investor reports submitted to us by Apple on the Refinitiv platform, which involved searching for the name of the firms that produced those reports and keywords such as 'Apple' and 'iPhone'. We also tried additional general searches for keywords such as 'Apple', 'smartphones', 'mobile' and 'iOS'. We downloaded and reviewed pages from the resulting reports that contained the most instances of our key search terms.
[467] Reports that commented on Apple's financial performance and mentioned AI as a source of growth: Wedbush '2025-03-13-AAPL.OQ-Wedbush Securities I-Gloom and Doom Crowd Back Focused on Cupertino; Seeing the F...-114086487' dated 10/03/2025; Morgan Stanley '2025-03-12-AAPL.OQ-Morgan Stanley-Apple, Inc. Fewer (A)pple (I)ntelligence Catalysts Temper U...-114046353.undefined', dated 12/03/2025; TD Cowen '2025-03-10-ASML.AS-TD Cowen-Smartphone Builds C1H25 Growing MSD YY, iPhone 16e Pricin...-114006589', dated 10/03/2025; HSBC '2025-01-31-AAPL.OQ-HSBC-Apple (AAPL US) Hold record Q1 25; next iPhone trigger is m...-113195118', dated 31/01/2025; Evercore '2025-01-31-AAPL.OQ-EVERCORE ISI-Emerging Markets Offsetting China Worries. Maintain OP.-113178691', dated 30/01/2025. Report that commented on financial performance of Apple but did not portray AI as a source of growth: Barclays '2025-02-27-Barclays-IT Hardware and Communications Equipment Valuation Update a...-113756475.undefined (1)' and '2025-02-27-Barclays-IT Hardware and Communications Equipment Valuation Update a...-113756475.undefined', dated 27/02/205.
[468] Apple's response to section 69 notice [✂]

some of Apple's internal documents show that Apple monitors the potential for increasing competition from trends such as AR technology, [✂].[469]

(b) Whilst some third parties (two connected devices providers and five app developers)[470] submitted that connected devices and AR/VR will have an increasing role in competition in Mobile Platforms over the next five years, most respondents[471] considered connected devices and AR/VR will have a limited impact on Mobile Platforms over the next five years. This was because of AR/VR devices not having a significant commercial impact,[472] or because of limited scope for future market disruption given this trend is largely a continuation of AR/VR trends in the past.[473]

6.137 Moreover, a few third parties submitted that the trend towards increasing usage of connected devices and AR/VR products may further entrench Apple's position in its wider Mobile Ecosystem.[474] A few third parties submitted that connected devices are likely to remain dependent on smartphone connections over the next five years,[475] such that Apple's control over this connection could enable it to raise barriers to competition in the supply of Mobile Platforms (for example due to the user lock-in effects of connected devices as discussed above in the section titled 'Competition from Google for end-users: End-user switching').[476]

Other market and technological developments

6.138 Third parties mentioned other developments that may have an impact on Mobile Platforms over the next five years, including advances in network connectivity, edge computing, cross-platform gaming (ie via portable handheld gaming devices) and emerging modes of accessing digital content (eg web apps and 'super apps'). The impact of the latter two trends is considered in the following chapter.

6.139 However, the evidence does not suggest that these developments, particularly those related to edge compute and network connectivity, are likely to significantly change Apple's position in respect of its Mobile Platform over the next five years:

[469] For example, an external report produced for Apple on its App Store portrayed augmented reality mobile gaming as a development that has been enabled and supported by the App Store. Source: Apple's internal documents: [✂]. Another of Apple's internal documents shows that Apple has monitored Google's investments in augmented reality. Source: Apple's internal documents: [✂]. Two additional Apple internal documents acknowledge that competition for 'AI/AR talent' is a risk in relation to its five-year outlook. Source: Apple's internal documents: [✂]. Finally, an Apple survey of iPad users suggests that Apple does monitor the potential for increasing competition arising from AR technology. Source: Apple's internal document [✂].
[470] 7 parties total. 6 parties' responses to section 69 notice: [✂]. 1 party's response to the CMA's invitation to comment: [✂] Financial services firm B (paragraph 28-29).
[471] 14 parties responses to section 69 notices: [✂]
[472] 4 parties total. 3 parties responses to section 69 notices: [✂]. 1 party's note of meeting: [✂]
[473] [✂] response to section 69 notice [✂].
[474] 2 parties responses to section 69 notices: [✂]. 1 party's note of meeting: [✂].
[475] [✂] response to section 69 notice [✂]; Google's response to section 69 notice [✂]; Note of meeting with [✂].
[476] [✂] response to section 69 notice [✂]; [✂] response to section 69 notice [✂]. Note of meeting with [✂]

(a) Third parties generally considered the developments in edge compute as part of the trends related to AI on mobile, which as discussed above, are unlikely to significantly weaken Apple's position in respect of its Mobile Platform.[477] This is because parties referred to how advancements in edge compute will facilitate processing for AI products and services (eg via on-device AI chips), such that integrating AI into mobile depends in part on a firm's ability to harness advances in edge compute.[478]

(b) Some third parties[479] mentioned advances in network connectivity (eg network slicing) but one party[480] noted that it is unclear when these trends will take place, such that it is unclear whether they will take effect soon enough to have a substantial impact over the next five years. In any case, no third party submitted that this trend is likely to diminish Apple's position in respect of its Mobile Platform or wider Mobile Ecosystem.[481] Further, a couple of third parties submitted that as the operating system provider Apple will remain in control of this development because Apple can control how third party connectivity providers interact with end-users on Apple mobile devices and potentially influence how those providers offer their services.[482]

Impact on overall position of Apple's Mobile Platform over the next five years

6.140 The evidence overall does not suggest that there are expected or foreseeable developments that are likely (whether individually or in combination) to be sufficient in scope, timeliness and impact to eliminate Apple's substantial market power in relation to its Mobile Platform over the next five years:

(a) Many respondents[483] who provided a view on the future of Mobile Platforms overall did not expect substantial change to Apple's position over the next five years.[484] Only two respondents (industry bodies) submitted explicitly that Apple does not have substantial market power and competition in Mobile Platforms is dynamic.[485]

[477] 6 parties responses to section 69 notices: [✂].
[478] 2 parties responses to section 69 notices: [✂].
[479] 3 parties responses to section 69 notices: [✂]. Parties responses to the CMA's invitation to comment: BT (paragraphs 5 and 7); Mobile UK (paragraphs 8-10); Three (pages 2-3).
[480] Vodafone's call note [✂].
[481] Although, note that one app developer submitted that, in relation to the impact of connectivity advances, Apple and Google are likely to leverage their resources to stay competitive but a failure to innovate could erode their position by 2030. [✂] response to section 69 notice [✂].
[482] Parties responses to the CMA's invitation to comment: Mobile UK paragraphs 8-10; BT paragraphs 5-8
[483] 10 parties' responses to section 69 notices: [✂]; 3 notes of meetings: [✂]; 3 parties responses to the CMA's invitation to comment: DMG Media (paragraph 2); Coalition for App Fairness (page 3); [✂] Financial Service Firm B (paragraphs 26-29).
[484] As well as asking stakeholders about specific market and technological developments, we asked third parties more generally how they expect Apple's position in Mobile Ecosystems will evolve over the next five years.
[485] CCIA's response to CMA's invitation to comment, page 3; Chamber of Progress' response to CMA's invitation to comment, page 2.

(b) In addition, submissions from many[486] third parties suggest that Apple's ability to leverage between different parts of its Mobile Platform and to adjacent markets is likely to increase over the next five years due to technological developments.[487]

(c) Our analysis of the internal documents submitted by Apple did not suggest that any future trends are likely to substantially disrupt the overall position of Apple's Mobile Platform over the next five years. Documents provided by Apple do not appear to identify any substantial threats to Apple's position.[488]

Provisional conclusion on competition from other Mobile Platforms

6.141 We provisionally conclude that Apple's Mobile Platform faces limited competitive constraint from other Mobile Platforms and we have not seen evidence of expected or foreseeable developments suggesting this is likely to change over the next five years. This is for the following reasons:

(a) Although there is evidence of competition between Apple's and Google's Mobile Platforms, the overall constraint imposed by Google is limited because Apple's and Google's Mobile Ecosystems have a different focus across the market, end-users are often "'sticky'" and disinclined to switch and revenue sharing agreements between Apple and Google limit their incentive to compete for users.

(b) Content providers typically distribute their content on both Google and Apple's Mobile Ecosystems in order to reach all mobile users. This means there is a limited constraint from content providers switching between them.

(c) Amazon is the only other Mobile Platform provider with a material share of supply in the UK. It provides a weak constraint on Apple as it only supplies tablets which are typically much cheaper than Apple's iPads and Amazon's tablets do not have access to the suite of Google's popular apps through GMS.

6.142 There are significant barriers to entry and expansion in providing a competing Mobile Platform and therefore Apple faces limited constraint from the threat of such entry or expansion occurring. The indirect network effects related to

[486] 19 Parties submissions. 8 parties' responses to section 69 notices: [✂]; 1 party's note of meeting: [✂]; 11 parties responses to the CMA's invitation to comment: Coalition for App Fairness (page 3); [✂] Financial Service Firm B (paragraphs 26-29); BBC (paragraph 25); Mozilla (page 7); [✂] Respondent B (pages 7-9); Three (page 1); Santander; Mobile UK (paragraphs 8-11); BT (paragraph 8); Radiocentre (paragraphs 1.5-1.7).
[487] We asked third-party stakeholders whether they expected technological developments will affect Apple's ability to use its position in relation to various components of its Mobile Platform (ie iOS or iPadOS, Safari and the App Store) to reinforce or improve its position in Mobile Platforms and related markets over the next five years.
[488] Apple's internal documents: dated July 2022 [✂] dated May 2024 [✂].

attracting native app developers to a new operating system are a particularly strong barrier.

6.143 Although certain expected or foreseeable market and technological developments such as AI, connected devices and AR/VR products may affect Apple's conduct in relation to its Mobile Platform, they are unlikely to significantly change Apple's position in respect of its Mobile Platform in the next five years.

7. SEMP: COMPETITION FROM ALTERNATIVES TO APPLE'S MOBILE CONTENT DISTRIBUTION

In this chapter we consider the competitive constraints on Apple's mobile content distribution within Apple's Mobile Ecosystem, and from non-mobile devices. Alternative methods of accessing content are available to users of Apple's Mobile Ecosystem, including alternatives to native apps and rival mobile browsers, and these may provide a competitive constraint on Apple's App Store and Safari mobile browser respectively. Similarly, non-mobile devices provide an alternative means for users to access content, and for content providers to distribute content, and therefore may provide a competitive constraint on Apple's mobile content distribution within its Mobile Ecosystem.

7.1 This chapter is structured as follows:

(a) We first consider the **competitive constraint from alternatives to Apple's native app distribution** both within Apple's Mobile Ecosystem and from non-mobile alternatives.

(b) We then consider the **competitive constraint from alternatives to Apple's mobile browser and browser engine** both within Apple's Mobile Ecosystem and from non-mobile alternatives**.**

(c) Finally, we set out our overall **provisional conclusion** on the competitive constraint from alternatives to Apple's mobile content distribution.

Competition from alternatives to Apple's Native App Distribution

This section considers the competitive constraints that Apple's App Store may face from alternative ways of distributing content on mobile devices within its Mobile Ecosystem, such as web-based content, emerging forms of distribution as well as from non-mobile platforms like gaming consoles.

We provisionally find that all of the above alternatives within Apple's Mobile Ecosystem as well as alternatives on non-mobile devices impose a limited constraint on Apple's App Store and we have seen no evidence of expected or foreseeable developments suggesting that this is likely to change over the next five years.

These provisional findings are consistent with our assessment in the previous chapter that Apple does not face strong competitive constraints to improve on outcomes for users and app developers through reductions in commission rates and / or improvements to quality. Furthermore, these provisional conclusions are consistent with our profitability analysis showing that Apple was and is expected to continue to make high profits and we have not seen evidence that Apple is eroding those profits by responding to competition, eg through price reductions and/or increasing investment in product and service improvements.

7.2 As set out in Chapter 2, most services accessed as apps on mobile devices are developed as dedicated native apps and downloaded using an app store controlled by the operating system provider such as the App Store on Apple's Mobile Platform.

7.3 There are other ways for users to access and for app developers to distribute native apps, including preinstallation of native apps by OEMs;[489] alternative app stores;[490] and sideloading.[491] However, Apple does not allow alternative native app distribution channels such as third-party app stores[492] and sideloading within its Mobile Ecosystem.[493] Apple submitted that it has no plans to change its policies on alternative app stores and sideloading in the UK by the end of 2030.[494] In addition, Apple also does not currently, and indeed never has, pre-installed any third-party apps on its mobile devices.[495]

7.4 Despite the above restrictions, Apple submitted that its App Store faces a competitive constraint from a range of alternate means of content distribution which are assessed further in this section. Our analysis covers both the extent to which these act as a competitive constraint now, and the potential for them to exert more of a constraint in the future:

(a) We first consider the extent of competitive constraints on the App Store from **web-based content distribution, such as web-apps, and PWAs.**

(b) We then consider the extent of competitive constraints on the App Store from emerging forms of content distribution such as **cloud-based gaming platforms and super apps** as well as **AI-based content distribution** within the Apple Mobile Ecosystem.

(c) We then consider the extent of competitive constraints from **non-mobile alternatives** such as gaming consoles.

(d) Finally, we draw **provisional conclusions** on the extent of competition that Apple's App Store faces within its Mobile Ecosystem.

7.5 Our assessment draws on analysis of usage data, evidence from Apple, evidence from third parties and our consumer survey.

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[489] Where device manufacturers can pre-install their own apps or apps from third-party app developers on their mobile devices which means those apps are available to users at the device set up.
[490] Where users can use more than one app store without switching their mobile device.
[491] Where an app developer's native app is downloaded by the user directly from the developer's web page or via peer-to-peer transfer.
[492] Clause 3.3.1.B of the Apple Developer Program License Agreement and clause 3.2.2.(i) of the App Review Guidelines (last accessed on 21 May 2025).
[493] Sideloading is a violation of the iOS and iPadOS Software License Agreement, such that Apple may deny services for Apple mobile devices that have sideloaded apps. Apple's response to section 69 notice [✂].
[494] Apple's response to section 69 notice [✂].
[495] Apple's response to section 69 notice [✂].

Competition from web apps

7.6 Web content can be made available to users through traditional websites, web apps or PWAs, all of which are typically enabled through a mobile browser.[496] In this section we focus mainly on web apps and PWAs rather than other web-based content (ie traditional websites) because web apps and PWAs have added functionality compared to traditional websites, making them more likely to be substitutable for native apps.

7.7 Apple submitted that:

(a) On iOS and iPadOS, app developers have multiple web-based distribution options, including web apps[497] and web browsers and that the App Store is 'constrained by these alternatives'.[498]

(b) Web apps and PWAs often have a similar appearance, user experience and functionality as a native app and developers can sell the same or very similar content via a traditional website as through a native app.[499]

(c) There are no factors that cause users to face difficulties in switching between using native apps and web apps or home-screen web apps on iOS or using a combination of these distribution methods.[500]

(d) It expects to continue to support tools for web apps and PWAs[501] and it will likely remain straightforward for users to access web apps and PWAs on iOS by the end of 2030.[502]

7.8 The evidence shows that within Apple's Mobile Ecosystem, web apps are used far less frequently than native apps. This is supported by data from Apple and from our consumer survey:

(a) Data from Apple in relation to the usage of PWAs[503] shows that the total number of PWA activations was estimated at [✂] [0 – 10] million in February 2025 across all Apple's mobile devices, and this was a slight increase from

[496] Note that web-based content can range from being very simple (eg static, non-interactive websites such as blogs) to very complex and interactive PWAs (eg sophisticated software products such as games). As explained in the section titled 'Competition from alternatives to Apple's Mobile Browser and Browser Engine', the users can interact with web content through in-app browsing, too.
[497] A 'web app' is software that is built and accessed using web technologies.
[498] Apple's response to section 69 notice [✂].
[499] Apple's response to section 69 notice [✂].
[500] Apple's response to section 69 notice [✂].
[501] A progressive web app is a web app that is installed on the home screen of a device and which has a user interface similar to a native app.
[502] Apple's response to section 69 notice [✂].
[503] Note that Apple's data was drawn from a [✂] sample of iOS devices in the UK. Apple's response to section 69 notice [✂].

