

**Meta’s response to the CMA’s consultation on proposed market investigation reference:
Mobile browsers and cloud-gaming**

Meta Platforms, Inc., Facebook Ireland Ltd., and Facebook UK Ltd. (together **Meta**) wish to provide a response to the CMA’s mobile browsers and cloud gaming consultation on proposed market investigation reference published on 10 June 2022 (the **Response**). The Response, as provided below, is to the best of Meta’s knowledge and belief as at the date of submission.

1. Introduction

- 1.1. Meta notes the CMA’s proposed market investigation reference (**MIR**) into the supply of web browsers and browser engines on mobile devices, and the distribution of cloud gaming services through app stores on mobile devices. Meta believes that the scope of the MIR should be widened to also further investigate and remedy Apple’s App Tracking Transparency rules (**ATT**).
- 1.2. ATT is causing significant harm to consumers and competition - while benefiting Apple. As the CMA identified in its Mobile Ecosystems Market Study Final Report (**Final Report**): the *“current implementation of ATT is likely to result in harm to competition, make it harder for app developers to find customers and to monetise their apps, and ultimately harm consumers”* and *“ATT has given Apple’s advertising services a competitive advantage”*.¹
- 1.3. Apple’s harmful practices in respect of ATT meet the legal test for an MIR. The CMA’s Final Report found reasonable grounds to suspect that ATT prevents, restricts or distorts competition. In addition, the relevant factors that the CMA takes into account when deciding whether to exercise its discretion to make a reference are met: (i) the scale of the adverse effects of ATT is significant, (ii) appropriate remedies are available, and (iii) it would not be more appropriate to address this concern via other powers available to the CMA or other regulators. ATT is well-suited to an MIR: ATT’s impact is felt across several markets and a range of different stakeholders (including app developers, advertisers, ad companies and consumers).
- 1.4. Importantly, ATT is closely linked to the issues within the proposed scope of the MIR. Expanding the MIR’s scope to include ATT would ensure that the investigation into, and any remedies imposed to address, Apple’s restrictions on cloud gaming and web browsers are effective in combating Apple’s strategy of locking consumers into the iOS ecosystem.² Investigating and remedying ATT will also enhance the efficacy of the CMA’s separate investigation into Apple’s App Store practices.
- 1.5. For example:

¹ Final Report, paragraphs 6.210 and 6.219.

² For example, see Final Report: paragraphs 6.214 and 6.264 (where the CMA concludes that ATT further entrenches Apple’s App Store position and therefore its market power in app distribution); paragraph 6.265 (where the CMA concludes that Apple’s restrictions on cloud gaming on iOS protect its competitive position in app distribution, as well as in mobile devices and operating systems); and paragraphs 5.146-5.147 (where the CMA concludes that Apple’s restrictions on web browsers enable Apple to retain market power within its iOS ecosystem, raising developers’ costs and hindering competition).

- **ATT is closely linked to other issues in the MIR.** As the CMA identified in the Final Report, lifting Apple’s restrictions on cloud gaming and on mobile web browsers would likely enhance competition. Lifting these restrictions could permit innovative cloud games and web apps to emerge. But many of the cloud games and web apps that might emerge if Apple’s restrictions were lifted would likely rely on personalised ads for monetisation and discovery. Should ATT artificially limit developers’ ability to monetise and to help users discover cloud games and web apps, many of these games and apps might never emerge. The positive impacts of lifting Apple’s cloud gaming and web browser restrictions will be sharply reduced. Notably, because ATT prevents linking of data across other apps *and websites*, ATT hinders monetisation and discovery on the web, as well as within native apps.
 - **ATT is closely related to the issues in the CMA’s App Store investigation.** That investigation concerns Apple’s monopoly on app distribution and payment services, and its associated commission. Today, advertising is the only alternative to the App Store for app discovery in iOS and to Apple’s in-app payment system for app monetisation. If the CMA does not take decisive action to protect the effectiveness of advertising - it will ultimately be much more difficult to tackle Apple’s harmful monopolisation and rent extraction in the iOS ecosystem.³
- 1.6. The CMA is very well-placed to address ATT and has unique and recent experience from its Privacy Sandbox investigation. Given ATT’s close links to the existing issues in the MIR, including Apple’s ATT practices would only be a limited expansion to the current proposed terms of reference, and the CMA’s MIR powers can provide a holistic and effective remedy. Meta urges the CMA to take this opportunity to terminate the harm being caused by Apple to UK consumers and businesses and make the UK a world leader in ensuring free and open competition in the iOS ecosystem.
- 2. ATT meets the legal framework for an MIR and is an appropriate use of CMA discretion**
- The statutory test for reference is met**
- 2.1. The CMA’s Final Report has clearly established that in respect of ATT there are reasonable grounds for suspecting that any feature, or combination of features, of a market in the United Kingdom for goods or services prevents, restricts or distorts competition.⁴ As such, the legal test for reference is met.
- 2.2. While the CMA is not obligated to provide a precise market definition to which the MIR for ATT would relate, the CMA’s Final Report identifies a number of markets impacted by Apple’s ATT. Those markets include: app distribution, the supply of apps, and the supply of advertising services.⁵

