

Anticipated acquisition by Microsoft Corporation of Activision Blizzard, Inc.

CMA/15/2022

Decision on relevant merger situation and substantial lessening of competition

ME/6983/22

The CMA's decision on reference under section 33(1) of the Enterprise Act 2002 given on 1 September 2022. Full text of the decision published on 12 October 2022.

Please note that [✂] indicates figures or text which have been deleted or replaced in ranges at the request of the parties or third parties for reasons of commercial confidentiality.

SUMMARY

Overview of the decision

1. The Competition and Markets Authority (**CMA**) conducted a phase 1 investigation into the anticipated acquisition of Activision Blizzard, Inc. (**ABK**) by Microsoft Corporation (**Microsoft**) (the **Merger**). After examining a range of evidence, the CMA believes that the Merger meets the threshold for reference to an in-depth phase 2 investigation, giving rise to a realistic prospect of a substantial lessening of competition (**SLC**) in gaming consoles, multi-game subscription services, and cloud gaming services.
2. As a result of the initial concerns found in the phase 1 investigation, the CMA is therefore considering whether to accept undertakings under section 73 of the Enterprise Act 2002 (the **Act**). Microsoft and ABK have until 8 September 2022 to offer an undertaking that might be accepted by the CMA. If no such undertaking is offered, then the CMA will refer the Merger for an in-depth phase 2 investigation pursuant to sections 33(1) and 34ZA(2) of the Act. This would enable the CMA to investigate these concerns in more detail before reaching a final decision on whether or not the Merger gives rise to an SLC.

About the gaming industry

The same three companies have been the only major suppliers in the console gaming market for the past 20 years

3. The gaming industry is the UK's largest revenue-generating form of entertainment. It is bigger than pay TV, home video (including streaming), cinema, music, or books. In 2021, it generated approximately £7 billion in revenue in the UK.
4. For the past twenty years, the same three companies have been the only significant suppliers of console gaming – Microsoft (Xbox), Sony (PlayStation) and Nintendo (Switch being the current generation console), with little or no entry from new rivals. As part of its investigation, the CMA sought to ensure that the Merger would not substantially reduce either current or future potential competition.
5. Part of the difficulty in entering and expanding in the console gaming market is the existence of strong network effects. Console providers such as Microsoft compete to attract users who want to play high-quality games, often with friends, as well as high-quality content from game developers, who want to make games for consoles with a large user base. Consoles with a lot of gamers attract better content, which in turn attracts more gamers to that console, which in turn attract better content, and so on. This self-reinforcing mechanism makes it more difficult for new entrants without a large user base or good pre-existing gaming content to enter and grow in the market.
6. In addition to consoles, people play games on personal computers (**PCs**) and mobile devices. Consoles and PCs can usually process larger and more complex games (such as *Call of Duty*). Mobile devices currently lack the technical capabilities to play most console games, and most people use them to play more casual games (such as *Candy Crush*).

Subscription services and cloud gaming are growing

7. The CMA believes the gaming industry is in a transitional phase. Over the past several years, gamers have typically accessed games by paying an up-front fee and downloading the relevant games from a digital storefront (such as the Xbox Store) to their console or device (such as a PC or mobile). For consoles this 'buy-to-play' model, whereby the gamer pays for the game in full and then accesses the software locally on their device, remains the primary mode of delivering games.
8. In recent years, two important and closely related disruptions have started to emerge in the gaming industry. The first is the development of cloud gaming services, a technology that allows complex games to be accessed on remote servers and streamed directly to a device. Since games are executed remotely, gamers can play using a range of devices that can be less powerful, and are often cheaper, than consoles (such as mobile phones or tablets). There have been

several recent entrants into the gaming industry using this disruptive technology, including Amazon Luna, Netflix, Google Stadia, Blacknut, NVIDIA GeForce Now, as well as publishers like Ubisoft. Many industry experts predict that cloud gaming will continue to grow significantly in the coming years.

9. The second important development is the emergence of multi-game subscription services. Unlike the traditional buy-to-play model, these services allow gamers to access a catalogue of games for a fixed, often monthly, fee. Some subscription services currently offer games that must be downloaded and played on consoles, with a smaller selection of games that can be streamed from cloud infrastructure (such as Xbox Game Pass), and other subscription services offer gaming libraries that are entirely cloud-based (such as Amazon Luna and Google Stadia). While most of the revenue in the industry continues to be generated from the purchase of individual games, multi-game subscription services are rapidly growing and have attracted a range of new entrants, including Microsoft, Sony, Nintendo, Amazon, Apple, Electronic Arts, Ubisoft, NVIDIA, Netflix, Utomik, Blacknut, and Google.
10. Although the console gaming market is highly concentrated, the CMA believes that the shift to cloud gaming services and multi-game subscription services is opening a window of opportunity for new entrants. To succeed, these new entrants will need to offer a strong gaming catalogue that will attract users. Cloud gaming service providers will also need access to cloud infrastructure and an operating system (OS) license (especially Windows OS, which is the operating system for which most PC games are designed).