[✂] [0 – 10] million activations in August 2023.[504] While we do not have equivalent data on native app usage on iOS, we expect the usage of native apps to be substantially higher than PWA activations. For example, in 2024 alone, there were [✂] [1 – 1.5] billion first time downloads of native apps and we would expect those native apps to be typically accessed multiple times by a user in the course of that period.

(b) The above data is broadly consistent with the evidence from our consumer survey which shows that while a proportion of users with an iOS smartphone do access content through web apps, their main way of accessing content remains through the App Store. Specifically, 92% of users with an iOS smartphone used the App Store and 30% used web apps on their current smartphone at any point in the past.[505] However, of the iOS smartphone users that used multiple methods for getting apps on their smartphones, 97% of iOS users stated that the App Store was their primary method and only 3% identified web apps as their primary method.[506]

7.9 The evidence suggests that for content providers, at present, web apps are not a viable substitute for native apps downloaded from the App Store. This is despite web apps in principle being an attractive option for content providers because they involve lower development and maintenance costs compared to native apps.[507] Specifically, 58 of 108 content providers we gathered evidence from indicated that web apps are not a viable substitute to the native apps,[508] and a number of these content providers indicated that substitutability is particularly limited in terms of functionality[509] and discoverability,[510] which are important factors for app developers' distribution choices.[511] Several content providers further submitted that functionality issues with web apps are due to restrictions that Apple has imposed on web browsers within its Mobile Ecosystem.[512]

[504] The number of PWAs activations was materially lower on Apple's tablets compared to Apple's smartphones, as set out in Annex A.
[505] Accent Mobile Consumer Survey, Figure 53.
[506] Accent Mobile Consumer Survey, Figure 54. A very small minority of iOS users did not use either method. These users are excluded from the base of this estimate.
[507] The content provider (in this case, a web developer) can develop one web app which can be used across browsers on any operating system due to the common standards of the open web whereas native apps need to be developed for each operating system separately.
[508] Of the remaining 50 content providers, 13 believed web apps were good substitutes and 37 gave no clear view. 58 parties total, split across CMA investigations. 21 responses in the context of the CMA's mobile ecosystem investigations including: 18 responses to section 69 notice; [✂] Epic's response to invitation to comment, dated 23 January 2025, page 2. [Epic.pdf]. 31 section 174 responses provided in the context of CMA's MEMS; [✂] 6 responses provided in the context of CMA's MBCG MI; [✂].
[509]Three app store providers and 21 native app developers submitted that web apps within Apple's Mobile Ecosystem have reduced functionality relative to native apps in terms of performance and access to the capabilities of the device they are running on. 18 responses to section 69 notices: [✂]; 2 responses to the CMA's ITC from [✂]. 4 calls: [✂].
[510] Five large app developers submitted that web apps suffer from reduced discoverability. 5 responses to section 69 notices [✂].
[511] For example, several app developers have indicated that functionality and discoverability is an important factor shaping their choices how to distribute their apps. 4 responses to section 69 notices [✂].
[512] 5 parties responses total. Including 2 parties responses to section 69 notices [✂]. As well as 3 parties responses from calls held with the CMA.

7.10 As set out in Annex A, the use of web apps has slightly increased over time. However, the evidence overall does not suggest that developments in web apps over the next five years are likely to significantly change the current position of Apple's App Store:

(a) Two OEMs and ten app developers submitted that web apps may advance technologically or increase in use and that this could reduce users' dependency on Apple's App Store[513] and a few app developers[514] submitted they may invest more in web apps if their performance improves sufficiently.

(b) However, five large app developers, one app store provider and one OEM submitted that they doubt web apps will become viable substitutes for native apps or be widely adopted by 2030.[515] Furthermore, the majority (32 out of 55) [516] of app developers indicated that they will continue to use the App Store as their primary distribution channel within Apple's Mobile Ecosystem over the next five years and only a small number of app developers (8 out of 55)[517] [518] expected to increase their use of web apps and/or alternative app stores, but only as a complementary distribution channel to the App Store. More generally, only a small proportion of content providers considered emerging modes of distributing digital content, including web apps, would have a substantial impact on competitive dynamics in Mobile Platforms over the next five years,[519] and many third parties indicated that they do not expect Apple's (or Google's) position in app distribution to significantly diminish over the next five years.[520]

(c) This is generally consistent with Apple's submissions and its internal documents from the last three years. Apple submitted that it cannot predict whether anything will change in relation to web apps as a potential constraint on the App Store by 2030.[521] In our analysis of Apple's internal documents we did not find evidence to suggest that Apple currently monitors the future impact of web apps on its Mobile Ecosystem.

[513] 12 responses to section 69 notices; [✂].
[514] 3 responses to section 69 notices; [✂] [✂].
[515] 7 responses to section 69 notices; [✂] [✂].
[516] 32 total including: 25 responses to section 69 notices; [✂]. Note several further third parties specified that this was dependent on there being no significant change to the options available to them due to regulatory intervention: 7 responses to section 69 notices [✂].
[517] 8 parties total. 7 parties responses to section 69 notice [✂]. Note of meeting with [✂].
[518] The remaining 15 out of 55 app developers gave no view.
[519] 5 parties responses to section 69 notices [✂]. For third parties who did not consider emerging modes of digital content to have a 'substantial' impact, see: 15 third-parties responses to section 69 notices [✂].
[520] 13 parties responses to section 69 notices [✂]. 2 notes of meetings with [✂]. 2 responses to the invitation to comment from Epic (page 9); Coalition for App Fairness ITC (page 3).
[521] Apple's response to section 69 notice [✂].

Competition from cloud-based gaming platforms and super apps within Apple's Mobile Ecosystem

7.11 Both cloud-based gaming platforms[522] and super apps are apps that can facilitate distribution of other apps and digital content within them. Therefore, at least in principle, both of these distribution methods replicate some of the functions of an app store, such as acting as a point of distribution for app developers within a given Mobile Ecosystem, allowing users to access content from more than one app developer and performing diverse tasks through a single app. However, cloud-based gaming platforms and super apps could only partially constrain the App Store insofar as they are used for distributing gaming apps or another subset of apps - ie cloud-based gaming cannot act as a substitute for the distribution of non-gaming apps on the App Store.

Competition from cloud-based gaming platforms

7.12 The evidence in the round shows that currently cloud-based gaming platforms impose a limited competitive constraint on the App Store.

(a) Apple identified cloud-based gaming apps as one of the categories of platforms that imposes a competitive constraint on the App Store.[523] Apple made changes to the App Store Review Guidelines in January 2024, which enable cloud-based gaming platforms to provide multiple streaming games within a single app.[524]

(b) However, only two app developers we spoke to identified cloud-based apps as a distribution channel that they use for reaching users on Apple's Mobile Ecosystem in the UK.[525] One of these app developers submitted that this distribution method does not help reach a 'commercially significant number of users' and that [✂]% nearly all of its mobile app revenue globally comes from the App Store and Google's Play Store.[526]

[522] Cloud-based apps are apps which do not include the majority of their functionality in the app files downloaded onto the device, but stream their content from the cloud. An example of this is cloud gaming apps, which run video games using storage and computing power hosted in the cloud, streaming only the video and audio output of the game to the device. This allows users to play technologically complex games on less powerful devices that may otherwise lack the computing power or storage to support them – such as mobile devices. See for example, CMA's Microsoft / Activision Blizzard merger inquiry (Microsoft/Activision) final report paragraph 4.32.

[523] Apple's response to section 69 notice [✂].

[524] Prior to 25 January 2024, Apple's App Review Guideline 4.7 required each streaming game to be submitted to the App Store for review as an individual app. There were no cloud gaming services native apps on Apple mobile devices in the UK and it was only possible for users to access cloud gaming on Apple mobile devices through web apps. Some CGSPs submitted that Apple's previous Guideline 4.7 amounted to a de facto ban on cloud gaming services being offered as a native app on Apple mobile devices. On 25 January 2024, Apple stated publicly that 'developers can now submit a single app with the capability to stream all of the games offered in their catalog'. We understand these changes effectively allowed a single app to stream multiple games without the need to submit each game separately for the App Review process and loosened a restriction on apps which distribute code. Apple's response to section 69 notice [✂]; Mobile Browsers and Cloud Gaming Market Investigation Final Report, paragraphs 12.93 to 12.96.

[525] 2 parties responses to section 69 notices [✂].

[526] [✂]'s response to section 69 notice [✂].

(c) In addition, the major cloud-based gaming platforms, such as Amazon Luna, NVIDIA's GeForce Now and Microsoft's Xbox Cloud Gaming are only available within Apple's Mobile Ecosystem as a web app. Evidence suggests that as a web app, a cloud-based gaming platform is affected by a range of limitations relative to native apps,[527] in addition to those discussed above the section 'Competition from web apps'.

(d) It is also consistent with our analysis of Apple's internal documents from the last three years in which we found no evidence that Apple monitors cloud gaming as a competitive constraint to its app distribution in the UK.

7.13 Further, the evidence does not indicate that the developments in cloud-based gaming platforms are likely to significantly change the App Store's position in the next five years:

(a) A number of third parties submitted that cloud gaming is likely to grow over the next five years,[528] and this is broadly consistent with the findings in the CMA's MBCG MI.[529] Further, some third parties considered that the growth in cloud gaming will impact or has the potential to impact the App Store's position.[530]

(b) However, no party we spoke to indicated that cloud-based gaming platforms are likely to become a substantially stronger competitive constraint on the App Store. Apple submitted that the future growth of cloud gaming apps and how much they will impact overall competition is 'unclear' and that cloud gaming in particular faces 'challenges across all platforms'.[531] As noted above, only a small proportion of content providers considered that emerging modes of distributing digital content such as cloud-based gaming platforms would have a substantial impact on competitive dynamics in Mobile Platforms over the next five years.[532] Additionally, some third parties suggested this may be due to Apple's ability to restrict the emergence of cloud-based app distribution on its Mobile Ecosystem.[533]

(c) Finally, as we explain above in the section 'Competition from web apps', a large number of third parties expect that Apple's App Store will remain the

[527] [✂] submitted that Apple's (and Google's) restrictions on alternative distribution and alternative billing systems have prevented it from offering a fully functioning cloud game streaming service to users. [✂]'s response to section 69 notice [✂]. [✂] submitted evidence that cloud gaming web apps have many limitations in terms of functionality relative to native apps [✂]'s response to section 174 notice in relation to MBCG MI [✂].
[528] 6 parties responses to section 69 notices: [✂]; 2 notes of meetings [✂].
[529] CMA, Mobile Browsers and Cloud Gaming Market Investigation, Final decision report, paragraphs 12.21 and 12.26 to 12.32.
[530] 4 responses to section 69 notices [✂]. Note of meeting with [✂].
[531] Apple's response to section 69 notice [✂].
[532] 5 parties responses to section 69 notices [✂]. For third parties who did not consider emerging modes of digital content to have a 'substantial' impact, see: 15 third-party responses to section 69 notices [✂].
[533] 2 responses to [✂] of section 69 notices [✂].

key distribution channel they will continue to use within Apple's Mobile Ecosystem and that Apple's position in app distribution will not significantly diminish over the next five years.

Competition from super apps

7.14 For the purpose of this investigation, we have referred to a super app as 'a mobile application that combines multiple services into one platform, allowing users to perform diverse tasks within a single application'.

7.15 Overall, super apps are significantly less prevalent in the UK compared to areas such as East and Southeast Asia where super apps offer a much wider and more complete range of services such as WeChat and Grab and are widely used. Whilst permitted on Apple's Mobile Ecosystem,[534] there are generally only a few examples of native apps which could potentially be considered as a super app in the UK. Some market players, like Uber, TikTok and Facebook, have expanded their in-app offerings beyond one distinct service in the UK and therefore could be said to be moving towards a 'super app' model.

7.16 The evidence suggests that super apps do not act as a competitive constraint on the App Store:

(a) Apple did not explicitly submit that super apps act as a competitive constraint on the App Store. Consistent with that, in our analysis of the internal documents from Apple we found no evidence to suggest that Apple monitors the competitive constraint from super apps.[535]

(b) No app developer identified super apps as a distribution channel that they use for reaching users on Apple's Mobile Ecosystem in the UK or a competitive constraint on the App Store. Two third parties[536] submitted that Apple has restricted the development of super apps in the past and another large app developer[537] submitted that the structure of Apple's in-app purchase commission rates can deter app 'consolidators' like super apps.[538]

(c) Finally, we note that super apps can only be distributed through the App Store within Apple's Mobile Platform, which limits the extent to which they

[534] Apple submitted that in 2017 and 2024, it made changes to the App Store Review Guidelines in order to enable and provide greater flexibility to app developers offering certain super apps. Specifically, Apple submitted that it changed its App Store Review Guidelines in 2017 to allow HTML5-based mini-apps and games to be distributed within native Apple apps, whereas this was previously disallowed. We understand that embedding this type of in-app software allows apps to function in a similar manner to 'super apps' on Apple mobile devices in the UK. Apple also submitted that in 2024, Apple introduced additional changes that provided greater flexibility to this category of app. Apple's response to section 69 notice [✂].

[535] We have only one reference to apps which may be considered as super-apps in Apple's internal documents from the last three years. This document, an internal email from 2023, contained [✂]. Apple's internal document [✂].

[536] Note of meeting with [✂] and 2 responses to section 69 notices [✂].

[537] [✂].

[538] This is because super apps are more likely to be subject to the headline commission rate of 30% and less likely to benefit from the reduced rates of 15% which is charged on revenue up to $1m pa.

can act as a substitute and a competitive constraint to the App Store (eg in relation to commission rates offered to app developers).

7.17 While some app developers might be shifting towards a super app model, there is no indication that the developments related to super apps are likely to significantly change the App Store's position over the next five years:

(a) Apple's submissions[539] as well as submissions from 13 third parties[540] generally indicate that the future growth of super apps will be modest or uncertain. Only one smaller browser provider, an OEM and two app developers submitted that they expect usage of super apps to increase by 2030.[541]

(b) Furthermore, as noted in the section 'Competition from web apps' above, only a small proportion of content providers considered emerging modes of distributing digital content, including super apps, would have a substantial impact on competitive dynamics in Mobile Platforms over the next five years[542] and most app developers expected the App Store to remain the key distribution channel within Apple's Mobile Ecosystem.

Competition from AI-based content distribution

7.18 The evidence in the round does not indicate that AI-related developments are likely to significantly disrupt the App Store's position over the next five years:

(a) Only some parties submitted that AI may lead to alternative distribution methods emerging for digital content on mobile or that AI agents may reduce users' reliance on native apps[543] which at least in principle could weaken the position of the App Store.

(b) However, one large app developer submitted that AI assistants are unlikely to replace the roles of apps or disrupt the standard model of Mobile Platforms (ie an operating system with native apps) in a widespread or commercialised manner in this period.[544] Additionally, an OEM submitted that integrating AI tools in the App Store may provide Apple with greater control over how apps are presented to end-users,[545] thus reinforcing its current position.

[539] Apple's response to section 69 notice [✂].
[540] 13 responses to section 69 notices [✂].
[541] This is explored in greater detail in the 'Competition on Android' section of the Browsers section of this paper. 4 responses to section 69 notices [✂].
[542] 5 parties responses to section 69 notices [✂]. For third parties who did not consider emerging modes of digital content to have a 'substantial' impact, see: 15 third-party responses to section 69 notices [✂].
[543] 5 responses to section 69 notices [✂].
[544] [✂]'s response to section 69 notice [✂].
[545] [✂]'s response to section 69 notice [✂].

(c) Apple submitted that AI-related technologies could enable it to enhance its App Store's existing services and features,[546] provide an interface for users to perform tasks and as such impact how users interact with their mobile devices and services (eg grocery ordering apps and browser apps) and connect with app developers.[547] In our assessment of Apple's internal documents from the last two years, we found only limited mention of AI developments in the context of competition facing the App Store. Apple submitted some third-party reports that monitored developments in AI and one document referred to [✂].[548] Apple's internal documents do not suggest these developments are likely to have a material impact on the App Store's position.