³ In addition, commentators have noted that ATT will likely reduce the competitive constraint of other app stores: <https://mobiledevmemo.com/does-att-wreck-alternative-app-stores/>.

⁴ Enterprise Act 2002, section 131(1).

⁵ Meta does not comment on the appropriateness or otherwise of these in respect of market definition.

2.3. The CMA’s Final Report sets out reasonable grounds to suspect that the following features, alone or in combination, prevent, restrict or distort competition in app distribution, the supply of apps, and the supply of advertising services:⁶

- The ATT framework applies to all apps on iOS, except to Apple’s own apps, which only began showing a “personalised ads” prompt many months after ATT’s implementation. This means that:
 - ATT limits competition among app developers, who can no longer effectively monetise apps via advertising, resulting in lower quality apps and fewer apps for consumers. ATT also increases the costs of apps for consumers by pushing app developers towards paid monetisation models. Because it prevents linking of data across apps *and websites*, ATT hinders monetisation not only within native apps, but also on the web.
 - ATT limits competition in advertising services. In addition to ATT, Apple’s SKAdNetwork offers third parties an inferior ability to carry out attribution and measurement, while Apple’s own access to data through a private ads measurement API is significantly better. These features provide Apple’s advertising service with a significant competitive advantage (in addition to data advantages) and restrict competition in advertising services.
 - ATT reinforces Apple’s position in app distribution. As app install ads become less effective, Apple’s App Store as a distribution channel and source of discoverability for new apps is strengthened. Due to Apple’s restrictions on web browsers, browsers are not a viable alternative distribution channel as web apps cannot offer the same user experience for consumers. Moreover, even if these restrictions were lifted, ATT would limit web apps’ ability to rely on personalised advertising for monetisation and discoverability.
- Apple prevents the use of incentives to users in any circumstances to encourage opt-in.⁷ This limitation directly prevents developers (including Apple rivals) from improving their offer to consumers and restricts developers from offering innovative new features to consumers.
- Apple influences user behaviour through choice architecture which unduly influences consumers to opt-out of sharing data, impacting on consumer choice.

Apple’s ATT is causing significant harm to consumers and to competition

2.4. Meta agrees with the CMA’s conclusion that ATT is “*likely to result in harm to competition, make it harder for app developers to find customers and to monetise their apps, and ultimately harm consumers by increasing the prices or reducing the quality and variety of apps available*”.⁸

⁶ Final Report, paragraphs 6.163-6.219; Appendix J, paragraphs 37-186.

⁷ App Store Review Guidelines, 3.2.2(vi); see also Final Report, Appendix J, paragraph 98.

⁸ Final Report, paragraph 6.219.