About the businesses and the transaction

Microsoft has a strong gaming ecosystem

11. Microsoft is a global technology company offering a wide range of products and services, with a global turnover of nearly £125 billion in FY2021. Since 2001, it has released several generations of Xbox gaming consoles. Xbox is one of the three major consoles in the market alongside Sony PlayStation and Nintendo Switch. Gamers typically download digital copies of the games they want to play on Xbox from Microsoft's Xbox Store. Microsoft also offers a multi-game subscription service, Xbox Game Pass, where gamers pay a monthly fee to gain access to a library of downloadable and cloud-based gaming content.
12. Microsoft is also a game publisher and currently owns 24 game development studios, several of which it acquired in recent years. These studios make games such as *Minecraft*, *Forza*, *Elder Scrolls*, and *Halo* for Xbox and other consoles, PC, and mobile devices. Some of this content is available exclusively on Xbox and some is licensed to rival console providers.

13. Microsoft has other business areas that are relevant to gaming. One is Azure, a leading cloud platform (ie a network of data centres and cloud computing infrastructure) that offers a wide range of services across several industries, including gaming. Another is Windows, the leading PC operating system. Many people play games on a PC rather than a console, and the vast majority of them use Windows OS. Because of its popularity, game developers generally make games that are designed and optimised for Windows OS.

ABK creates some of the most popular gaming content

14. ABK is a game developer and publisher with global turnover of £6.3 billion in FY2021. It develops gaming content for consoles, PC, and mobile. ABK's three most popular franchises—*Call of Duty*, *World of Warcraft* and *Candy Crush*—account for most of its revenue.
15. *Call of Duty*, in particular, is widely regarded as one of the most successful gaming franchises of all time. For more than a decade, its releases have ranked in the top games available on console and are expected to continue to do so.

Microsoft's acquisition of ABK is a significant transaction

16. Microsoft announced in January 2022 that it has agreed to acquire ABK for a purchase price of USD 68.7 billion. The Merger is conditional on receiving merger control clearance from a number of global competition agencies, including the CMA.

The CMA's assessment

Why is the CMA looking at the merger?

17. The CMA's primary duty is to seek to promote competition, both within and outside the UK, for the benefit of consumers. It has a duty to investigate mergers that could raise competition concerns in the UK, provided it has jurisdiction to do so.
18. The CMA believes that it has jurisdiction to review this Merger: the CMA believes it is or may be the case that each of Microsoft and ABK is an enterprise and that they will cease to be distinct as a result of the Merger, and that the turnover test is met given ABK generated more than £70 million turnover in the UK in FY2021. Accordingly, arrangements are in progress or contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

How did the CMA investigate the merger?

19. At phase 1, the CMA needs to establish whether there is a *realistic prospect* of an SLC which merits a reference to an in-depth phase 2 investigation. This is a lower threshold than that used during a phase 2 investigation, which requires the CMA to conclude that a merger is *likely* to result in an SLC in order to prohibit a transaction.

20. To understand the implications of the Merger on competition, the CMA gathered information from a wide variety of sources, including by using the CMA's statutory information gathering powers to ensure that the CMA has as complete a picture as possible under the constraints of the statutory timetable.
21. As part of its phase 1 investigation, the CMA gathered data and reviewed over one thousand internal documents from Microsoft and ABK to understand their businesses, their future strategies, and the gaming industry as a whole. The CMA also gathered evidence from other market participants, such as game developers and competitors across console, cloud, PC, and mobile gaming, which included both written and oral submissions as well as their internal documents.
22. This evidence shows that the Merger could impact competition in several ways. In investigating the Merger, and consistent with the CMA's strict legal time constraints at phase 1, the CMA focused on the most important ways in which the Merger could potentially harm competition, both now and in the future. These 'theories of harm' assess the harm to competition that could arise from:
 - (a) Microsoft withholding or degrading ABK's content—including popular games such as *Call of Duty*—from other consoles or multi-game subscription services; and
 - (b) Microsoft leveraging its broader ecosystem together with ABK's game catalogue to strengthen network effects, raise barriers to entry and ultimately foreclose rivals in cloud gaming services.