(d) We also understand that as native apps, any third-party AI-based content distribution models will remain reliant on Apple's App Store for distribution within Apple's Mobile Ecosystem and that their access to inputs such as on-device AI compute will likely be controlled by Apple as the operating system provider. This is consistent with our provisional view set out in section 'Competition to Apple's Mobile Platform arising from wider technological and market developments' in Chapter 6, suggesting that Apple's Mobile Platform and its wider Mobile Ecosystem, may ultimately benefit from AI-related developments rather than experience a weakening of its position.

Competition from non-mobile alternatives

7.19 Users access content across both mobile and non-mobile devices, including gaming consoles, televisions and desktop computers. We have therefore considered the extent to which non-mobile alternatives provide a competitive constraint to Apple's App Store.

7.20 Apple submitted that it competes against PC and console app platforms such as Microsoft's Xbox, Sony's PlayStation, and the Nintendo Switch[549] particularly as users are able to choose from several devices to access similar content (for example, access gaming content on gaming consoles).[550] Apple further submitted that an increasing number of non-mobile devices other than desktop computers and gaming consoles (eg notebooks, televisions, cameras, cars, speakers and eBook readers) are becoming methods of distributing apps to consumers and that these devices also impose a competitive constraint on Apple's Mobile Platform.[551]

[546] For example, by enhancing developer tools, enabling more efficient content discovery with personalised user experiences and facilitating more 'intelligent, context-aware and proactive' interactions between app developers and users.
[547] Apple's response to section 69 notice [✂].
[548] Apple's internal documents: [✂].
[549] Apple's response to section 69 notice [✂].
[550] Apple's response to section 69 notice [✂].
[551] Apple's response to section 69 notice [✂].

7.21 Consistent with Apple's submissions, several third parties submitted that they distribute digital content for both mobile devices and other devices such as AR/VR devices and gaming consoles,[552] and some third parties submitted that users are increasingly accessing and consuming similar content across platforms, including both off- and on-mobile devices.[553] However, third-party evidence overall demonstrates that non-mobile gaming and content distribution is viewed as a complementary, separate category of content distribution, rather than a viable substitute to the App Store:

(a) First, some app and games developers submitted that mobile devices are generally used on the go, but other devices are typically used in a static location and have key differences in functionality such as screen sizes and keyboards.[554] Therefore, they generally have different – albeit often complementary – use cases (eg in a maps app designed for hiking, users might plan their route in greater detail on desktop devices before navigating the route 'on the go' with the mobile app). This is broadly consistent with user research indicating that mobile and desktop browsing fulfil different use cases, as discussed below in the section 'Competition from alternatives to Apple's Mobile Browser and Browser Engine'.

(b) Second, a few gaming developers also submitted that certain games work best for mobile devices or may not function properly on other devices such as PCs or on portable gaming consoles. For example, certain games are embedded in social media apps and rely on mobile devices' call functionality, and certain games require access to functionality such as GPS and the device's camera.[555]

(c) Third, a few games developers told us that there are differences in the user bases and reach of distribution methods on and off mobile devices.[556] One games developer explained that there is likely to be more overlap between the user bases for mobile portable gaming devices (eg Nintendo Switch) and PC games than there is for either of these two user groups and mobile device gaming users. This is consistent with evidence from our consumer survey, which found that only 24% of respondents who had an Apple smartphone also had a gaming console.[557]

(d) Fourth, one gaming distribution platform provider submitted that mobile devices are currently siloed from gaming on non-mobile devices because Apple imposes various restrictions that make its Mobile Ecosystem less

[552] 4 parties responses to section 69 notices: [✂]; 2 parties submissions [✂]; 2 notes of meetings [✂].
[553] [✂] note of meeting [✂]; [✂]'s submission [✂]; [✂]'s submission [✂].
[554] [✂]'s response to section 69 notice [✂]; 3 notes of meetings [✂].
[555] 2 notes of meetings: [✂].
[556] 2 notes of meetings; [✂]. [✂]'s response to supplementary questions [✂].
[557] Accent Mobile Consumer Survey, Figure 61.

accessible to third parties. This includes restrictions on alternative methods of app distribution and preventing app developers from steering users to external websites for app discovery and purchases.[558] We received further complaints on Apple's steering restrictions from other app developers, which suggests this may be acting as a barrier to cross-platform integration for other content providers (including outside of gaming).[559]

(e) Finally, some content will not always be available across native apps on mobile devices and other platforms. For example, low-end games for mobile devices may not be suitable for game consoles which usually offer high-end games that require considerable investment.

7.22 Whilst some third parties submitted that cross platform integration might further increase in the future,[560] we have seen no third-party evidence to suggest that this development is likely to significantly change Apple's position in native app distribution over the next five years.

7.23 In addition, our analysis of Apple's internal documents shows that [✂],[561] [✂].[562] However, the documents Apple submitted [✂].

Provisional conclusion on competition from alternatives to Apple's Native App Distribution

7.24 Overall, our provisional view is that the alternatives available within Apple's Mobile Ecosystem, such as web-based content distribution, cloud-based gaming platforms and super apps impose only a weak competitive constraint on the App Store and we have not seen evidence of expected or foreseeable developments suggesting that this is likely to change significantly over the next five years. This is supported by the evidence showing very limited usage of these methods. While the usage of some of these methods such as web apps may have exhibited some growth, evidence overall suggests that these developments, the growth of cloud-based gaming or the emergence of super-apps or AI-based content distribution methods are likely to significantly change the App Store's position over the next five years.

7.25 Similarly, we provisionally conclude that the App Store faces limited competitive constraint from non-mobile content distribution alternatives which are typically seen as complements rather than substitutes to the App Store. The evidence in the round suggests that on-mobile and off-mobile content distribution are generally considered to be complements rather than substitutes, even though these two

[558] [✂]'s submission [✂].
[559] Parties' responses to section 69 notices: [✂]; [✂]'s submission [✂].
[560] Note of meeting [✂]; [✂].'s submission [✂].
[561] Apple's internal documents; [✂].
[562] Apple's internal documents; [✂].

channels (particularly in relation to gaming content), due to their complementarity, have become more integrated over time.

Competition from alternatives to Apple's Mobile Browser and Browser Engine

In the previous Chapter, we provisionally found that Apple's Mobile Platform faced only limited competition from rival Mobile Platforms. As part of this assessment, we considered the extent to which Apple competes with other Mobile Platforms to attract web developers and found that, as web content is made broadly available by content providers, Apple does not compete for web content to be made available on its Mobile Platform.

In this Chapter we are considering the extent to which Apple faces competition within its Mobile Ecosystem from alternatives to its mobile browser, Safari, and its mobile browser engine, WebKit. We also consider the extent of competition that Safari and WebKit face from non-mobile alternatives.

We find that Safari faces limited competitive constraints and this is unlikely to change over the next five years. Although other mobile browsers are available on Apple's Mobile Ecosystem, these are limited by several barriers to entry and expansion, and Safari's consistently high share of supply indicates that these are a weak constraint. Apple faces no competition on its Mobile Ecosystem to its browser engine WebKit, and its provision of in-app browsing. Alternatives to mobile browsers, namely native apps, AI tools, and desktop browsing, only provide a limited competitive constraint for a limited set of use cases.

7.26 Our assessment of the competitive constraint Apple faces from alternatives to Safari and WebKit – both now and over the next five years – considers the following topics in turn:

(a) **Competitive dynamics** in mobile browsing.

(b) **Shares of supply** in mobile browsing within Apple's Mobile Ecosystem.

(c) The **competitive constraints** on Apple's mobile browser, browser engine, and in-app browsing implementations.

(d) **Barriers to entry or expansion** faced by rivals.

(e) **Alternatives to mobile browsing,** both within Apple's Mobile Ecosystem and from non-mobile devices.

(f) **Provisional conclusions** on the competition Apple faces from alternatives to its mobile browser Safari, and its mobile browser engine WebKit.

7.27 We assess the competitive constraints on Apple's mobile browser, browser engine, and in-app browsing implementations separately. We focus primarily on competition at the mobile browser level, since this is where the competition for users, and monetisation of mobile browsing, primarily take place. However, we note that there are interlinkages between competition between mobile browsers, and competition in browser engines and in-app browsing. For example, greater use of a provider's browser engine or in-app browsing implementations will increase its share of web traffic, thereby providing advantages in terms of web compatibility which will benefit its browser.

7.28 Our assessment draws on analysis of usage data, evidence from Apple, evidence from third parties, internal document evidence, and consumer research.

Competitive dynamics in mobile browsing

7.29 Before discussing the evidence on competition from alternative browsers and browser engines, we provide context on the competitive dynamics in mobile browsing. Mobile browsers are generally offered free of charge to users. They are monetised in various ways, including through agreements with search engine providers (whereby search advertising revenue is shared by a search engine provider with the browser developer), advertising, or premium services such as built-in VPNs. Some browser developers offer browsers to support other products or services they offer, such as mobile devices (eg Apple and Samsung), or search engines (eg Google, Microsoft, and DuckDuckGo). Mobile browser developers compete for users to increase their share of web traffic and therefore generate greater revenue (or for alternative motivations such as promoting their other products eg search engines).

7.30 Evidence from browser developers indicates that the key parameters of competition between browsers include security, privacy, speed, compatibility with web content, and innovative features.[563] The quantitative research carried out by Verian asked respondents for the reasons for using their preferred browsers. The most commonly selected answers were familiarity, ease of use, brand, using the same browser as on other devices, and access to saved information such as passwords and bookmarks.[564]

7.31 Competition for users takes place at the browser level. Browser engines compete to be chosen by browser developers as the browser engine on which to base their browser. The parameters of competition for browser engines are therefore similar, as the features that are important to users in a browser, will also be important to a browser developer in a browser engine. In addition, if a browser engine is used by

[563] 5 responses provided in the context of CMA's MEMS; [✂].

[564] Verian Group UK (2024), Mobile Browsers Quantitative Consumer Research, Figure 6.5 Link to Verian Final Report. Other available options were speed, stability, compatibility, design, security features, privacy features, fewer adverts, and availability of extensions.

more browser developers, it will increase its share of web traffic, which brings benefits as it will lead to more web developers making their content compatible with that browser engine.

7.32 Both mobile browsers and browser engines seek to attract the largest possible range of web developers and online content providers. Although in theory web content is accessible through any browser or browser engine, issues may exist where web content is not fully compatible with a given browser. By having a large number of users or share of web traffic, browsers and browser engines are more likely to be prioritised for compatibility by web developers. Browsers and browser engines can also seek to attract web developers by offering new, innovative features.

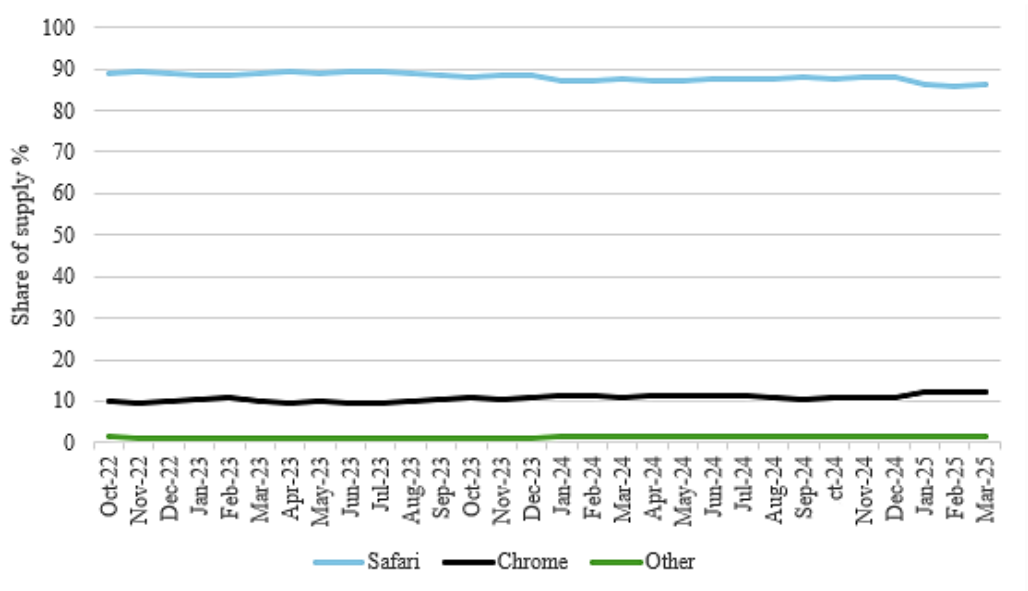
Shares of supply

7.33 In this section, we analyse data on shares of supply for Mobile Browsers and Mobile Browsers Engines. We find that Safari has held an extremely high and stable share of supply over a substantial period which suggests that it is subject to limited competition within Apple's Mobile Ecosystem.

7.34 Many mobile browsers are available to users on Apple's Mobile Ecosystem. This includes Apple's Safari, Google's Chrome, and Mozilla's Firefox.

7.35 Annex A describes shares of supply in mobile browsers on Apple's Mobile Ecosystem in more detail. In March 2025, Safari had a web traffic share of supply of 86% on Apple's Mobile Ecosystem in the UK. Chrome had a share of supply of 12%, with smaller browsers making up the remaining 2%. These shares of supply have remained similar over the period for which data is available (October 2022 to March 2025, see figure 7.1).

Figure 7.1: UK mobile browser shares of supply on Apple Mobile devices from October 2022 to March 2025 using Cloudflare Radar data on web traffic



Source: Cloudflare Radar

Competitive constraints on Apple's mobile browser, browser engine and in-app browsing

7.36 We have found that Safari has held a high and stable share of supply within Apple's Mobile Ecosystem over a significant period of time and that this may indicate that Apple faces limited constraint from alternative mobile browsers. In this section we consider the evidence on competition from competing mobile browsers, browser engines and in-app browsing implementations. We find that Safari and WebKit face only limited competitive constraints.

Competition from rival mobile browsers

7.37 In this section we consider competition from alternative mobile browsers within Apple's Mobile Ecosystem and find that Safari faces limited constraints. Whilst there is uncertainty about how competition will develop, particularly with regard to AI, the evidence does not indicate that these developments are likely to significantly change Apple's position in relation to its Mobile Platform in the next five years.

7.38 Apple submitted that competition among mobile browsers on its Mobile Ecosystem 'is, and will remain, vigorous', with Chrome a particularly strong competitor:

(a) It stated that there are more than 100 mobile browsers available, and that users can easily download new mobile browsers and switch their defaults. As a result, Apple consistently offers new features, innovations and performance

enhancements to ensure that Safari maintains its competitive edge against competing browsers.[565]

(b) It stated that in particular it faces strong competition from Google's Chrome Browser. Apple stated that [✂].[566]

7.39 Google submitted that Chrome has strong incentives to win users from Safari within Apple's Mobile Ecosystem, and competes strongly with significant investment and marketing efforts.[567] Internal documents from Google are also consistent with it competing for users within Apple's Mobile Ecosystem.[568]

7.40 However, we provisionally consider that there are limits to the extent to which alternative mobile browsers provide a competitive constraint on Safari:

(a) As described above, Safari has had a consistently high share of supply for many years. This is consistent with Safari facing limited competitive constraints.