- 2.5. In respect of next steps, the Final Report says that the CMA and ICO “*will continue to engage*” with Apple on the implications of Apple’s ATT changes.⁹ Meta is pleased that the CMA is continuing to address its concerns about ATT with Apple. However, ATT affects a broad range of stakeholders, for whom any changes made to ATT will have important consequences. Meta is concerned that the CMA’s bilateral engagement with Apple limits the ability for other affected groups to engage with any proposed changes and thus provide the CMA with their critical perspectives on the consequences of those changes. In contrast, addressing these changes through a public process like an MIR would give third parties the opportunity to provide that valuable input. An MIR process would not prevent the CMA from reaching a faster resolution with Apple on ATT ahead of the CMA’s statutory timetable for market investigations.
- 2.6. ATT has already had, and will continue to have, a massive impact on the iOS ecosystem. Costs of advertising have increased and developer ads revenues have sharply declined.¹⁰ Meanwhile, Apple’s self-preferencing is giving its own advertising business a huge competitive advantage, which is growing rapidly as a result. The knock-on consequences of ATT reinforce Apple’s market power in app distribution.¹¹
- 2.7. Meta summarises the negative impacts of Apple’s ATT below, as set out in the Final Report.
- 2.8. Apple’s ATT policy is having severe impacts on app developers:
- **It is more difficult for developers to monetise their apps via in-app advertising:** ATT severely diminishes developers’ ability to monetise their apps through ad personalisation. This effect is exacerbated by Apple’s SKAdNetwork, which offers inferior attribution and measurement capabilities. As the CMA’s Final Report found, ATT opt-in rates have been low¹² and have fallen significantly from pre-ATT consent rates. Importantly, effective opt-in rates are likely to be even lower, as certain iOS users cannot be shown the ATT prompt and reported rates will not account for ATT’s double opt-in requirement.¹³ As the CMA’s Final Report found, ATT has already had a material impact on developers’ ads revenue.¹⁴
 - **It is more expensive for developers to find new users and re-engage existing users:** the average cost for mobile app install ads is significantly higher for iOS14.5+ campaigns than for iOS14.4- campaigns. Over the year following ATT’s launch, the reported median cost per acquisition (**CPA**) on Meta for app

⁹ Final Report, paragraph 6.219.

¹⁰ Final Report, Appendix J, paragraph 130 (costs of advertising), and paragraphs 136, 137 and 139 (impact on developer revenue).

¹¹ Final Report, paragraphs 6.210 and 6.214.

¹² Final Report, paragraph 6.195: estimates of opt-in rates received by the CMA from app developers varied, ranging around 20-30%.

¹³ Users who cannot be shown the ATT prompt include users who have centrally disabled prompts in their general device settings, users whose Apple IDs are managed by an educational or business institution, and users whose Apple IDs were created in the last three days: <https://support.apple.com/en-us/HT212025>. These users will not be shown the ATT at all, resulting in their automatically being opted-out.

¹⁴ Final Report, Appendix J, paragraph 139.

conversions increased by [REDACTED] globally and by [REDACTED] in the UK. In addition, discoverability in the App Store is already seen by developers as the main channel to reach consumers. ATT will further decrease the number of viable alternatives to Apple's own ads products, strengthening Apple's market power in app distribution.¹⁵

- **More developers are considering monetising via in-app purchases:** given the significant impact of ATT on ads revenues, developers may be forced to monetise their apps by charging consumers.¹⁶ These charges would then be subject to Apple's 15-30% commission. Developers who compete with Apple's own apps on iOS (Music, Arcade, News, Fitness etc.) would be particularly affected as the 15-30% commission would hamper their ability to compete against Apple. Many developers may not be able to make the move to a paid model and therefore may be forced to shut down.

2.9. Apple's ATT has negative consequences for UK consumers and businesses:

- **Increased costs of apps and fewer apps:** personalised advertising provides an effective monetisation model for developers. An ads monetisation model helps keep apps free or available at a lower cost. If developers start to monetise by charging consumers to access content, this switch in monetisation strategy increases the costs of apps for consumers. In addition, many ad-supported apps may disappear, especially those created by smaller developers who cannot adapt their business models.
- **Increased costs of switching from Apple:** as the prices of apps increase, the cost of switching away from Apple increases. This raises barriers to switching, which in turn increase consumer lock-in to the iOS ecosystem and further entrench Apple's position in mobile devices.
- **Skews consumer decision-making and prevents innovative offers:** ATT's choice architecture may unduly influence consumers to opt-out of data sharing without understanding what the pros and cons of data sharing are. Apple's restriction on developers' ability to offer incentives to encourage opt-in stops innovative offers being made to consumers where consumers could benefit from, and share in the value of, personalised ads. For example, developers could offer cash-backs on purchases made via in-app ads for those consumers who opt-in to ATT.¹⁷ But such innovative offers are flat out prohibited by Apple.
- **Increased costs of advertising for UK businesses:** thousands of businesses across the UK rely on personalised advertising in order to efficiently reach existing and potential customers. As the costs of advertising increase, limited advertising budgets become less effective.

2.10. Apple's ATT policy has significant benefits for Apple – not just its advertising business but for its ecosystem as a whole. Absent intervention, Apple has no incentive to change ATT. The benefits to Apple include:

¹⁵ Final Report, paragraphs 6.214-6.215.