A game-changing merger

23. Microsoft already holds a strong position in the gaming industry through its established Xbox console, which has a large user base and a strong catalogue of gaming content. Microsoft has been steadily strengthening its gaming ecosystem in line with the evolution of the gaming industry, including by acquiring independent gaming studios (such as Bethesda in 2021), expanding Game Pass (its market-leading multi-game subscription service), and developing its cloud infrastructure to better support its gaming activities.
24. Acquiring ABK would significantly expand Microsoft's own gaming library, adding some of the world's best-selling and most recognisable franchises, including *Call of Duty*, *World of Warcraft*, and *Candy Crush*. The CMA is concerned that having full control over this powerful catalogue, especially in light of Microsoft's already strong position in gaming consoles, operating systems, and cloud infrastructure, could result in Microsoft harming consumers by impairing Sony's—Microsoft's closest gaming rival—ability to compete as well as that of other existing rivals and potential new entrants who could otherwise bring healthy competition through innovative multi-game subscriptions and cloud gaming services.

What could be the impact of the merger on gaming consoles and subscription services?

25. The CMA gathered substantial evidence from Microsoft, ABK, and third parties to assess the significance of ABK's gaming portfolio. This evidence consistently pointed towards ABK's content, especially *Call of Duty*, as being important and capable of making a material difference to the success of rivals' gaming platforms. ABK invests significant time and capital in creating regular *Call of Duty* releases, which consistently rank as some of the most popular games. These titles require thousands of game developers and several years to complete, and there are very few other games of similar calibre or popularity.
26. The CMA believes the Merger could allow Microsoft to make ABK content, including *Call of Duty*, exclusive to Xbox or Game Pass, or otherwise degrade its rivals' access to ABK content, such as by delaying releases or imposing licensing price increases. This type of concern is known as 'input foreclosure', where a firm uses its control of an important input to harm its rivals.
27. The CMA examined internal documents and economic analyses to assess whether Microsoft would have an incentive to use ABK's content to foreclose rivals. The CMA did not limit its analysis to an assessment of the short-term or 'static' costs and benefits to Microsoft of engaging in these strategies. Rather, the CMA considered Microsoft's broader strategies, as evidenced by its internal documents and historical course of dealing following similar transactions in the past. The CMA found that the potential strategic benefits to Microsoft of using ABK's content to foreclose rivals—such as expanding the Game Pass user base and strengthening network effects in its gaming ecosystem—could outweigh any immediate losses in terms of licensing revenues. The CMA notes that Microsoft has followed this approach in several past acquisitions of gaming studios, where it made future game releases from those studios exclusive in consoles to Xbox (such as the upcoming *Starfield* and, based on Microsoft's public statements, *Elder Scrolls VI* from Bethesda, a studio Microsoft acquired as part of its USD 7.5 billion acquisition of ZeniMax in 2021).
28. The CMA believes that in the short- to medium-term, the main rival that could be affected by this conduct would be Sony. Evidence suggests that Microsoft and Sony compete closely with each other in terms of content, target audience, and console technology. Nintendo, on the other hand, competes less closely with either of Sony or Microsoft, generally offering games that focus more on 'family fun' and innovative ways of playing (eg the *Wii Fit* board) and does not currently offer any *Call of Duty* games on the Nintendo Switch.
29. PlayStation currently has a larger share of the console gaming market than Xbox, but the CMA considers that *Call of Duty* is sufficiently important that losing access to it (or losing access on competitive terms) could significantly impact Sony's revenues and user base. This impact is likely to be felt especially at the launch of the next

generation of consoles, where gamers make fresh decisions about which console to buy. The CMA believes that the Merger could, therefore, significantly weaken Microsoft's closest rival, to the detriment of overall competition in console gaming.

30. As the market for multi-game subscription gaming services grows, Microsoft could use its control over ABK content to foreclose rivals, including recent and future entrants into gaming as well as more established players such as Sony. Absent the Merger, ABK games would in principle be available to any multi-game subscription service. The CMA recognises that ABK's newest games are not currently available on any subscription service on the day of release but considers that this may change as subscription services continue to grow. After the Merger, Microsoft would gain control of this important input and could use it to harm the competitiveness of its rivals. As the multi-game subscription market is still in its infancy, the effect of the Merger could be to tip or significantly increase concentration in the market in Microsoft's favour before future rivals have a chance to develop. The CMA therefore believes that the Merger gives rise to significant competition concerns in multi-game subscription services (including cloud gaming services, to the extent these are distributed through multi-game subscription services).