(b) As described in more detail in the 'Barriers to entry and expansion for rival browsers on Apple's Mobile Ecosystem' section below, evidence shows that rival mobile browsers face several barriers to entry and expansion on Apple's Mobile Ecosystem, which limit the competitive constraint they impose on Safari. These barriers also impact Google, and it submitted that [✂].[569]

(c) As described in the 'Competition from Google for end-users: Impact of Apple's agreements with Google' section of Chapter 6, the Information Services Agreement or 'ISA', between Apple and Google also serves to limit the competitive constraint that Chrome imposes on Safari within Apple's Mobile Ecosystem. In this agreement Google has agreed to pay Apple a significant percentage of its advertising revenue for web searches that take place via Safari (36%), and a lower but similar share for web searches that take place via Chrome ([✂]) on Apple's Mobile Ecosystem, and requires Apple to set Google as the default search engine on Safari for all its mobile devices. As a result, the financial incentives for Apple and Google to compete in mobile browsers on Apple's Mobile Ecosystem are dampened.[570]

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[565] Apple's response to section 69 notice [✂]; Apple's submission [✂].
[566] Apple's response to section 69 notice [✂].
[567] Google response to the CMA's MBCG MI PDR, 9 January 2025, paragraphs 10, 22, and 23 [link].
[568] A Google internal document presenting research on mobile users benchmarked Chrome's perceived strengths and weaknesses against Safari. [✂]; Another internal document monitoring Chrome's browser competition focused on Safari over other smaller competitors. [✂];
Another internal document detailing a 'situation assessment' compared Chrome and Safari's features. This document showed that the EU Browser choice screen had led to a large increase in Chrome usage on iOS in the EU. [✂].
[569] Google's response to section 69 notice [✂].
[570] See MBCG MI final report, paragraphs 9.1-9.5. [link]

(d) Internal documents provided by Apple on competitive trends for Safari on Apple's Mobile Ecosystem are consistent with it facing limited competitive constraints. The internal documents provided do not consider competition from rival mobile browsers, [✂].[571]

7.41 Further, evidence from Apple, along with many third parties, does not suggest that AI and other developments will be likely to significantly change Safari's position on Apple's Mobile Ecosystem over the next five years:[572]

(a) Apple submitted that future developments will intensify competition. It stated that AI will become a 'key dimension of competition for mobile browsers', [✂].[573]

(b) Google submitted that mobile browsers 'will need to keep up the rapid pace of innovation brought about by advancements in AI.' It stated that OpenAI and Perplexity have announced browsers which may fundamentally change how mobile browsers are used.[574]

(c) OpenAI submitted that its 'Operator' product is 'an agent that can go to the web to perform tasks for the user.'[575] It described Operator as [✂]. It stated that Operator [✂]. It stated that [✂].[576]

(d) Several third parties submitted that AI could impact competition in mobile browsers over the next five years. These third parties submitted that AI could significantly change how users interact with the web and therefore disrupt current market positions, however they indicated that this was uncertain.[577]

(e) One of these third parties submitted that any impact of AI on Apple's market position is likely to be limited due to Apple's control of its Mobile Ecosystem.[578]

(f) Most third parties submitted that they did not expect significant changes in competition in mobile browsers over the next five years (whether due to AI or other technological developments).[579]

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[571] In the internal documents provided by Apple, a single internal document considered competitive trends over time, [✂]; [✂].
[572] The competitive constraint from AI-based alternatives to browsers eg chat-bots, is considered below.
[573] Apple's response to section 69 notice [✂]; Apple's submission [✂].
[574] Google's submission [✂].
[575] OpenAI's response [✂] to section 69 notice [✂].
[576] OpenAI's response [✂] to section 69 notice [✂].
[577] 9 responses to section 69 notices; [✂].
[578] [✂]'s response [✂] to section 69 notice [✂].
[579] 22 responses to section 69 notices [✂].

(g) Internal documents from Apple and Google show that whilst the use of AI by competitors is monitored, it is [✂].[580]

7.42 Our provisional view of the above evidence on AI is that it is mixed: whilst a few third parties state that AI could potentially have an impact on competition in mobile browsers, more third parties did not mention it as a potential significant development, and the extent of any impact within the next five years is presently highly uncertain. In addition, through its current position with Safari, and its control of its Mobile Ecosystem, Apple will continue to benefit from advantages such as pre-installation and default status, which are likely to limit the ability of new entrants to compete.

Competition from rival mobile browser engines

7.43 In this section, we consider the competitive constraint on WebKit from alternative browser engines within Apple's Mobile Ecosystem. On Apple mobile devices, all mobile browsers are required to use Apple's WebKit browser engine (ie as a result of the WebKit restriction), as specified in Apple's App Store Review guidelines.[581] Apple therefore does not face competition from rival mobile browser engines on its Mobile Ecosystem. This position will not change unless Apple lifts its total prohibition on the use of alternative browser engines on its Mobile Ecosystem.

Competition from rival in-app browsing implementations

7.44 Finally, we consider the competitive constraint on Apple from alternative in-app browsing implementations within Apple's Mobile Ecosystem and find that Apple faces limited constraints. On Apple's mobile devices, app developers have two options for implementing in-app browsing, both of which are provided by Apple and based on the WebKit browser engine.[582] Apple therefore does not face competition in the provision of in-app browsing implementations on its Mobile Ecosystem. This position will not change unless Apple lifts its total prohibition on the use of alternative in-app browsing implementations on its Mobile Ecosystem.

Barriers to entry and expansion for rival browsers on Apple's Mobile Ecosystem

7.45 We have found that Safari and WebKit have held a high and stable share of supply within Apple's Mobile Ecosystem over a significant period of time and that Apple

[580] Apple monitors AI developments in relation to browsers, however AI is identified as a competitive threat only in limited ways. [✂]; Google monitors AI developments holistically focusing on [✂] as competitors. [✂] browsers are referenced, but AI is mostly considered [✂].
[581] Apple, App Review Guidelines, not dated, accessed by the CMA on 15 May 2025 [link]; The WebKit restriction is specified in guideline 2.5.6. More specifically, all apps which browse the web, including standalone mobile browsers and in-app browsing, must use WKWebView, the framework provided by Apple and based on WebKit.
[582] App developers may use the system webview, WKWebView, or the system view controller, SFSafariViewController. See MBCG MI final report, paragraph 7.7. [link] Although Apple submitted that a third option, Custom SDK, is available, it had not identified any use of this option by developers.

faces limited constraints from alternative mobile browsers, browser engines and in-app browsing implementations. This section considers to what extent barriers to entry and expansion for rival mobile browsers and browser engines within Apple's Mobile Ecosystem may limit the competitive constraint on Apple, focusing on the following:[583]

(a) Low user awareness and engagement

(b) The WebKit restriction

(c) Access to functionality

(d) Choice architecture

(e) Restrictions on in-app browsing

Low user awareness and engagement

7.46 In this section, we consider whether low user awareness of alternative mobile browsers (and the unique functionalities or features that each of them has) may act as a barrier to entry and expansion for rival mobile browsers within Apple's Mobile Ecosystem. We find that the evidence indicates that users generally lack awareness and engagement with the topic of mobile browsers and this is a significant barrier to entry as it may limit the likelihood of a consumer downloading a new mobile browser or changing their default mobile browser. This creates a barrier to smaller or lesser-known browsers competing effectively with Safari, particularly in light of choice architecture practices on Apple's Mobile Ecosystem described below. It therefore limits the competitive constraint on Safari.

7.47 Apple submitted that research by Verian suggests that about 95% of iOS users are aware of alternative browsers given that they had heard of two or more browsers when prompted. It also stated that most Safari users simply prefer Safari over other mobile browsers or see no reason to switch to another one.[584]

7.48 We consider that the quantitative research carried out by Verian indicates that user engagement with mobile browsers is generally low, with most users (70%) having rarely or never engaged with the topic of mobile browsers previously,[585]

[583] Barriers to entry that could impact a new entrant in Mobile Ecosystems looking to provide access to web content, by either gaining access to an existing browser or developing its own mobile browser are considered above in the 'Barriers to entry and expansion in Mobile Platforms' section of Chapter 4. As described above, Apple's policies currently prevent the entry of rival mobile browser engines or in-app browsing implementations on Apple's Mobile Ecosystem. We therefore do not discuss potential further barriers to entry and expansion for these products.
[584] Apple response to the CMA's MBCG MI PDR, 9 January 2025, paragraph 131 [link]
[585] Verian Group UK (2024), Mobile Browsers Quantitative Consumer Research, Figure 3.6 Link to Verian Final Report

most users relying on pre-installed browsers,[586] and most users having not changed their default smartphone browser.[587]

7.49 Similarly, the qualitative research carried out by Verian found that there is low engagement with mobile browsers,[588] awareness of alternative browsers is low,[589] and respondents had difficulties working out how to change their default browser.[590]

The WebKit restriction

7.50 In this section, we consider whether the WebKit restriction may act as a barrier to entry and expansion for rival mobile browsers within Apple's Mobile Ecosystem. We find that the WebKit restriction restricts the ability of rival mobile browsers to innovate and develop features, and increases their costs. It therefore creates a barrier to entry and expansion for rival mobile browsers on Apple's Mobile Ecosystem and limits the competitive constraint on Safari.[591]

7.51 Apple submitted that its improvement of WebKit on iOS and iPadOS lowers barriers to entry and expansion by 'saving browser developers the considerable resources required to develop and maintain a safe, secure, and performant browser engine.'[592] It submitted that WebKit permits for substantial differentiation between mobile browsers, allowing developers to build features and interfaces on top of WebKit, while upholding Apple's privacy and security protections.[593]

7.52 However, substantial evidence from third party browser developers shows that the WebKit restriction creates barriers to entry and expansion for mobile browsers on Apple's Mobile Ecosystem:

(a) It restricts their ability to innovate and develop features for their mobile browsers on Apple's Mobile Ecosystem. Several browser developers provided examples of features that they were unable to implement, or had more difficulty in implementing, on Apple's Mobile Ecosystem, as a result of their inability to use an alternative browser engine or to modify WebKit. This includes features for web apps, which could provide an alternative to native apps for content providers.[594]

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[586] Verian Group UK (2024), Mobile Browsers Quantitative Consumer Research, Figure 6.3. Link to Verian Final Report
[587] Verian Group UK (2024), Mobile Browsers Quantitative Consumer Research, Figure 9.2. Link to Verian Final Report
[588] Verian Group UK (2024), Qualitative Research, slide 10. [link]
[589] Verian Group UK (2024), Qualitative Research, slide 10. [link]
[590] Verian Group UK (2024), Qualitative Research, slide 10. [link]
[591] We note that development costs, and indirect network effects linked to web compatibility, could constitute barriers to entry for rival mobile browsers on Apple's Mobile Ecosystem. However, the WebKit restriction, by limiting the extent to which browser vendors can modify and differentiate their browsers, currently limits the impact of these barriers. We have therefore not considered them in detail in this report.
[592] Apple's submission [✂].
[593] Apple response to the CMA's MBCG MI Working Papers 1-5, 3 September 2024, paragraph 78. [link]
[594] 8 responses from 7 respondents provided in the context of CMA's MBCG MI; [✂]; 1 response to CMA working papers; Google response to the CMA's MBCG MI Working Paper 2 [✂].

(b) It means that app developers are prevented from developing their own in-app browsing implementations using their own browser engines. One app developer [✂] submitted that this prevents both mobile browsers and in-app browsing on iOS from competing more effectively with Safari. This app developer submitted that [✂].[595]

(c) It increases their costs by requiring them to develop a WebKit-based version of their browser to enter as a mobile browser on Apple's Mobile Ecosystem, as opposed to being able to use the same browser engine that they use on other platforms. This means they sometimes have to rebuild features in a different way for Apple's Mobile Ecosystem, incurring additional costs.[596] A few browser developers submitted that this delayed their entry on Apple's Mobile Ecosystem.[597]

Access to functionality

7.53 In this section we consider whether the extent to which rival mobile browsers can access the same functionality as Safari on Apple's Mobile Ecosystem may act as a barrier to entry and expansion for rival mobile browsers. We find that greater and/or more immediate access to certain functionalities on Apple's Mobile Ecosystem has provided Safari with a competitive advantage relative to third-party mobile browsers, by allowing Safari to implement features that are not available to rival mobile browsers, and therefore limiting the competitive constraint on Safari.

7.54 Apple submitted that generally, it makes features and functionality available to third-party mobile browsers at the same time as Safari.[598] However, making APIs available to third parties is a significant commitment, and therefore there is sometimes a delay in rolling out APIs as rolling out features too early can result in harm to users.[599]

7.55 Third-party browser developers provided evidence of many features which are available to Safari, but which are either not currently available to third party browser developers in the same way, or were only made available to third party browser developers after a delay. Examples of such features include:[600]

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[595] [✂]'s response to section 69 notice [✂].

[596] 2 responses provided in the context of CMA's MEMS; [✂]; 2 responses provided in the context of CMA's MBCG MI; [✂]; 2 notes of calls with; [✂]; 1 working paper response from Google [✂].

[597] 1 response provided in the context of CMA's MEMS [✂]; 1 note of call with; [✂]; 1 Issues statement response [✂]; Apple has submitted the WebKit restriction reduces development costs, but this is not consistent with the evidence. By preventing browser developers from using the same browser engine on Apple's Mobile Ecosystem as on other platforms, the WebKit restriction increases browser developers cross-platform development costs.

[598] Apple response to the CMA's MBCG MI PDR, 22 November 2024, paragraph 104. [link]

[599] Apple response to the CMA's MBCG MI PDR, 22 November 2024, paragraphs 110 and 113. [link]

[600] A more detailed assessment of evidence on third-party mobile browser access to functionality on Apple's mobile devices is set out in Section 5 of the MBCG MI final report. [link]

(a) Browser extensions. Several third parties submitted that, whilst Safari can support browser extensions on iOS, third party browser developers do not have the same ability to do so.[601]

(b) PWA installation. Several third parties submitted that, until 2023, Safari was the only mobile browser that could install PWAs on iOS.[602]

(c) Full screen video. Apple submitted that full screen video was made available to Safari in September 2018, before being made available to third parties in March 2022.[603]

Choice architecture

7.56 In this section, we consider whether choice architecture for new Apple mobile devices creates a barrier to entry and expansion for rival mobile browsers. Choice architecture describes the environment in which users act and make decisions, including the presentation and placement of choices and the design of interfaces. Although it is possible for users to switch to an alternative mobile browser to Safari, there are barriers to doing so, given Safari's position as the pre-installed and default mobile browser on many new devices. We find that this, combined with behavioural biases, and general low user awareness and engagement with mobile browsers (see above), provides Safari with a competitive advantage and therefore limits the competitive constraints on it within Apple's Mobile Ecosystem.

7.57 Research shows that the use of choice architecture is an important factor in user behaviour. Pre-installation, prominent placement, and default settings can all influence user behaviour in light of behavioural biases such as status quo bias.[604]

7.58 Apple submitted that it seeks to provide a 'premium consumer experience with basic and essential functionality available out-of-the-box' which includes enabling internet browsing by pre-installing, setting as default, and prominently placing Safari.[605] Apple also submitted that it makes it easy for users to download new

[601] 1 response provided in the context of the CMA's MEMS; [✂]; 3 responses provided in the context of the CMA's MBCG MI; [✂]; 1 note of meeting with [✂]; In addition to third party views, Apple has made several submissions indicating that third party mobile browsers are now able to support extensions subject to certain safeguards. See Apple's responses in the context of the CMA's MEMS; [✂] Apple's response to CMA's PDR dated 22 November 2024, paragraph 122. [link].

[602] 1 response provided in the context of the CMA's MEMS; [✂]; 2 responses provided in the context of the CMA's MBCG MI; [✂]; OWA Bringing Competition to Walled Gardens, section 5.3.1, accessed on 4 February 2025. [link] In addition to third party views, Apple submitted that the ability to add a web app to the home screen was first made available in iOS 14 (September 2020), and made available to third party mobile browsers in iOS 17 (September 2023). See Apple's response provided in the context of the CMA's MBCG MI [✂]; and 'iOS 14 is available today - Apple (UK)', accessed on 4 February 2025.

[603] Apple's response provided in the context the CMA's MBCG MI [✂].

[604] For more details see Section 8 of the MBCG MI final report. [link]

[605] Apple's response [✂] to section 69 notice [✂].

mobile browsers, switch defaults, and change the placement of Safari and other mobile browsers.[606]

7.59 On its Mobile Ecosystem, Apple as the operating system provider has control over choice architecture for mobile browsers. On every new Apple mobile device, Safari is pre-installed, pre-set as the default mobile browser, and is placed prominently on the default home screen ('application dock').

7.60 Several third-party browser vendors submitted that Apple's use of choice architecture was an important part of competition in mobile browsers, and therefore provides Safari with a competitive advantage on Apple's Mobile Ecosystem.[607]

Restrictions on in-app browsing

7.61 In this section we consider whether the inability of rival mobile browsers to offer in-app browsing implementations on Apple's Mobile Ecosystem creates a barrier to entry and expansion for rival mobile browsers. We find that, whilst it may have some negative implications, the impact is expected to be relatively limited overall.