¹⁶ Final Report, paragraphs 6.216-6.218. While developers will think long and hard before changing their apps' monetisation models, evidence indicates that ATT has already prompted some developers to choose paid over ad-supported monetisation. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4090786.

¹⁷ Final Report, Appendix J, paragraphs 98-101.

- **Less competition for its ads business:** as the CMA’s Final Report found, Apple does not apply ATT to itself. When ATT was first enforced (April 2021), Apple’s own apps had no prompt for consumer privacy controls. It was only after the iOS15 release in September 2021 where Apple released a significantly distinct and less pejoratively worded “personalised ads” prompt. In addition, “Apple Ads Attribution API,” a tool Apple reserves for customers of its own ads business, provides more timely and granular data than SKAdNetwork, the tool Apple makes available to third parties.¹⁸ This self-preferencing means that Apple’s ads business is at a significant competitive advantage, as can be evidenced by its rapid expansion, revenue growth, and growth forecasts.¹⁹
- **Increased revenue from in-app payments:** as app developers may be forced to pivot to monetise via in-app purchases, Apple will take a 15-30% commission on each IAP, increasing its in-app-purchase revenues as a result of making advertising less viable.
- **Reinforcing market power:** by increasing the costs of consumers switching to a non-iOS alternative, consumers are further locked into Apple’s ecosystem, reinforcing Apple’s market power.

It is an appropriate use of CMA discretion to make an MIR for ATT

- 2.11. Where the statutory criteria are met, the CMA has discretion in deciding whether to make an MIR taking into account the relevant factors as set out in the CMA’s guidance.²⁰ Expanding the scope of the MIR to include ATT is an appropriate use of the CMA’s discretion.

The scale of the suspected problem is significant

- 2.12. Both the size of the affected market and the proportion of the market affected is significant. As the CMA’s Final Report concludes, app stores are a key distribution channel for native apps. In the UK in 2021, the CMA found that Apple’s App Store had a market share of 30-40% of all app downloads across all main device types. On iOS, Apple has a monopoly over app stores as Apple restricts competing app stores. All app developers who distribute apps on iOS via the App Store are beholden to Apple’s terms and conditions, which include mandatory compliance with ATT. As the CMA reports, on average 20-30 million users downloaded at least one native app from the App Store in any given month in 2021.²¹

¹⁸ For example, see Table J.1 in the Final Report, Appendix J.

¹⁹ For example, see the evidence summarised at Final Report, Appendix J, paragraph 167.

²⁰ Market investigation references: OFT511, paragraph 2.1. The CMA’s guidance indicates that the following four factors are taken into account in the exercise of this discretion: (i) whether the scale of the suspected problem, in terms of its adverse effect on competition, is such that a reference would be an appropriate response to it, (ii) whether there is a reasonable chance that appropriate remedies will be available, (iii) whether it would be more appropriate to deal with the competition issues identified by applying the Competition Act 1998 or using other powers available to the CMA or, where appropriate, to sectoral regulators, and (iv) whether it would be more appropriate to address the problem identified by means of undertakings in lieu of a reference.

²¹ Final Report, paragraph 4.39.

- 2.13. The adverse effects of ATT can already be seen in the multi-millions of developer revenue that have already been reported as lost as a result of ATT. Meanwhile, Apple's own advertising services have grown substantially - its UK advertising revenues tripled between 2018 and 2021, and is forecasted to be a multi-billion dollar business in 2022 on a worldwide basis.²²
- 2.14. Apple's ATT is a persistent feature in the relevant markets. Apple has not indicated any willingness to remedy ATT despite significant outcry from developers since it was first announced. The CMA's Final Report indicates that Apple is in ongoing discussions with the CMA and the ICO about the ATT framework. This is a welcome development and recognises the importance of addressing the harm caused by ATT. However Meta's concern is that this process does not enable third parties to input on changes to ATT that will have important consequences for them. An MIR is a more appropriate mechanism to achieve resolution in respect of ATT as it enables third-party engagement.