What could be the impact of the merger on cloud gaming services?

31. In the longer term, many market participants expect cloud gaming to grow and for gamers to shift from console gaming to cloud gaming on a range of devices. This market is growing rapidly and has seen several new entrants that were previously not active in console gaming, including cloud platform providers, such as Google and Amazon, and game developers such as Ubisoft.
32. Microsoft already has a combination of assets that is difficult for other cloud gaming service providers to match. By having a large and well-distributed cloud infrastructure, Microsoft will be able to host games on its servers on preferential terms and reach gamers throughout the world without having to pay a fee to third-party cloud platforms. By having Windows, the OS where the vast majority of PC games are played, Microsoft can stream games from Windows servers without having to pay an expensive Windows licensing fee and may be able to design and test games made for Windows more effectively than rivals. And by having an existing console ecosystem, Microsoft has an existing user base of gamers to which it can promote its cloud gaming services, as well as a range of popular games that it can offer.
33. The Merger would, therefore, bring together the company in a uniquely strong position to offer cloud gaming services with one of the industry's strongest gaming catalogues. The CMA is concerned that, by leveraging ABK's content and Microsoft's wider ecosystem, Microsoft will have an unparalleled advantage over current and potential cloud gaming service providers. This could result in increased concentration in cloud gaming services or the market 'tipping' to Microsoft, and

ultimately deny consumers the benefits of competition between new and emerging providers vying to succeed in cloud gaming. The CMA recognises that, if Microsoft were to significantly increase its market power in cloud gaming services, this could have knock-on effects on independent game developers and publishers who compete against Microsoft's own gaming portfolio, and who could be disadvantaged in a number of ways, such as by having to pay higher fees or by being demoted on Microsoft's gaming ecosystem.

34. The CMA therefore believes the Merger could substantially reduce competition in cloud gaming services.

What happens next?

35. As a result of these concerns, the CMA believes that the Merger gives rise to a realistic prospect of an SLC in gaming consoles (together with their digital storefronts), multi-game subscription services, and cloud gaming services. The CMA is therefore considering whether to accept undertakings under section 73 of the Act. Microsoft and ABK have until 8 September 2022 to offer an undertaking which might be accepted by the CMA. If no such undertaking is offered, or the CMA decides that any undertaking offered is insufficient to remedy its concerns to the phase 1 standard, then the CMA will refer the Merger for an in-depth phase 2 investigation pursuant to sections 33(1) and 34ZA(2) of the Act. Following such a further detailed investigation, the CMA would reach a final decision as to whether or not the Merger gives rise to an SLC.

ASSESSMENT

PARTIES

36. Microsoft is a global technology company founded in 1975 and headquartered in Redmond, Washington, US.¹ Microsoft is publicly listed on Nasdaq. Microsoft's global turnover in the financial year 2021 was close to £125 billion, of which [✂] was generated in the UK.²
37. Microsoft is organised into three operating segments: (i) Productivity and Business; (ii) Intelligent Cloud; and (iii) More Personalised Computing.³ Microsoft offers a wide range of products and services including:
- (a) Windows OS. Microsoft Windows is a computer OS that can be installed on a PC or server to provide a graphics-based interface between the user and the computer's hardware and software. Over the years, Microsoft has released various versions of Windows in an endeavour to improve on features like speed and user interface.⁴ Microsoft offers two types of licences for Windows – Windows for desktop PCs (**Windows Client**) and Windows for servers (**Windows Server**) [✂].⁵
 - (b) Azure. Azure is Microsoft's public cloud platform and associated services. Azure offers over 200 Infrastructure-as-a-Service (**IaaS**) and Platform-as-a-Service (**PaaS**) solutions including computing, storage, networking, databases, operating systems, developer tools, and runtimes, to help enterprises build and run their systems, analytics, and applications in the cloud. Customers pay consumption-based fees for the services they use.⁶ Within Azure, Microsoft offers Azure PlayFab, a backend platform for live games, providing managed game services, real-time analytics, and live operations, which enables game developers to build and operate games, analyse gaming data, and improve overall gaming experiences.⁷ Examples of games that run on Azure PlayFab include first-party games such as *Minecraft*, *Forza Horizon 4*, *Doom Eternal*, and *Microsoft Flight Simulator*, as well as some third-party games including *Roblox*, *Astroneer* and *Wasteland 3*.⁸
 - (c) Xbox Cloud Gaming. Microsoft currently offers cloud-based game streaming through Xbox Cloud Gaming, which is composed of dedicated Xbox consoles

¹ Final Merger Notice dated 5 July 2022 (**FMN**), paragraph 3.1.