7.62 Third-party mobile browsers are prevented from offering their own in-app browsing implementations, based on their mobile browsers or browser engines.[608] This limits the share of web traffic these browsers account for, and therefore may have a negative impact on them with respect to web compatibility, as web developers may be less likely to prioritise them for compatibility testing. It may also have a negative impact on user experience with third-party mobile browsers as users cannot benefit from the use of their chosen mobile browser in in-app browsing on Apple's Mobile Ecosystem. This may limit the ability of third-party mobile browsers to attract users.

Competition from alternatives to mobile browsing

7.63 We have found that Safari and WebKit have held a high and stable share of supply within Apple's Mobile Ecosystem over a significant period of time, that Apple faces limited constraints from alternative browsers, browser engines and in-app browsing implementations and that barriers to entry and expansion for alternative browser and browser engines are high. This section considers the extent of competition from certain alternatives to mobile browsing within Apple's Mobile Ecosystem, namely native apps and AI tools, and from non-mobile alternatives.

[606] Apple's response [✂] to section 69 notice [✂].
[607] 6 responses to section 69 notices; [✂].
[608] Several browser vendors offer in-app browsing implementations on Android and may be expected to enter on Apple's Mobile Ecosystem if it were possible.

We find that Apple's Mobile Browser and Mobile Browser Engine face only limited competition from these alternatives.

Competition from native apps

7.64 Native apps provide an alternative way for users to access content, and for content providers to reach users. With in-app browsing, native apps can also provide an alternative way for users to view and browse web content.[609] We have therefore considered the extent to which native apps provide a competitive constraint to Apple's Mobile Browser and Browser Engine. We find that native apps impose only a limited competitive constraint on Safari on Apple's Mobile Platform:

7.65 For users, they may provide a substitute in some circumstances, but do not replicate the full functionality of a mobile browser such as browsing the open web and accessing content without the need for downloads like Safari.

7.66 For content providers, although native apps provide an alternative distribution method, the vast majority continue to distribute via the web (and therefore through mobile browsers) in order to reach as many users as possible.

7.67 Whilst in-app browsing also substitutes for use of dedicated mobile browsers, this is only in limited circumstances, and in-app browsing offers only limited functionality relative to dedicated mobile browsers.

7.68 Evidence does not suggest that the constraint imposed by native apps on Safari is likely to change significantly over the next five years.

7.69 Evidence suggests that mobile browsers do compete with native apps for end-users to some extent; however native apps do not substitute for the full functionality of mobile browsers:

(a) Apple submitted that native apps to an extent are a substitute for mobile browsers, as users can accomplish a wide range of online activities though either. However, unlike mobile browsers, they do not allow for open-ended web searching. Users who want to browse the web, rather than engage in a specific activity, therefore use dedicated mobile browsers.[610]

(b) Evidence from other browser vendors indicates that native apps do substitute for mobile browsers in certain circumstances. Certain apps such as search apps may substitute for more of the use cases of mobile browsers. However,

[609] The extent of competition from AI tools, which are often provided as native apps, is considered below.
[610] Apple's response [✂] section 69 notice [✂].

they do not substitute for the full functionality of mobile browsers in browsing the open web and accessing content without the need for downloads.[611]

7.70 Evidence suggests that the extent to which mobile browsers compete with native apps for content providers is more limited, with content in native apps and browsers more likely to be complements than substitutes:

(a) Apple submitted that almost all content providers offer web versions of their native app content in order to ensure that users can access their content in as many ways as possible, and there are no barriers to doing so.[612]

(b) Evidence from content providers indicates that offering content through native apps is not seen as a substitute to offering content through browsers. Instead, they are seen as complements fulfilling different purposes. Reasons given included web content being easier to access for new users, and native content being better for increasing engagement with existing users.[613]

7.71 Evidence suggests that in-app browsers are generally not considered an alternative to mobile browsers:

(a) Apple submitted that whilst in-app browsers allow users to view web pages within a native app, they lack functionality (such as an address bar, tabs, and search engine access) compared to dedicated mobile browsers, meaning that users seeking to browse or search the web tend to use dedicated mobile browsers.[614]

(b) Evidence from browser vendors indicates that whilst in-app browsing is widely used, and this takes web traffic away from dedicated mobile browsers, in-app browsing is only a substitute in limited circumstances and lacks the functionality available in dedicated browsers.[615]

Competition from AI tools

7.72 AI tools such as chatbots or agents also provide an alternative for users to some functions currently performed by mobile browsers.[616] We have therefore considered the extent to which such AI tools provide a competitive constraint on Apple's Mobile Browser and Browser Engine. We find that AI tools provide a

[611] 6 responses to section 69 notices; [✂].

[612] Apple's response [✂] to section 174 notice [✂].

[613] 47 respondents to CMA notices, comprised of 14 section 69 notices, 28 responses provided in the context of the CMA's MEMS and 5 responses provided in the context of the CMA's MBCG MI; 13 responses to section 69 notices; [✂]; 28 responses provided in the context of CMA's MEMS; [✂]; 5 responses provided in the context of CMA's MBCG MI; [✂].

[614] Apple's response [✂] to section 174 notice [✂]; Apple's response [✂]to section 174 notice [✂].

[615] 6 responses to section 69 notices; [✂].

[616] The impact on competition from AI integrated in browsers, or 'agentic browsers', is considered in the 'Competition from rival mobile browsers' section above.

limited competitive constraint on Safari within Apple's Mobile Ecosystem currently. It is possible that this could increase as the functionality of AI increases; however, this is uncertain (see also the 'Competition from rival mobile browsers' section above). We therefore consider on balance that the evidence does not suggest that it is likely that AI tools will significantly change Safari's position within Apple's Mobile Ecosystem over the next five years.

7.73 The evidence indicates that AI powered tools or chatbots do not compete with mobile browsers and are currently only a limited substitute for mobile browsers, but that this could change in the future:

(a) In August 2024, Apple submitted that AI powered tools or chatbots do not compete with mobile browsers, as they tend to serve as complements rather than substitutes. It stated that although AI powered tools and chatbots compete to a limited extent in that they can help a user access discrete information or answer a specific query, they do not replicate the full web browsing experience.[617] Apple also submitted that AI personal assistants are only substitutes for mobile browsers to a limited degree currently, but that this could change in the next few years.[618]

(b) Most other browser vendors submitted that AI personal assistants are a limited substitute for mobile browsers currently, and several indicated that they do not replicate the full use case of mobile browsers.[619] Substitutability was generally expected to increase over the next five years, but with differing views and some uncertainty about the extent of this.[620] For example, Ecosia submitted that AI could 'significantly reduce the need for manual browsing'.[621] However other browser vendors stated that it was difficult to predict the extent to which AI could replace browsers. [622]

(c) Evidence from our consumer survey shows that 40% of respondents used an AI assistant for any purpose. A relatively low proportion of respondents reported using AI frequently for tasks such as searching for information and searching for products, which might otherwise be performed in a mobile browser.[623]

[617] Apple's response [✂] to section 174 notice [✂].
[618] Apple's response to section 69 notice [✂].
[619] 9 responses to section 69 notices; [✂].
[620] 10 responses to section 69 notices; [✂].
[621] Ecosia's response to section 69 notice [✂].
[622] 3 responses to section 69 notices [✂].
[623] The proportion of respondents using AI most-often or frequently was; 17% for searches for less simple information (DV43r1), 9% for searches for simple information (DV43r2), 5% for searches for products they want to buy (DV43r3), and 7% for searches for a specific website (DV43r4).

Competition from non-mobile alternatives

7.74 Browsing on desktop (or laptop) computers provides an alternative means for users to access web content.[624] We have therefore considered the extent to which non-mobile alternatives provide a competitive constraint on Apple's Mobile Browser and Browser Engine. We find that desktop browsing may impose some constraint on mobile browsers, as the feature sets are similar and users can switch between the two. However, most evidence shows that the use cases for mobile and desktop are different, and that they are generally considered as complements rather than substitutes. We have not seen evidence to suggest desktop browsing is likely to become a materially stronger constraint on Safari over the next five years.

7.75 The evidence generally suggests that browsing on desktop and laptop computers fulfils different use cases for the end-user to browsing on mobile devices:

(a) Apple submitted that desktop browsing [✂]. For the most part available features are similar, although some complex websites may not be fully functional on mobile. Mobile also enables 'on the go' browsing, which is not possible on desktop. Apple stated that users switch between and access content on both, and Apple promotes Safari as a web browser, rather than as a mobile or desktop browser.[625]

(b) Other browser vendors submitted that, although for some use cases mobile and desktop are substitutable, they are often used for different purposes and are therefore generally seen as complements.[626]

(c) Several pieces of user research also indicate that mobile and desktop browsing fulfil different use cases:

(i) The qualitative research carried out by Verian found that respondents typically had preferences for completing certain tasks on their smartphone versus desktop. In particular, 'anything fiddly', or anything that required high security tended to be on desktop only.[627]

(ii) Research conducted by Microsoft shows that mobile browsers are used differently to desktop browsers.[628]

[624] We also asked stakeholders about other alternatives to mobile browsing such as browsing on smart glasses and smart watches. However, no respondent considered these as credible substitutes to mobile browsing. 10 responses to section 69 notices; [✂].

[625] Apple's response [✂] to section 69 notice [✂].

[626] 10 responses to section 69 notices; [✂].

[627] Verian Group UK (2024), Mobile Browsers Qualitative Consumer Research, slide 12. [link]

[628] Microsoft's response provided in the context of the CMA's MBCG MI [✂] to voluntary request for information [✂].

(iii) Research conducted by a browser vendor [✂] shows that users use its browser [✂] on mobile differently to on desktop.[629]

7.76 For content providers, web content available on mobile will be equally available on desktop browsers, with adjustments to account for differences such as screen size or input mode.[630] In limited cases, some web content may not fully function on mobile due to slight differences in functionality. Web content is therefore by its nature available cross-platform, and content providers do not choose between platforms such as mobile and desktop, although they may optimise their content for either.

7.77 Internal documents from Apple show that [✂].[631]

Provisional view on competition from alternatives to Safari and WebKit

7.78 In our provisional view, Apple's Safari faces limited competitive constraints on Apple's Mobile Ecosystem and the evidence does not indicate that this is likely to change significantly over the next five years.

7.79 Although other mobile browsers are available, these are limited by several barriers to entry and expansion, in particular those related to the WebKit restriction, Safari's superior access to functionality, and choice architecture; and Safari's consistently high share of supply indicates that these are a weak constraint. Alternatives to mobile browsing, namely native apps and AI tools, only provide a limited competitive constraint for a limited set of use cases. Technological developments are not expected to change this in the next five years.

7.80 Apple's policies mean that there are no alternatives to its mobile Browser Engine or in-app browsing implementations on Apple's Mobile Ecosystem.

7.81 Whilst non-mobile devices provide an alternative for users and content providers, on the user side they generally serve a different use case to mobile, and on the content provider side are seen as a complement rather than a substitute.

Provisional conclusion on competition from alternatives to Apple's mobile content distribution

7.82 Our provisional conclusion is that Apple faces limited competitive constraints in relation to content distribution within its Mobile Ecosystem.

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[629] [✂]'s response [✂] to section 174 notice [✂].
[630] Jigsaw Research (2024), Qualitative Research with Developers on Mobile Browsers and Mobile Browser Engines, pages 22, 23, and 53. [link]
[631] An internal document [✂].

7.83 Within Apple's Mobile Ecosystem, there are alternatives to the App Store such as web-based content distribution, cloud-based gaming or super apps. However, overall, we consider that these alternatives impose only a limited competitive constraint on the App Store given that the evidence shows that these methods have very limited usage and that they are generally not viewed as a comparable substitute to native apps on the App Store.

7.84 Alternative mobile browsers within Apple's Mobile Ecosystem are limited by several barriers to entry and expansion, and Safari's consistently high share of supply indicates that these are a weak constraint. Apple faces no competition from alternative browser engines or alternative in-app browsing implementations. Alternatives to mobile browsers, namely native apps and AI tools, only provide a competitive constraint for a limited set of use cases.

7.85 Whilst non-mobile devices provide an alternative for users and content providers, in the case of both native app and web content, on the user side they generally serve a different use case to mobile, and on the content provider side are seen as a complement rather than a substitute.

7.86 Further, we have not seen evidence to suggest that any expected or foreseeable market or technological developments in content distribution are likely to significantly change Apple's position in content distribution on its Mobile Ecosystem over the next five years.

8. CONCLUDING ON SEMP AND POSS

8.1 In this chapter we:

(a) Present the final elements of our SEMP assessment, namely:

(i) Regulatory and other developments;

(ii) Profitability assessment.

(b) Present our assessment in relation to whether Apple has a position of strategic significance in respect of its Mobile Platform.

(c) We then provisionally conclude on whether Apple meets both SMS conditions in respect of its Mobile Platform.

Regulatory and other developments

In this section we consider the scope for other developments – in particular, legislation, regulatory action and litigation – to affect Apple's market power in respect of its Mobile Platform over the next five years.[632] We provisionally find that whilst regulatory developments may in principle affect Apple's conduct in carrying out the digital activity, they are not likely (whether individually or in combination) to be sufficient in scope, timeliness and impact to eliminate Apple's market power in at least the next five years.

8.2 Apple has significant global operations, and it is not possible to anticipate every such development; however, we have set out below the regulatory and other developments (both within the UK and internationally) that we consider have the most potential relevance to our assessment of whether Apple has substantial and entrenched market power in respect of its Mobile Platform.

Developments in the UK

8.3 The following developments are taking place within the UK:

(a) collective proceedings have been brought against Apple in the Competition Appeal Tribunal (the CAT) alleging abuses of dominance in relation to hardware and software markets;[633,634] and

[632] CMA194, paragraph 2.59.
[633] Including https://www.catribunal.org.uk/cases/14037721-dr-rachael-kent; 1468/7/7/22 Mr Justin Gutmann v Apple Inc., Apple Distribution International Limited, and Apple Retail UK Limited | Competition Appeal Tribunal; 1601/7/7/23 Dr Sean Ennis v Apple Inc and Others | Competition Appeal Tribunal; 1689/7/7/24 Consumers' Association ("Which?") v Apple Inc, Apple Distribution International Limited, Apple Europe Limited & Apple Retail UK Limited | Competition Appeal Tribunal.
[634] Epic has brought a claim against Apple in the Competition Appeal Tribunal; however, in February 2021 the application for permission to serve the proceedings on Apple Inc. was refused; see *Epic Games, Inc.* and Others v *Apple Inc. and Another* [2021] CAT 4.

(b) Google is currently the subject of another investigation under Part 1 of the Act in relation to the provision of its Mobile Platform.[635]

8.4 We do not consider that these developments (whether individually or in combination) are likely to be sufficient in scope, timeliness and impact to eliminate Apple's market power in respect of its Mobile Platform in at least the next five years. In particular:

(a) the consequences of each of the collective proceedings claims is uncertain, since at the time of this proposed decision, there can be no certainty as to the outcome of the proceedings (both in terms of whether the claims will succeed and what, if any, remedies may be ordered);

(b) the CMA has not yet reached a final decision on whether to designate Google as having SMS in relation to the provision of its Mobile Platform (and such a designation would be necessary for any interventions to be imposed on Google). If Google is designated as having SMS in October 2025 (the current statutory deadline for the investigation), the precise nature and scope of any interventions imposed on Google during any five-year designation period will need to be defined and consulted on. Any potential impact on Apple's market power in respect of its Mobile Platform on a forward-looking basis therefore remains uncertain.