Appropriate remedies are available through an MIR

- 2.15. The CMA has wide-ranging statutory powers to accept undertakings or impose an order in the event that it made an MIR. While Meta does not comment on effective remedies for ATT in this Response, Meta notes that Chapter 8 of the Final Report has already contemplated a number of potential remedies to address Apple's conduct:²³
- Requiring Apple to offer an equivalent prompt to its own services as it does to third-party app developers;
 - Requiring Apple to offer equivalent functionality and data access under SKAdNetwork as is available via Apple's own Ads Attribution API;
 - Requiring Apple to remove its ban on developers offering incentives to encourage opt-in;
 - Requiring Apple to undertake sufficient user testing to create a revised prompt for consumer privacy controls which ensures that consumers are sufficiently informed of their options and consequences of opting-in or opting-out.
- 2.16. Meta would be willing to provide further detailed technical submissions on effective remedies. However, Meta considers that the key principles for any remedies are equivalences and effectiveness:
- As a minimum, Apple must be required to treat third parties in the same manner as its own services in all relevant respects; and
 - Moreover, for remedies to be effective, Apple must not be permitted to artificially handicap its rivals. In this regard, Meta notes that the CMA's Privacy Sandbox commitments provide a relevant analogue.

²² Final Report, Appendix J, paragraph 167.

²³ Final Report, paragraphs 8.189-8.190.

- 2.17. However, regardless of the precise remedies the CMA ultimately selects, it is clear that any relevant remedies could be implemented by the CMA. The remedies could be simply constructed as orders requiring changes to Apple's rules and enforcement practices.

It is not more appropriate to use other CMA powers or other regulatory powers

- 2.18. An MIR is an appropriate tool to address Apple's ATT conduct. The CMA's order making powers can remedy ATT's adverse effects on competition and its harmful effects in the future. It would not be more appropriate or effective to address these concerns via the CMA's competition act or consumer law tools.

3. Meta supports the CMA's MIR into web browsers and cloud gaming

- 3.1. Apple's restrictions on web browsers and cloud gaming result in worse outcomes for consumers and competition.
- 3.2. Apple has no incentive to lift its restrictions on web browsers or cloud gaming because they significantly benefit Apple. These restrictions enable Apple to retain and defend its power over its mobile ecosystem and protect its App Store revenues. Therefore, absent intervention, Apple's anticompetitive practices will not change. Meta supports the CMA's intervention to remove these restrictions and agrees that opening a market investigation into these practices is appropriate. Expanding the scope of the MIR to include ATT will ensure that the CMA's remedies are more effective by giving innovative developers the choice to monetise via advertising effectively across both web and app surfaces.
- 3.3. Chapter 8 of the CMA's Final Report has identified a number of potential remedies that should be effective in lifting Apple's restrictions on web browsers and cloud gaming. Meta notes that in order for a remedy to be effective the CMA should ensure that Apple does not circumvent proposed remedies by imposing other restrictions that would have the same result. For example, despite Apple having lifted its outright ban on cloud gaming, Apple's other restrictions on cloud gaming apps continue to create a de facto ban.

4. Conclusion

- 4.1. Meta notes the CMA's decision to open a market investigation into Apple's practices in respect of web browsers and cloud-gaming. Meta considers that Apple's ATT practice is an interrelated example of Apple's control over its ecosystem which has harmful consequences for those dependent on it, and prevents competition from flourishing. For the reasons discussed above, Meta believes the MIR scope should be expanded to include ATT. Indeed, Apple's incentives for its restrictions on web browsers, cloud gaming and ATT are all the same - to ensure Apple retains control over its closed ecosystem. Apple is using its market power to extract more revenue from developers and consumers, leverage its iOS monopoly into other services like gaming and advertising, and lock consumers into the iOS ecosystem by making it harder to switch.
- 4.2. Expanding the scope of the MIR to further investigate and remedy ATT would be an appropriate and effective use of the CMA's discretion. In particular, it would be a limited expansion of the existing terms of reference necessary to make the existing scope of the MIR and other ongoing CMA investigations into Apple more effective. If ATT continues to artificially limit developers' ability to monetise (and be

discovered) via advertising - the positive impacts of removing the cloud gaming and web browser restrictions will be reduced. In addition, resolving ATT will make the CMA's ongoing investigation into Apple's monopoly on app distribution and payment services (and its associated commission) more effective. Advertising provides app developers a critical alternative to the App Store for app discovery and to Apple's in-app purchase system for app monetization; ads enable consumers to discover third-party apps, and enable developers to monetise those apps without charging consumers (and paying Apple's commission). If the CMA does not take decisive action to protect the effectiveness of advertising - it will ultimately be much more difficult to tackle Apple's harmful monopolisation and rent extraction in the iOS ecosystem.