² FMN, paragraph 6.1.

³ FMN, paragraph 3.2.

⁴ ['From Windows 1 to Windows 10: 29 years of Windows evolution'](#), dated 2 October 2014, accessed 4 August 2022.

⁵ The Parties' response to question 5 of the CMA's RFI dated 19 July 2022.

⁶ FMN, paragraph 12.82.

⁷ FMN, paragraph 12.83.

⁸ FMN, paragraph 12.83.

located in Microsoft data centres.⁹ This is distinct from Azure. Microsoft has deployed around [X] Xbox servers worldwide across its data centres to provide Xbox Cloud Gaming. It is [X].¹⁰

- (d) Xbox. Xbox is Microsoft's gaming console. It connects to a television or other display and allows users to play games specifically developed for Xbox. Xbox first launched in 2001 and has since remained one of the three main gaming consoles in the market (along with Sony's and Nintendo's consoles).¹¹
- (e) Xbox Game Studios. Microsoft is active as a developer, publisher, and distributor of games. Microsoft publishes games for PCs, consoles and mobile devices developed by Xbox Game Studios, a collection of 24 first party development studios, including the recently acquired ZeniMax studios. Examples include games in the *Minecraft*, *Forza*, *Elder Scrolls* and *Halo* game titles.¹²
- (f) Digital distribution. Microsoft distributes games in digital form.¹³ Microsoft operates the Microsoft Store on Windows (the **Microsoft Store**), an app store on Windows PCs, through which it distributes its own first-party games and third-party games for PC, as well as an Xbox-branded storefront (the **Xbox Store**), which can be accessed via an Xbox console, web-browser, or the Xbox App for Windows.¹⁴
- (g) Gaming Subscription Services. Microsoft offers multi-game subscription services that include access to first- and third-party games (eg Xbox Live Gold and Xbox Game Pass), online multiplayer capabilities (eg Xbox Live and Xbox Live Gold) and cloud gaming functionality (Xbox Cloud Gaming, which is available as part of the Xbox Game Pass top-tier subscription and on a free-to-play basis with *Fortnite*).¹⁵

38. ABK is a game developer and publisher founded in 2008 and headquartered in Santa Monica, California, US.¹⁶ ABK is publicly listed on Nasdaq. ABK's global turnover in the financial year 2021 was over £6 billion, of which approximately £716 million was generated in the UK.¹⁷

39. ABK is active in the following areas:

⁹ FMN, paragraph 12.85.

¹⁰ FMN, paragraph 12.85.

¹¹ FMN, paragraph 2.7.

¹² FMN, paragraph 6 of the Executive Summary.

¹³ Microsoft also distributes games in physical form through third parties, but does not have 'bricks-and-mortar' retail outlets in the UK.

¹⁴ FMN, paragraph 7 of the Executive Summary.

¹⁵ FMN, paragraph 8 of the Executive Summary.

¹⁶ FMN, paragraph 3.10.

¹⁷ FMN, paragraph 6.1.

- (a) Game development and publishing. ABK develops games for PCs, consoles, and mobile devices, and publishes them in most countries around the world through three business units: (i) Activision Publishing, Inc (**Activision**); (ii) Blizzard Entertainment, Inc (**Blizzard**); and King Digital Entertainment (**King**).¹⁸
- (b) Digital distribution. In Europe, ABK provides warehousing, logistics, and sales distribution services to third-party publishers of interactive entertainment software and interactive entertainment hardware (as well as its own publishing operations). ABK also has an online gaming digital storefront for PC games, Battle.net, which facilitates digital distribution of Blizzard and select Activision content.¹⁹
- (c) Display advertising. ABK operates digital display advertising within some of its game content, particularly within mobile games offered by King.²⁰

40. Microsoft and ABK are together referred to as the **Parties**, or for statements referring to the future, the **Merged Entity**.

TRANSACTION AND RATIONALE

- 41. On 18 January 2022, Microsoft entered into an agreement with ABK, via its direct wholly owned subsidiary Anchorage Merger Sub Inc., to acquire sole control of ABK (as defined above, the **Merger**).²¹ Under the terms of this agreement, Microsoft agreed to pay USD 95 per share, representing a purchase price of approximately USD 68.7 billion.²²
- 42. The Parties informed the CMA that the Merger is also the subject of review by competition authorities in a number of other jurisdictions, including Australia, Brazil, [X], the EU, Japan, [X], South Korea, and the US.²³
- 43. The Parties told the CMA that Microsoft's rationale for the Merger is to:
 - (a) provide Microsoft with gaming content (including popular ABK franchises like *Call of Duty (CoD)*, *World of Warcraft*, and *Candy Crush Saga*) which will help Microsoft to execute a cross-platform strategy (allowing gamers to play games on multiple devices);²⁴

¹⁸ FMN, paragraph 3.11.