International developments

8.5 In addition to the developments within the UK, the following are taking place internationally:

(a) Apple Inc., together with its subsidiaries, has been designated as a 'gatekeeper' under the EU's Digital Markets Act[636] (the DMA) in respect of certain 'core platform services', including its operating systems (iOS, iPadOS), its online intermediation service (the App Store), and its web browser (Safari)[637] and is therefore subject to certain obligations;[638]

[635] SMS investigation into Google's mobile ecosystem - GOV.UK. Google's Mobile Platform is described in the CMA's proposed decision as including Google's Android operating system, Play Store, Chrome browser and Blink browser engine.
[636] Regulation (EU) 2022/1925 on contestable and fair markets in the digital sector and amending Directives (EU) 2019/1937 and (EU) 2020/1828 (Digital Markets Act) [2022] L 265/1.
[637] European Commission decisions of 5 September 2023 and 29 April 2024 addressed to Apple Inc.
[638] The prohibitions and obligations for gatekeepers are set out in Articles 5, 6 and 7 of the DMA. Apple's obligations include: (i) allowing third parties to interoperate with Apple's services; (ii) allowing business users to communicate offers and conclude contracts with their customers outside of Apple's ecosystem; (iii) not requiring users to use Apple's own payment system for in-app purchases; (iv) not using non-public data in competition with business users; (v) enabling users to uninstall any pre-installed software or app and change default settings; (vi) enabling the installation of third-party app stores; (vii) not treating Apple's products and services more favourably in ranking than similar third-party services or products; (viii) providing portability of end user data; and (ix) applying fair, reasonable and non-discriminatory conditions of access for app developers to the App Store.

(b) The European Commission has also investigated Apple under its antitrust rules. In March 2024, it found that Apple had abused a dominant position on the market for the distribution of music streaming apps to iOS users through its App Store.[639] In July 2024 it also accepted commitments from Apple to allow third-party providers of digital wallets access to the NFC function on iOS devices, following preliminary findings that Apple was abusing its dominant position;[640]

(c) As a result of an ongoing case brought by Epic Games, Apple has been ordered not to prohibit app developers from directing customers to purchasing mechanisms other than Apple's In-App Purchasing, as the US District Court found that Apple's practices violated California Unfair Competition Law;[641]

(d) The US Department of Justice has accused Apple of violating antitrust law in relation to an alleged smartphone monopoly, by suppressing innovations and technologies that could increase competition;[642]

(e) Apple has been designated by the Japan Fair Trade Commission as a specified software operator under the Mobile Software Competition Act[643] and will therefore be subject to certain prohibitions and obligations in relation to the provision of smartphone software;[644] and

(f) On 25 November 2024, the Brazilian Competition Authority (CADE) launched an investigation into Apple's alleged abuse of dominance in relation to app distribution. Concurrently, it imposed injunctions regarding the App Store's terms of use, including requiring Apple to permit users to be informed of alternative purchasing channels.[645]

8.6 We do not consider that these developments (whether individually or in combination) are likely to be sufficient in scope, timeliness and impact to eliminate Apple's market power in respect of its Mobile Platform in the UK in at least the next five years.

8.7 In relation to the DMA:

(a) the effect of Apple's obligations under the DMA on the provision of its Mobile Platform in the UK are, and will remain, unclear, since the territorial reach of

[639] AT.40437 - Apple - App Store Practices (music streaming) accessed by the CMA, 25 June 2025.
[640] AT.40452 - Apple - Mobile payments accessed by the CMA, 25 June 2025.
[641] *Epic Games, Inc v. Apple Inc. 20-cv-5640 (YGR)*.
[642] *US and Plaintiff States v. Apple Inc. 24-cv-4055*. See Complaint: U.S. and Plaintiff States v. Apple Inc..
[643] Act on Promotion of Competition for Specified Smartphone Software (Act No. 58 of 2024).
[644] Apple's designation specifically relates to its basic operating software, application store and browser: Designation of Specified Software Operators under the Act on Promotion of Competition for Specified Smartphone Software | Japan Fair Trade Commission
[645] CADE issues interim measure against Apple — Conselho Administrativo de Defesa Econômica, accessed by the CMA on 26 June 2025. These injunctions were recently upheld by the Federal Regional Court – see Circuit court reinstates antitrust ruling against Apple | Law | valorinternational, accessed by the CMA on 26 June 2025.

the DMA does not extend to the UK.[646] One possible outcome is that Apple may carve out the UK market (and other territories outside the EEA) from any response to the DMA requirements, resulting in differences in how Apple carries out and offers its Mobile Platform in the UK and the EEA. This has indeed been the case in relation to several DMA obligations; for example, Apple has offered new business terms for apps in the EU only, and made available an interoperability request process to app developers that provide services or hardware in the EU;[647]

(b) even if Apple were to extend its responses to the DMA to the UK voluntarily, they could be withdrawn at any time, and it does not necessarily follow that these changes would mean that Apple would not have market power in respect of its Mobile Platform in the UK on a forward looking basis;

(c) there remains some uncertainty as to how Apple will respond to its obligations under the DMA. In particular, we note that:

(i) The European Commission has an ongoing proceeding to determine Apple's compliance or otherwise with the DMA regarding its new App Store business terms.[648] Preliminary findings of non-compliance were issued in April 2025 to which Apple has a right to respond before any final decision is reached.[649]

(ii) The European Commission has adopted two decisions specifying the measures that Apple must take to comply with aspects of its interoperability obligations under the DMA.[650] The first set of measures concerns iOS connectivity features predominantly used for connected devices. The second set of measures relates to the process for requests from app developers interested in obtaining interoperability with iPhone and iPad features.[651] Apple has appealed both decisions.[652]

(iii) The European Commission has issued a non-compliance decision to Apple regarding DMA Article 5(4) pursuant to which app developers distributing their apps via Apple's App Store should be able to inform customers, free of charge, of alternative offers outside the App Store, steer them to those offers and allow them to make purchases.[653] Apple

[646] The DMA applies to core platform services '*provided or offered by gatekeepers to business users established in the [European] Union or end-users established or located in the [European Union]*' (Article 1(2)).
[647] Apple's DMA Compliance Report, Non-confidential summary, 7 March 2025, NCS-March-2025.pdf, pages 21 and 161.
[648] European Commission, Proceeding pursuant to Article 20(1) of Regulation (EU) 2022/1925 of 24 June 2024, DMA.100206
[649] Commission closes investigation into Apple's user choice obligations and issues preliminary findings
[650] Unlike non-compliance proceedings, specification proceedings define how obligations should be met rather than sanctioning breaches of the DMA in the event of non-compliance.
[651] European Commission, Specification Proceedings Decision of 19 March 2025 – Final Measures, DMA.100203; European Commission, Specification Proceedings Decision of 19 March 2025 – Final Measures, DMA.100204.
[652] Eg Apple challenges 'unreasonable' EU order to open up to rivals | Reuters, accessed by the CMA on 25 June 2025.
[653] European Commission Implementing Decision of 23 April 2025, DMA.100109.

has subsequently altered its App Store rules in the European Union to permit such steering, in exchange for a processing fee,[654] though it has also appealed the European Commission's decision.[655]

(iv) Apple has appealed its designation as a gatekeeper insofar as it imposes an obligation to comply with interoperability obligations, as well as the treatment of the App Store as a single core platform service.[656]

8.8 In relation to the European Commission's antitrust cases: Apple has appealed the decision relating to its position on the market for music streaming apps, so the ultimate outcome of the case remains unclear.[657] Apple's commitments on access to its NFC chip also only apply in the EEA,[658] so may not affect Apple's market power in the UK.

8.9 In relation to the Epic Games case in the US, Apple has stated that it will be appealing the latest injunction, the outcome of which remains to be seen.[659]

8.10 In relation to the US Department of Justice case, at the time of this proposed decision, proceedings are at a very early stage, with the court having only recently denied Apple's motion to dismiss the lawsuit The ultimate outcome of the case and scope of any market impacts therefore remain unclear.

8.11 In relation to Japan's Mobile Software Competition Act, the effect of Apple's obligations on the provision of its Mobile Platform in the UK is unclear. One possible outcome is that Apple may carve out the UK market from any response to the requirements under Japanese legislation, resulting in differences in how Apple carries out and offers its Mobile Platform in the UK and Japan.

8.12 In relation to the CADE investigation, proceedings are still at an early stage and no decision has yet been reached. Moreover, since any decision would only relate to Apple's services in Brazil, there would be no guarantee that Apple would extend its response to the UK.

Provisional conclusion on regulatory and other developments

8.13 On the basis of the available evidence, we consider that although regulatory developments may in principle affect Apple's conduct in carrying out its Mobile Platform digital activity, they are not likely (whether individually or in combination) to be sufficient in scope, timeliness and impact to eliminate Apple's market power in at least the next five years.

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[654] Apple changes App Store rules in EU to comply with antitrust order | Reuters, accessed by the CMA on 8 July 2025.
[655] Apple hits back against 'unprecedented' €500m EU fine - BBC News, accessed by the CMA on 8 July 2025.
[656] T-1080/23, Apple v Commission.
[657] T-260/24, Apple v Commission.
[658] AT_40452_10155330_9978_4.pdf.
[659] USCA Form 1 dated 5 May 2025.

Profitability analysis

Apple has been highly profitable for at least the last ten years, making high profits and a high return on capital globally. Based on our review of Apple's own financial projections relating to future revenues and profitability relating to its Mobile Ecosystem activities, we have seen no evidence that these high levels of profitability would not continue. We estimate that Apple's Mobile Platform activities in the UK have generated similar returns. More detailed analysis is contained in Annex B.

8.14 This section summarises our analysis of profitability of Apple's Mobile Platform. Profitability can be an indicator of market power. This is based on the premise that under effective competition a firm would generally earn no more than a 'normal' rate of profit over the long run. Where firms persistently earn in excess of a normal return, this signals that there may be limitations in the competitive process.

8.15 Since our SMS assessment relates to Apple's market position in the UK, we are interested in the profitability of Apple's Mobile Platform in the UK.[660] In this regard we note that:

(a) To inform our assessment of Apple's position in the UK for its Mobile Platform, we have assessed financial information on Apple's Mobile Ecosystem. Those figures include Apple's revenue for sales of its mobile devices, which indirectly contribute to Apple's Mobile Platform revenue;[661]

(b) We have started with global figures, recognising that the digital activities we are assessing are global in nature, and because Apple did not provide information on the profitability of its Mobile Platform at a UK level; [662]

(c) Our analysis is therefore based on global data from Apple supplemented by information we obtained from Apple to enable more detailed breakdowns and UK specific analysis, where appropriate.

8.16 Our analysis focuses on the following topics:

(a) overall size and financial position for the Apple Group;

(b) global profitability of Apple's Mobile Platform; and

(c) UK profitability of Apple's Mobile Platform.

8.17 We have focused on standard reporting metrics to inform our analysis of Apple's revenues, costs, and profits. In particular:

[660] See CMA194, paragraph 2.55(e)
[661] An end user does not purchase a Mobile Platform in isolation. Instead, an end-user buys into a Mobile Ecosystem as a whole, considering the hardware of the device they are purchasing in tandem with the Mobile Platform deployed on it.
[662] Apple's response to section 69 notice [✂]

(a) We have assessed the amount of profit Apple has earned in absolute terms, and as a percentage 'return on capital employed' (**ROCE**), comparing accounting profit with the size of investment made by Apple to achieve those profits;

(b) We have compared our findings against its weighted average cost of capital (**WACC**), which is a widely used benchmark for returns on an investment. The WACC is essentially the minimum return required on an investment or asset to satisfy the owners and creditors;[663] and

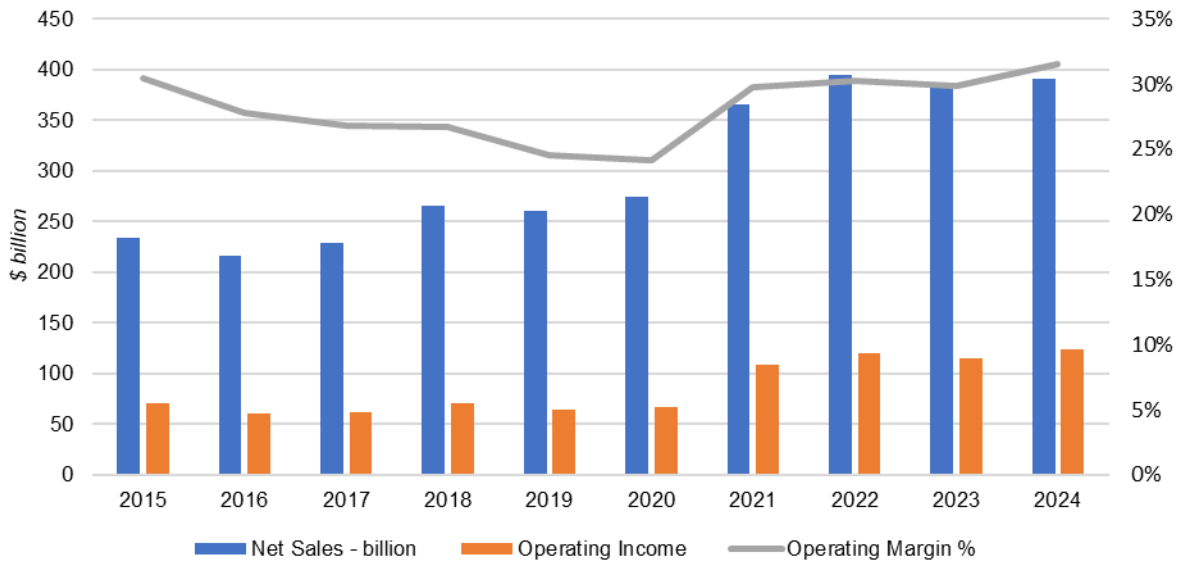
(c) We have considered revenue and gross profit metrics relating to Apple's Mobile Ecosystem products and services.[664]

8.18 We summarise the main findings of this analysis below, while a more detailed explanation can be found in the Profitability analysis in Annex B.

Profitability of the Apple Group

8.19 Our profitability analysis shows that, at the group level, Apple generates substantial profits and operating cashflows in absolute terms. As shown in figure [1] below, Apple's earnings before income and tax (**EBIT**) have remained consistently high and the operating profit margin has not fallen below 24%.[665,666]

Figure 8.1: Apple Group Revenue and Profitability between 2015 and 2024



Source: CMA analysis of Apple 10K

[663] Our ROCE based approach to profitability is set out in more detail in Annex B.
[664] Apple told us that [✂]. Apple's response to section 69 notice [✂]
[665] CMA analysis of Form 10-K for Apple filed 1 November 2024.
[666] EBIT is based on Apple's reported Operating Income in its Consolidated Statements of Operations in published accounts.

8.20 As set out in the Profitability analysis in Annex B, Apple's profitability, when measured as a percentage ROCE is in excess of 100%, compared with our estimate of its WACC of [✂] [10-15]%. This profitability estimate remains high even when adopting a conservative sensitivity analysis, for example in relation to intangible assets.[667]

Profitability of Apple's Mobile Platform

8.21 The profitability figures set out above relate to the profitability of the Apple Group. However, for the purposes of our SMS assessment we are concerned with the profitability of Apple's UK Mobile Platform activities.

8.22 While the majority of Apple's revenue has historically come from device sales, the contribution and importance of Apple's services business, which includes App Store and Safari, has been increasing steadily in recent years. Services accounted for almost 25% of revenue in 2024, and almost 40% of gross profits.[668]

8.23 Apple's services revenues include the fees earned by Apple from what Apple refers to as Third Party Licensing Arrangements,[669] which is predominantly made up of its share of revenue from Google under the ISA as considered in Chapter 4, under the impact of Apple's agreements with Google;[670] and the App Store, which is monetised through commission fees and advertising revenues.[671]

8.24 Ideally, we would assess the profitability of Apple's mobile activities specifically, taking into account all relevant costs and an appropriate capital base. However, Apple does not report on its Mobile Platform activities' profitability in its published accounts. We also note that Apple does not directly monetise its mobile operating systems.

8.25 We have therefore based our analysis on revenue and profitability information received from Apple relating to the main products and services through which we consider Apple directly and indirectly monetises its Mobile Platform's activities, including through its broader Mobile Ecosystem - namely Advertising revenues, the App Store, and the sale of iPhones and iPads.