¹⁹ FMN, paragraph 3.13.

²⁰ FMN, paragraph 3.14.

²¹ FMN, paragraphs 2.1, 2.3, and 2.5. See, here: [press release](#) issued by Microsoft.

²² FMN, paragraph 2.2.

²³ FMN, paragraph 2.4.

²⁴ FMN, paragraph 2.21.

- (b) improve Microsoft's presence in the mobile segment, where ABK holds an established position (particularly through King);²⁵
- (c) support Microsoft's investments in its multi-game subscription service, Xbox Game Pass²⁶ (**XGP**), and improve user engagement/adoption amongst Xbox and PC users;²⁷
- (d) improve Microsoft's ability to create a 'Universal Store' (extending the Xbox digital storefront across non-Xbox platforms and devices);²⁸ and
- (e) increase the attractiveness of Microsoft's advertising business (**MSAN**).²⁹

44. Microsoft's internal documents broadly support the rationale stated above, with a particular focus on acquiring a broad range of differentiated gaming content to help scale XGP.³⁰

PROCEDURE

45. As part of its Phase 1 investigation, the CMA gathered data and reviewed over one thousand internal documents from Microsoft and ABK to understand their businesses, their future strategies, and the gaming industry as a whole. The CMA also gathered evidence from other market participants, such as game developers and competitors across console, cloud, PC, and mobile gaming, which included both written and oral submissions as well as their internal documents. Where necessary, this evidence has been referred to within this Decision.

46. The Merger was considered at a Case Review Meeting.³¹

JURISDICTION

47. The CMA believes that the Merger (as described in paragraph 41) is sufficient to constitute arrangements in progress or contemplation for the purposes of the Act.³²

²⁵ FMN, paragraphs 2.16, 2.20, and 2.22.

²⁶ For completeness, the CMA notes that Microsoft offers a number of pricing options for its subscription services, for users on both PC and consoles, as well as a bundled subscription and cloud gaming offering (Xbox Game Pass Ultimate). Throughout this Decision, references to Xbox Game Pass refer to the various offerings as a collective, unless otherwise specified.

²⁷ FMN, paragraph 2.24.

²⁸ FMN, paragraph 2.25 and 2.26.

²⁹ FMN, paragraph 2.29.

³⁰ For example, see [§].

³¹ [Mergers: Guidance on the CMA's jurisdiction and procedure \(CMA2\)](#), December 2020, from page 46.

³² Section 33(1)(a) of the Act.

48. Each of Microsoft and ABK is an 'enterprise' under section 129 of the Act. As a result of the Merger, these enterprises will cease to be distinct for the purposes of sections 23(1)(a) and 26 of the Act.³³
49. The UK turnover of ABK in FY2021 exceeded £70 million, so the turnover test in section 23(1)(b) of the Act is satisfied.³⁴
50. The CMA therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

COUNTERFACTUAL

51. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (ie the counterfactual). For anticipated mergers, the counterfactual may consist of the prevailing conditions of competition, or conditions of competition that involve stronger or weaker competition between the merger firms than under the prevailing conditions of competition.³⁵
52. In determining the appropriate counterfactual, the CMA will generally focus only on potential changes to the prevailing conditions of competition where there are reasons to believe that those changes would make a material difference to its competitive assessment.³⁶ The CMA also seeks to avoid predicting the precise details or circumstances that would have arisen absent the merger. For example, the CMA might assess the likelihood that one of the merger firms would have entered or significantly expanded, but not the precise characteristics of the product or service it would have introduced or the level of sales it would have achieved.³⁷
53. The Parties submitted that the relevant counterfactual against which to assess the Merger is the prevailing conditions of competition.³⁸ The CMA has not received any evidence that indicates it should base its assessment on a counterfactual other than the prevailing conditions of competition.
54. The Parties also submitted that the CMA departs from this counterfactual at certain points in the competitive assessment, on the basis that the CMA speculates that certain changes may occur in ABK's product offerings.³⁹ However, the CMA's conclusion on the counterfactual does not seek to ossify the market at a particular point in time, and an assessment based on the prevailing conditions of competition

³³ FMN, paragraph 5.2.

³⁴ FMN, paragraph 5.3.

³⁵ [Merger Assessment Guidelines](#), March 2021, paragraph 3.2.