8.26 We recognise that the profits earned on one product or service should not necessarily be considered in isolation from the other products and services within the same Mobile Ecosystem. Nevertheless, it is helpful to understand the extent to which distinct business activities are able to generate revenues over and above

[667] For example, we have conducted a sensitivity analysis to our ROCE based profitability analysis to test the sensitivity of our profitability findings to changes in intangible assets relating to Apple's R&D expenditure.
[668] CMA analysis based on segmental revenue data from Apple 10Ks for 2015-2024.
[669] CMA analysis of Apple's response to section 69 notice [✂]; Form 10-K for Apple filed 1 November 2024, page 4.
[670] CMA analysis of Apple's response to section 69 notice [✂]
[671] CMA analysis of Apple's response to section 69 notice [✂]

their directly attributable costs and we set out our analysis on an individual product/service basis below.

Safari/Advertising Revenues

8.27 Globally, Advertising revenues represent the second largest revenue generating segment within Apple's services business, after Digital Content.[672] Revenues within this Advertising segment are generated primarily through the ISA between Google and Apple, and it also generates revenue from App Store Advertising. We estimate that the Apple's gross profit margins from Advertising revenues [✂] was higher than for its overall Services segment over the period 2022 to 2024 on a global basis.[673]

8.28 Apple generated £[✂] billion of advertising revenues in the UK and $[✂] globally, primarily from Third Party Licensing Arrangements (including the ISA), and also from App Store Advertising.[674] We estimate that the value of the payments Apple receives from Google under the ISA in return for Google Search being the default search engine on mobile Safari for the UK alone was £[✂] £[0-2] billion in 2024.[675]

The App Store

8.29 The App Store represents one of the largest segments within Apple's service business, comprising [✂] [20-30]% of total services revenue.[676,677] In the UK in 2024, the App Store generated total revenues of £[✂] £[0-2]billion from customer billings.[678]

8.30 We estimate that the App Store's gross profit margins (excluding App Store advertising) averaged [✂]% over the period 2022 to 2024 on a global basis, which was higher than for the overall Services segment.[679]

8.31 As noted above, the App Store also generates revenues from App Store advertising, which is reported separately within Apple's Advertising reporting

[672] Apple's Digital Content segment includes the App Store and Apple's subscription content. See Form 10-K for Apple filed 1 November 2024, page 5
[673] CMA analysis of Apple's response to section 69 notice [✂]
[674] CMA analysis of Apple's response to section 69 notice [✂]. Converted from USD to GBP at an average GBPUSD exchange rate of 1.2783 (source: Office for National Statistics).
[675] CMA analysis of Google's response to section 69 notice [✂]
[676] Reported revenues for the App Store reporting segment exclude revenues from App Store Advertising, which Apple reports separately within its Advertising Segment, as noted above.
[677] App Store segmental revenues include revenues relating to devices other than the iPad and iPhone. CMA analysis of Apple's response to section 69 notice [✂]
[678] App Store segmental revenues include revenues relating to devices other than the iPad and iPhone. By 'revenue' for the App Store, we refer to net billings ie, the amount that Apple charges as commission on the App Store. Apple records as revenue the level of gross billings paid by consumers for purchases in the App Store after subtracting the share paid to app developers, which we describe as net revenue. We note the average ratio between net revenue and gross billings over this period has been [✂]% on a global basis, which reflects Apple's commission structure. CMA analysis of Apple's response to section 69 notice [✂]. Converted from USD to GBP at an average GBPUSD exchange rate of 1.2783 (source: Office for National Statistics).
[679] CMA analysis of Apple's response to section 69 notice [✂]

segment. Including App Store advertising, Apple generated £[✂] billion of revenues from the App Store in the UK from its mobile devices.[680]

iPhone and iPad

8.32 When considering the profitability of Apple's Mobile Platform activities we have considered devices as well as services, on account of the interdependencies between the two. An end user does not buy a Mobile Platform in isolation; an end user buys into a Mobile Ecosystem as a whole, considering the hardware of the device they are purchasing in tandem with the Mobile Platform deployed on it. Therefore our analysis of the profitability of Apple's Mobile Platform is conducted at the Mobile Ecosystem level (ie including the profitability of the iPhone and iPad).

8.33 The majority of Apple's revenues come from device sales, including in particular the iPhone, which accounted for 51% of Apple's global revenues, and [✂]% [a similar proportion] in UK.[681] In the UK, Apple generated revenues of £[✂] £[5-10] billion from the sale of iPhones and a further £[✂] £[0-5] billion from the sale of iPads.[682] Apple's global gross profit margins of [✂]%[683] for iPhone and iPad device sales are lower than for its services activities.[684]

Apple's mobile operating systems (iOS and iPadOS)

8.34 Apple does not directly monetise its operating systems. Our estimates of the profits earned by Apple are notably high even when taking into account the costs associated with providing these systems in our calculation of Apple's group-level ROCE.

Profitability of Apple's Mobile Platform in the UK

8.35 Our assessment of Apple's profitability specifically concerns the profitability of Apple's UK Mobile Platform.

8.36 As set out above, the majority of Apple's global revenues and profits relate, either directly or indirectly, to its Mobile Platform. Although we do not have UK specific profitability and cost data, we have data on revenues in the UK as set out below, and have also considered whether the profitability of Apple's activities in the UK was likely to be materially different from its global activities, using the data provided to us by Apple.

[680] CMA analysis of Apple's response to section 69 notice [✂]. Converted from USD to GBP at an average GBPUSD exchange rate of 1.2783 (source: Office for National Statistics).
[681] CMA analysis of Apple's response to section 69 notice [✂]
[682] [✂]. Converted from USD to GBP at an average GBPUSD exchange rate of 1.2783 (source: Office for National Statistics).
[683] [✂] CMA analysis of Apple's response to section 69 notice [✂]
[684] CMA analysis of Apple's response to section 69 notice [✂]

8.37 Apple's total UK revenues of £[✂] £[10-20] billion[685] in 2024 included:

(a) £[✂] £[5-10] billion from iPhone device sales, and a further £[✂] [£0-5] billion from iPad device sales;

(b) at least £[✂]billion in Advertising revenues of which the majority £[✂]billion relates to Third Party Licensing Arrangements (including the ISA), and further £[✂]billion relates to App Store Advertising;[686] and

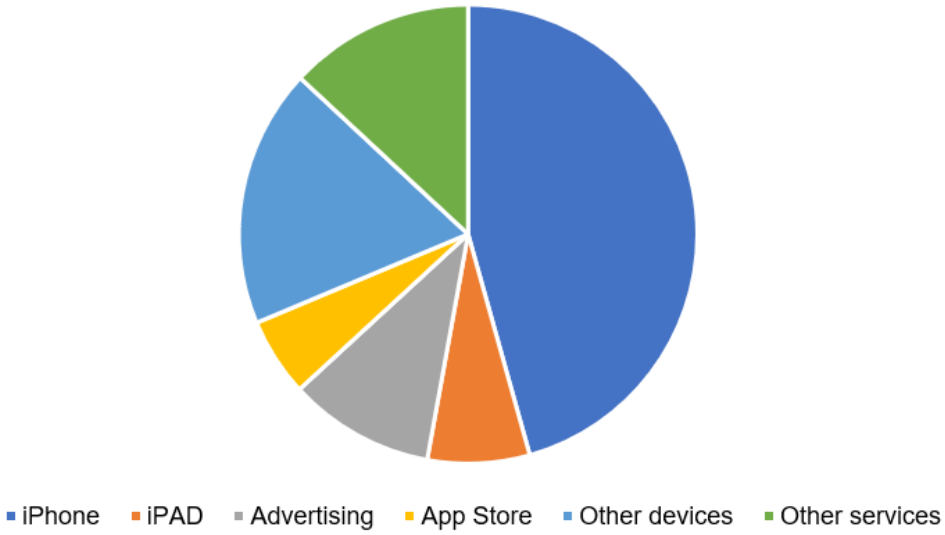
(c) £[✂] £[0-2] billion from the App store.[687]

8.38 The remaining £[✂] billion relates to:

(a) Non-mobile device sales (£[✂] £[0-5] billion); and

(b) Other service revenues (£[✂] £[0-5] billion), many of which relate at least in part to Apple's Mobile Platform (eg Apple care and Apple pay).[688]

Figure 8.2: Breakdown of UK revenue in 2024



Source: CMA analysis [689]

[685] CMA analysis of Apple's response to section 69 notice [✂]. Revenue figures relate to the calendar year ending 31 December 2024.
[686] Advertising revenues include [✂]
[687] CMA analysis of Apple's response to section 69 notice [✂]. Converted from USD to GBP at an annual average exchange rate for the period from 1 January to 31 December 2024 at an average exchange rate of 1.2783 (source: Office of National Statistics). A small proportion of Apple's estimated App Store revenues relate to products other than iPhones and iPhones.
[688] CMA analysis of Apple's response to section 69 notice [✂]. Converted from USD to GBP at an annual average exchange rate for the period from 1 January to 31 December 2024 at an average exchange rate of 1.2783, (source: Office of National Statistics). Other service revenue includes also App Store customer billing revenues from products other than iPhones and iPads.
[689] CMA analysis of Apple's response to section 69 notice [✂]

8.39 Given the global nature of Apple's cost reporting structures, we have therefore assumed that the gross profit margins and the operating profit margins for Apple's Mobile Platform are broadly similar in the UK to those for the total Apple Group.[690] We estimate that Apple generated gross profits of at least £[✂]billion in the UK in 2024 from its Mobile Ecosystem, which relate directly or indirectly to its Mobile Platform.[691,692]

8.40 On this basis, and as we have seen no evidence that Apple's UK Mobile Ecosystem activities are generating a materially different level of profitability than its global Mobile Ecosystem activities,[693] we estimate that Apple's Mobile Platform activities are generating economic profits over and above our estimate of its weighted average cost of capital in the UK as well as globally.

Forecast profitability

8.41 Based on our review of Apple's own financial projections relating to future revenues and profitability relating to its Mobile Ecosystem activities, we have seen no evidence that these high levels of profitability would not continue.[694]

Summary of our profitability findings

8.42 Although Apple has historically been a devices business, the share of profits attributable to its services business has been increasing over time, and account for almost half of its global gross profits.

8.43 Apple generates profits from its Mobile Platform through its Mobile Ecosystem, including device sales, its App Store (including from App Store Advertising), its ISA and other services provided to users of its mobile devices.

8.44 Our analysis indicates that Apple was highly profitable for at least the last ten years, making high profits and a high return on capital. Based on our review of Apple's own financial projections relating to future revenues and profitability relating to its Mobile Ecosystem activities, we have seen no evidence that these high levels of profitability would not continue.[695]

[690] CMA analysis based on Apple's response to section 69 notice [✂] CMA analysis of Apple's response to section 69 notice [✂] and Form 10-K for Apple filed 1 November 2024.
[691] CMA analysis based on Apple's response to section 69 notice [✂] CMA analysis of Apple's response to section 69 notice [✂] and Form 10-K for Apple filed 1 November 2024. Figures converted from USD to GBP using a GBPUSD average exchange rate of 1.2783.
[692] Our approach to estimating UK returns from Apple's mobile activities is set out in more detail in our analysis of Apple's profitability in Annex B.
[693] CMA analysis of Apple's response to section 69 notice [✂]
[694] CMA analysis of Apple's response to section 69 notice [✂]
[695] Apple's response to section 69 notice [✂]

8.45 We estimate that Apple's Mobile Platform activities in the UK have similarly generated a high return on capital relative to our estimate of Apple's WACC over this period.

Position of Strategic Significance

This section sets out our provisional assessment as to whether Apple has a position of strategic significance in relation to its Mobile Platform. We provisionally consider that Apple has a position of strategic significance in respect of its Mobile Platform because we consider that at least the first two conditions[696] (significant size or scale in respect of the digital activity and a significant number of other undertakings using the digital activity, either of which would suffice) are satisfied.

8.46 Our provisional findings are based on the evidence described below which shows that:

(a) Apple's Mobile Platform is used by a very large number of UK users (eg to access, view and engage with digital content and services on their Apple mobile devices) and businesses in the UK (eg as a means of reaching those users): see paragraphs 8.48 to 8.54 below.

(b) The services provided by Apple as part of its Mobile Platform are important to a wide range and large number of other businesses in the UK to provide digital content and services to users of Apple's mobile devices: see paragraphs 8.55 to 8.60 below.

8.47 While we have received evidence indicating that the third and fourth factors may also be satisfied,[697] given the above provisional finding, and since only one factor is sufficient, we have not considered the third and fourth factors in detail.

Significant size or scale

8.48 Our Guidance notes that there is no quantitative threshold for when size or scale can be considered 'significant'. This condition can be assessed using a range of absolute or relative metrics, which could include the number of users, usage data (eg time spent or frequency of use), the amount of data being gathered or accessed via the digital activity, the number of purchases or transactions made, or the revenue generated from the digital activity.[698]

[696] Pursuant to sections 6(a) and 6(b) of the Act.
[697] Ie that Apple's position in respect of its Mobile Platform (a) would allow it to extend its market power to a range of other activities, and (b) allows it to determine or substantially influence the ways in which other undertakings conduct themselves, in respect of the digital activity or otherwise (sections 6(c) and 6(d) of the Act).
[698] CMA194, paragraphs 2.68-2.70. See also explanatory notes to the Act, paragraph 114.

8.49 The evidence we have obtained indicates that Apple's Mobile Platform has a significant number of users, a high share of supply and earns very large revenues. This is the case for Apple's Mobile Platform and across the component parts of its Mobile Platform: namely its Smartphone Operating System, Tablet Operating System, Native App Distribution and Mobile Browser and Browser Engine, as set out below.

Smartphone Operating System and Tablet Operating System

8.50 Apple's iOS and iPadOS have a significant number of users, have consistently held a large share of supply and have generated significant revenue. In particular:

(a) In 2024 in the UK there were [✂] [40-50] million accounts making transactions on iPhones (using iOS) and [✂] [10-20] million accounts making transactions on iPads (using iPadOS).[699] This is a very significant number of users in the UK particularly when compared against the UK population of 69 million;[700]

(b) Apple has consistently been one of the largest suppliers of smartphone operating systems and tablet operating systems in the UK for almost a decade. In each year from 2015 to 2024, [50 – 60%] [✂]% of active smartphones were iOS devices.[701] In each year from 2017 to 2024, [50 – 60%] [✂]% of active tablets were iPadOS devices;[702,703]

(c) Apple generates significant revenue across its Mobile Platform and Mobile Ecosystem in the UK. For example, in 2024, Apple's Mobile Ecosystem generated at least £[✂] £[5-10] billion in revenue,[704] and a significant proportion of that related to revenue generated from its Mobile Platform.