³⁶ [Merger Assessment Guidelines](#), March 2021, paragraph 3.9.

³⁷ [Merger Assessment Guidelines](#), March 2021, paragraph 3.11.

³⁸ FMN, paragraph 11.1.

³⁹ The Parties' response to the CMA's Issues Letter dated 11 August 2022 (**Issues Letter response**), paragraph 3.1; and the Parties' response to the CMA's Supplementary Issues Letter (**Supplementary Issues Letter response**), paragraphs 1.6, 4.26, and 4.29.

can reflect that, absent the merger, a merger firm would have continued making investments in improvements, innovations or new products.⁴⁰ Therefore, the CMA considers that the prevailing conditions of competition in this case include strategies and innovations in the gaming industry (including the emergence of multi-game subscription and cloud gaming services, as discussed further below). The CMA considers the discussion around potential improvements, innovations or new products which might have occurred as part of the prevailing conditions of competition absent the Merger is most appropriately addressed within the competitive assessment.

55. The CMA therefore considers that the relevant counterfactual is the prevailing conditions of competition. However, the CMA considers the dynamic nature of aspects of the gaming industry as part of its competitive assessment.

BACKGROUND

56. The Parties submitted that gaming is the fastest growing portion of the media and entertainment sector. Gaming is already larger in terms of revenue than pay TV, home video (including streaming), cinema, music, books, or newspapers & magazines.
57. By revenue, the UK is the largest video game market in Europe and the sixth-largest gaming market worldwide. Having grown year-on-year for the past decade, the gaming industry is currently the UK's highest-grossing form of entertainment (generating overall revenues of approximately £7 billion in revenue in the UK).⁴¹
58. The way in which games are distributed has changed over the past few years. Games were previously distributed on physical media (eg cartridges, Blu-ray discs or CD-ROM) in brick-and-mortar stores. In recent years, this has shifted towards digital distribution, with gamers downloading games directly to their PCs, consoles, or mobiles via online stores. Industry analysts report that physical sales accounted for 21% of gaming revenue in 2021, falling to 19% in 2022 (as compared to 55% in 2015).⁴² The result of this shift has been to significantly increase the prominence of digital distribution channels, such as console storefronts (eg the Xbox Store or the PlayStation Store) and PC storefronts (eg Valve's Steam and Epic's Games Store).
59. Today, the gaming industry is going through two important and closely related transitions. The first is a shift towards cloud gaming services. Historically, the gaming industry has been organised around a limited set of devices optimised for gaming—consoles and gaming PCs in particular—which are expensive and relatively infrequent purchases (console generations are released years apart). The

⁴⁰ [Merger Assessment Guidelines](#), March 2021, paragraph 3.3.

⁴¹ ['The UK video games market is worth a record £7.16bn'](#), dated 31 March 2021, accessed 30 August 2022.

⁴² ['Video game market in the United Kingdom – Statistics & Facts'](#), dated 10 November 2021, accessed 27 July 2022.

emergence of cloud gaming technology provides an additional delivery mechanism that allows gamers to stream games running on hardware in a data centre to their choice of device. Rather than downloading the game, gamers access and play the games through a lightweight ‘middleware’ app on their device. Cloud gaming means that gamers can play more technologically complex games on less powerful devices, such as mobile devices, that would otherwise lack the computing power or storage to support those games. Although the evidence shows that cloud gaming continues to face challenges, such as slow internet speeds in some regions and latency issues during gameplay, experts consider that the industry is at an inflection point where cloud gaming technology will become feasible for most game titles in the foreseeable future.⁴³ The expectation is that cloud gaming will grow significantly and, in time, potentially become the primary delivery mechanism for gaming content.

60. The second transition is a shift from ‘buy-to-play’ towards multi-game subscription services.⁴⁴ Games have traditionally been sold under the ‘buy-to-play’ model, whereby customers pay a one-time upfront fee for each individual game.⁴⁵ With the emergence of multi-game subscription services, gamers are now able to access a curated catalogue of games, which they can download to their device or stream from a cloud gaming services provider. While most of the revenue in the industry continues to be generated from the purchase of individual games, multi-game subscription services are growing rapidly, and the potential growth of this market has attracted several rivals to establish their own multi-game subscription service offering, including Sony, Amazon, Apple, and Google. Some of these multi-game subscription services offer a combination of downloads and streaming (eg XGP), while others focus on streaming only (eg Google Stadia). The number of games across all multi-game subscription services that are available to stream from cloud gaming services is rapidly increasing.
61. The CMA considers that this shift towards cloud gaming and multi-game subscription services represents an opportunity to reshape the competitive landscape in the gaming industry. Microsoft submitted that it has lost the ‘console wars’ to Sony and Nintendo with each generation of consoles.⁴⁶ Microsoft explained that it launched XGP in large part as a response to Xbox’s lack of success in the console wars.⁴⁷
62. The CMA considers that Microsoft is in a unique position to take advantage of the shift towards cloud gaming and multi-game subscription services. Gaming content attracts users to a platform, which, in turn, generate the revenues required to create more content and encourage third-party game developers to create games for that