Native App Distribution

8.51 Apple's App Store is the only permitted app store on Apple's Mobile Platform in the UK, meaning that it has a 100% share of supply for native app distribution through

[699] Transacting accounts are those accounts that made a free or paid app download or paid in-app purchase or subscription across Apple's services in the calendar year 2024. Apple's response to section 69 notice [✂]
[700] According to estimates reported by Worldometer, in 2024, the UK population was around 69 million.
[701] The CMA has measured shares of supply on the basis of active devices. CMA analysis of data from market participants, in particular [✂]; [✂]; and [✂]. More detail on share of supply is set out in Annex A.
[702] The CMA has measured shares of supply on the basis of active devices. CMA analysis of data from market participants in particular [✂]; [✂]; [✂]; and [✂]. More detail on share of supply is set out in Annex A.
[703] We note Apple's submission that its operating systems are not separate products from the devices they operate on and thus do not have distinct competitive conditions. Apple's response to section 69 notice [✂]
[704] Apple generated UK revenues of £[✂] [£0-2] billion from the App Store (including advertising), £[✂] [£5-10] billion from iPhone sales, £[✂] [£0-5] billion from iPad sales, and £[✂]billion from its TPLAs (primarily from the Apple ISA). Some of the other revenue Apple generated in the UK also relates at least in part to Apple's Mobile Ecosystem (eg payment services); CMA analysis of Apple's response to section 69 notice [✂]. Figures converted from USD to GBP at a GBPUSD exchange rate of 1.2783.

app stores on the Apple Mobile Ecosystem.[705] It also generates a significant number of transactions and revenue:

(a) The App Store has a significant number of first-time native app downloads and active users in the UK. For example, in the UK in 2024, the App Store had [✂] [1 – 1.5] billion first time downloads of native apps and an average of [✂] [20-30] million monthly active users (meaning users that download at least one app per month);[706]

(b) The App Store has a significant number of app developers distributing native apps. In 2024 in the UK, the average number of app developers with apps available on the App Store at the end of each month was approximately [✂] [0 – 1] million; [707]

(c) Apple generates very significant revenue through sales on its App Store. In 2024, the value of customer billings and net revenues on the UK App Store were £[✂] [0 – 5] billion and £[✂] [0-2] billion respectively.[708,709]

Mobile Browser and Browser Engine

8.52 Apple has significant shares of supply in respect of both its Safari browser and WebKit browser engine. In particular:

(a) In March 2025 in the UK, Safari had an 86% share of supply of browsers on iOS (including iPadOS).[710] In 2024, it had a share of supply across all mobile devices in the UK of 43%.[711] Chrome was the second largest mobile browser on iOS devices with a share of supply of 12% while smaller browsers accounted for around 2%; [712]

[705] Apple's response to section 69 notice [✂]. We refer here to publicly available and finalised versions of native apps, as we understand that beta versions of apps and custom apps for specific businesses are available to be distributed via alternative means of distribution such as the Apple Business Manager. See Apple Developer Enterprise Program - Apple Developer, accessed by the CMA on 26 June 2025. We also refer specifically to apps that have been legitimately downloaded by the user. We understand that users technically can sideload native apps onto iOS and iPadOS devices, but that Apple does not allow sideloading on its mobile devices and submitted that unauthorised modification of iOS and iPadOS violates the iOS and iPadOS Software License Agreement. Apple's response to section 69 notice [✂].
[706] We have calculated the monthly active users for 2024 taking the average of the monthly data Apple provided. See Apple's response to section 69 notice [✂]. See Annex A for further information.
[707] We have calculated averages based on data from Apple. See Apple's response to section 69 notice [✂] See Annex A for further information.
[708] Apple's response to section 69 notice [✂]. See Annex A for further information.
[709] Customer billings refers to the value of user spend within apps via Apple's IAP and net revenue means the value of customer billings retained by Apple via its IAP. IAP refers to in-app purchase, Apple's proprietary payment system as described in Section 3.1.1 of Apple's App Review Guidelines.
[710] CMA analysis of publicly available Cloudflare data as set out in Annex A. Due to the specific methodology used, we note that some browser traffic on iPadOS may be captured under MacOS which means that these figures could be understated.
[711] CMA analysis of publicly available Statcounter data as set out in Annex A. Due to the specific methodology used, we note that some browser traffic on iPadOS may be captured under MacOS which means that these figures could be understated.
[712] CMA analysis of publicly available Cloudflare data as set out in Annex A.

(b) WebKit has a 100% share of supply for browser engines on Apple's Mobile Ecosystem in the UK due to the fact that WebKit is the only browser engine permitted to be used on Apple iPhone and iPad;

(c) Mobile Browsers are a key gateway for UK mobile device users to access and search the internet. In March 2023, UK mobile device users used Mobile Browsers for around 15 hours per month. This represents around 16% of the time spent on all mobile apps.[713]

8.53 The large number of users on Apple's Mobile Platform, as described above, means that Apple's actions can have a significant impact on a substantial number of people and businesses in the UK. This is especially so given the importance of mobile devices for most people's daily lives to access a range of content and services.[714]

8.54 We therefore provisionally consider that Apple has significant size and scale in respect of the provision of its Mobile Platform.

A significant number of other firms use Apple's Mobile Platform in carrying on their business

8.55 Our Guidance explains that this condition can be assessed, for example, by reference to the number of businesses, products and services 'hosted' on the firm's platform, and/or the proportion of other firms' sales it facilitates. As with the assessment of size and scale, there is no quantitative threshold for when the number of other firms using the digital activity to carry on their business can be considered significant and this may be assessed in terms of the firm's absolute position and/or relative to other firms.[715]

8.56 Apple's Mobile Platform is a key gateway through which a significant number of firms across a wide variety of sectors carry on their business by providing content and services to mobile device users in the UK.

8.57 In particular, the App Store is an important access point or gateway to users for a diverse and large range of firms, especially given it is the only way to distribute native apps on Apple's mobile devices. The evidence we have gathered indicates that the App Store is used by a significant number of firms to carry on their business. Specifically:

(a) It hosts a significant number of app developers, who conduct their business by providing a wide range of apps to users. For example, in 2024 in the UK,

[713] UK users spent 79.3 hours using mobile apps (excluding Mobile Browsers), and 14.7 hours using Mobile Browsers. 'Monthly hours per visitor spent using mobile browsers and apps in the United Kingdom (UK) in March 2023', Statistica, accessed 7 July 2025.
[714] For example, Ofcom's 2022 Online Nation report found that consumers use smartphones for an average of three hours daily, and tablets for just over 30 minutes. Online Nation 2022 Report, Figures 1.4 and 1.6.
[715] CMA194, paragraphs 2.71-2.72. See also explanatory notes to the Act, paragraph 115.

the average number of app developers with apps available on the App Store at the end of each month was approximately [✂] [0 – 1] million, and the average number of native apps available on the App Store at the end of each month was approximately [✂] [1 – 2] million.[716] These apps span a wide range of categories, including business, productivity, education, games, health and fitness and more;

(b) As noted in paragraph 8.51 above, substantial revenues are generated via the App Store.

8.58 Similarly, Safari and WebKit are an important access point or gateway to users for a diverse and large range of businesses. This is because:

(a) Mobile browsers provide the primary gateway for users to access the web on their mobile devices, and hence for businesses to reach users with their content and products. This includes both online content providers and search engine providers;

(b) As noted above, Safari was the leading mobile browser across iOS and iPadOS devices in the UK in March 2025 with a share of supply of 86%, and 43% across all mobile devices in the UK;[717] and

(c) All browser vendors use WebKit on Apple's Mobile Ecosystem due to the fact that WebKit is the only browser engine permitted to be used on Apple iPhone and iPad.

8.59 Finally, the way Apple carries out its Mobile Platform activity can have a significant impact on a range of firms, since it can influence the conditions under which they conduct their business on its platform. For example, it can:

(a) determine the extent to which other software applications or services can access certain elements of its mobile devices' hardware and software; and

(b) set the terms of access for the App Store – as the only means for distributing native apps on iOS and iPadOS – resulting in app developers seeking to reach users of Apple mobile devices having little choice but to accept Apple's terms of access.

8.60 We therefore provisionally consider that a significant number of other firms use and rely on Apple's Mobile Platform in carrying on their business.

[716] We have calculated averages based on data from Apple. See Apple's response to section 69 notice [✂] See Annex A for further information.
[717] See Cloudflare Radar and Statcounter. Due to the specific methodology used, we note that some browser traffic on iPadOS may be captured under MacOS which means that these figures could be understated.

Provisional conclusion on whether Apple meets the SMS conditions

Substantial and entrenched market power

8.61 In Chapter 6 we considered the current and potential competitive constraints on Apple's Mobile Platform from rival Mobile Ecosystems. On the evidence we have seen to date, **Apple's Mobile Platform faces limited competitive constraint from rival Mobile Ecosystems.**

8.62 We started by considering competition for end-users and provisionally found that Apple's Mobile Platform faces limited constraint:

(a) Analysis of shares of supply shows that in smartphones, in each of the last ten years, Apple's iOS and Google's Android have held significant and relatively equal shares of supply in the UK, with Apple having a share of supply of 50-60%. For tablets, although there is a third significant supplier in Amazon's Fire, Apple is the largest supplier with a share of supply of 50-60%. The shares of supply analysis shows that Apple's market position has persisted over the past ten years for smartphones and the past seven years for tablets, which supports the view that its position is entrenched.

(b) Apple and Google focus on different price segments, with Apple holding a higher share of higher-priced mobile devices, and Google holding a higher share of the sale of lower-priced mobile devices. For example, smartphones with Apple's Mobile Platform accounted for 71% of new smartphones sold over £300, and smartphones deployed with Google's Mobile Platform accounted for 100% of new smartphones sold under £300.

(c) User switching between Apple and Google's Ecosystems imposes a limited competitive constraint on Apple and we have not seen evidence that this is likely to change over the next 5 years. In particular, we found that both Apple and Google have large sticky customer bases, with the vast majority of customers not even considering the alternatives available to them when they last replaced their smartphone; and that there are material barriers to switching. Further, the evidence suggests that, when switching does happen, it often appears to be driven by users upgrading or downgrading into a different price segment, rather than switching between similarly priced mobile devices, which is consistent with the differentiated focus of Google's and Apple's Mobile Ecosystems.

(d) Apple's and Google's financial incentives to compete in the provision of their Mobile Platforms are significantly reduced compared to a situation absent the revenue sharing provisions of the ISA agreement. This limits the competitive constraint imposed on Apple by Google.

8.63 We then assessed the competitive constraint on Apple's Mobile Platform by considering competition for content providers. We have provisionally found that Apple's Mobile Platform faces limited competition when competing for content providers. In particular, both Apple's App Store and Google's Play Store are 'must-have' distribution channels for content providers as each store is the only way to access a large and distinct set of users. Consistent with this, the evidence does not indicate that there is strong competition on commission fees and quality for app developers. There is also limited competition for web content, which is generally made available cross-platform.

8.64 Beyond Google, Apple's Mobile Platform faces limited competitive constraint from other providers. There are significant barriers to entry and expansion, which limit the threat of new entry which might otherwise act as a competitive constraint on Apple's Mobile Platform. The indirect network effects related to attracting native app developers to a new operating system form a particularly strong barrier. The evidence indicates that, although technological developments such as AI and AR/VR products may affect Apple's conduct in relation to its Mobile Platform, they are not expected to significantly change Apple's position in the next five years.

8.65 Therefore, although there is some competition with Google, Apple's Mobile Platform faces limited competitive constraints, and we have not seen evidence of expected and/or foreseeable developments suggesting this is likely to change over the next five years.

8.66 In Chapter 7 we considered the competitive constraints on Apple's mobile content distribution within the Apple Mobile Ecosystem, and from non-mobile devices. This focused on the alternatives to Apple's Native App Distribution and alternatives to Apple's Mobile Browser and Browser Engine. Our provisional conclusion is that **Apple faces limited competitive constraints in relation to its content distribution within its Mobile Ecosystem and from non-mobile alternatives**:

(a) In native app distribution, Apple's policies prevent competition from alternatives to its App Store within Apple's Mobile Ecosystem, and web-based alternatives provide only a weak competitive constraint. Non-mobile content distribution alternatives are typically seen as complements rather than substitutes to the App Store. We have not seen evidence of expected or foreseeable developments suggesting that these competitive constraints are likely to disrupt the App Store's position over the next five years.

(b) In mobile browsers, Apple's Safari also faces limited competitive constraints within Apple's Mobile Ecosystem. Although other mobile browsers are available, these are limited by several barriers to entry and expansion, in particular those related to the WebKit restriction, Safari's superior access to functionality, and choice architecture; and Safari's consistently high share of supply indicates that these are a weak constraint. Alternatives to mobile

browsers, namely native apps and AI tools, only provide a limited competitive constraint for a limited set of use cases, and desktop browsing is generally considered a complement rather than a substitute. We have not seen evidence of expected or foreseeable developments suggesting that these competitive constraints are likely to disrupt the Safari or WebKit's position over the next five years.

8.67 Overall, we therefore consider that Apple faces limited competitive constraints from content distribution alternatives within its Mobile Ecosystem and from non-mobile alternatives.

8.68 Finally, earlier in this chapter, we considered how regulatory developments in the UK and internationally may affect Apple's market power in the next five years. We found that, although developments such as the EU's DMA, the ongoing Epic case in the US, and US Department of Justice case, may affect Apple's conduct, the outcomes remain uncertain, and may not impact the UK. They are therefore not likely (whether individually or in combination) to be sufficient in scope, timeliness and impact to eliminate Apple's market power in its Mobile Platform in the next five years.

8.69 We also considered Apple's profitability with respect to its Mobile Platform. We found that Apple has been highly profitable for at least the last ten years, making high profits and a high return on capital. Based on our review of Apple's own financial projections relating to future revenue and profitability, we have seen no evidence that these high levels of profitability would not continue. We estimate that its Mobile Platform activities in the UK have similarly generated a high return on capital relative to our estimate of Apple's WACC over this period. This is consistent with Apple having substantial market power.

8.70 Overall, our assessment shows that Apple faces limited current and potential competitive constraints in the provision of its Mobile Platform. We therefore provisionally conclude that Apple has **substantial market power** in the provision of its Mobile Platform.

8.71 In order to assess whether an undertaking has substantial and entrenched market power in respect of a digital activity, the CMA must carry out a forward-looking assessment over a period of at least five years – the length of the SMS designation.[718] The forward-looking assessment is part of the CMA's assessment of substantial and entrenched market power, not a separate step. It will have particular relevance for the assessment of whether market power is entrenched.[719]

8.72 In the preceding sections, we have considered developments that would be expected or foreseeable if the CMA did not designate Apple as having SMS in

[718] Section 5 of the Act.
[719] CMA194, paragraph 2.56.

respect of its Mobile Platform and which may affect Apple's conduct in carrying out the provision of its Mobile Platform. In particular, we considered:

(a) market developments such as entry, expansion and emerging business models;[720]

(b) technological developments such as AI, connected devices, edge computing, advances in network connectivity and cross-platform gaming;[721] and

(c) regulatory and other developments including litigation.[722]

8.73 We also considered the extent to which the competitive constraints on Apple's App Store and on Safari were likely to change over the next five years.

8.74 The persistence of Apple's market position and the scale of the barriers to entry and expansion described above are consistent with Apple having entrenched market power in respect of its Mobile Platform. In this context, significant changes in the competitive dynamics would be required to significantly impact Apple's strong and established position and to dissipate Apple's substantial market power in respect of its Mobile Platform in the next five years.

8.75 For the reasons set out in this decision, we provisionally conclude that there are no expected or foreseeable developments that are likely (whether individually or in combination) to be sufficient in scope, timeliness and impact to eliminate Apple's substantial market power in the provision of its Mobile Platform over the next five years.

8.76 Accordingly, our provisional view is that Apple's substantial market power in the provision of its Mobile Platform is **entrenched** as at this stage there is no clear and convincing evidence that Apple's current position of substantial market power will likely dissipate over the next five years.[723]

8.77 For these reasons and, on the basis of the above, our provisional decision is that Apple has substantial and entrenched market power in respect of the provision of its Mobile Platform.

Position of Strategic Significance

8.78 We then assessed whether Apple has a position of strategic significance in relation to its Mobile Platform. We provisionally consider that at least the first two POSS conditions are satisfied:

[720] See 'Competition to Apple's Mobile Platform arising from wider technological and market developments' in Chapter 6.
[721] See 'Competition to Apple's Mobile Platform arising from wider technological and market developments' in Chapter 6.
[722] See 'Regulatory and other developments' in this chapter.
[723] CMA194, paragraph 2.62.

(a) Apple's Mobile Platform is used by a very large number of UK users (eg to access, view and engage with digital content and services on their Apple mobile devices) and businesses in the UK (eg as a means of reaching those users).

(b) The services provided by Apple as part of its Mobile Platform are important to a wide range and large number of other businesses in the UK to provide digital content and services to users of Apple's mobile devices.

8.79 For these reasons and, on the basis of the above, our provisional decision is therefore that Apple has a position of strategic significance in the provision of its Mobile Platform.

9. NEXT STEPS

9.1 For the reasons set out in this document, we propose to designate Apple as having strategic market status in respect of the provision of its Mobile Platform.

9.2 We invite Apple and other interested parties to comment on our proposed decision before we make our final decision. [724]

9.3 Anyone wishing to do so should submit their views in writing to mobileSMS@cma.gov.uk by no later than **5pm (UK time) on 20 August 2025**.

9.4 Apple, as the subject of this SMS investigation, will have the opportunity to make oral representations on this proposed decision.

9.5 We will consider any responses, evidence and representations we receive before taking the final decision by the statutory deadline of 22 October 2025.

[724] Under section 13(1) of the Act, the CMA has a duty to carry out a public consultation on any decision that it is considering making as a result of an SMS investigation.