⁴³ Third-party responses to question 6 of the CMA’s Cloud Gaming questionnaire; and a third-party response to question 12 of the CMA’s Developer/Publisher questionnaire.

⁴⁴ This is discussed in greater detail below from paragraph 236.

⁴⁵ Other existing payment models, including expansion packs, in-game purchases, and single game subscriptions are set out in the frame of reference section.

⁴⁶ FMN, paragraph 22.

⁴⁷ FMN, paragraphs 2.9 and 22.

platform. This self-reinforcing mechanism makes it harder for new entrants without a large user base or good pre-existing content to enter the market. The Merger would significantly expand Microsoft's gaming library, adding some of the world's best-selling and most recognisable franchises, such as CoD and *World of Warcraft*. This would leave Microsoft as the only supplier with (i) the leading PC operating system, (ii) one of the world's leading cloud services platforms, and (iii) one of the strongest gaming libraries and user bases.

FRAME OF REFERENCE

63. Market definition provides a framework for assessing the competitive effects of a merger. The assessment of the relevant market is an analytical tool that forms part the analysis of the competitive effects of the merger and should not be viewed as a separate exercise.⁴⁸ The boundaries of the market do not determine the outcome of the analysis of the competitive effects of the merger, as it is recognised that there can be constraints on merging parties from outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others. The CMA will take these factors into account in its competitive assessment.⁴⁹
64. In this case, as in other digital markets, the relevant products are complex and include recent and future potential developments. Demand for gaming products can vary considerably between gamers, and there are complexities in how customers make decisions. The choices available to customers depend on whether they already own a gaming device or if they are planning on buying one. In addition, different customer characteristics mean that some customers may consider a broader range of choices than others. For example, some gamers may prefer complex games that require considerable time and skill (and have historically been played on consoles). Others may prefer simpler games that can be played casually for short periods of time on a range of devices, whilst another group may prefer a mix of both. Where possible, the CMA has accounted for these factors in the discussion of frame of reference which follows. However, the CMA notes that a single frame of reference may not always capture the true competitive interactions between different providers and, where this is the case, these are discussed in the competitive assessment.
65. The potential issues under analysis in this case relate in various ways to how competition between the Parties and their rivals will dynamically evolve over time, in particular in relation to multi-game subscription and cloud gaming services. In these circumstances, the CMA will place more emphasis on the competitive assessment than on static market definition. In its assessment of the impact of the Merger on

⁴⁸ [Merger Assessment Guidelines](#), March 2021, paragraph 9.1.

⁴⁹ [Merger Assessment Guidelines](#), March 2021, paragraph 9.4.

competition, it will consider evidence on concentration measures alongside evidence of closeness of competition. This involves assessing the strength of the current and likely future constraints between the products of the Parties and their rivals. Evidence on concentration and on closeness of competition can be interpreted and taken into account without the need for a precise definition of the relevant markets.⁵⁰

66. Accordingly, the CMA's analysis does not seek to conclude on a bright-line definition of the relevant markets, but instead describes the competitive framework within which the Parties and their rivals operate.⁵¹
67. In this case, the CMA found that gaming platforms are two-sided, with users on one side and content providers on the other. In its frame of reference, the CMA has assessed each side of the market separately, focusing primarily on the user side of the market, where the competitive concerns in this Merger arise. The CMA has considered both sides of the market in its competitive assessment, including the impact of direct and indirect network effects.⁵²

Product scope

PCs, consoles, and mobile devices

68. Microsoft manufactures and sells dedicated gaming consoles under its *Xbox* brand. Microsoft also sells PCs (such as its *Surface* series of computers) and mobile devices (such the Microsoft *Surface Duo*), which can also be used to play video games.
69. ABK does not manufacture or sell PCs, consoles, or mobile devices.⁵³

Parties' submissions

70. The Parties submitted that there are separate markets for the manufacture and supply of (i) PCs and consoles and (ii) mobile devices.⁵⁴ In particular, the Parties explained that mobile devices lack the technical capabilities to play most PC and console games, and only a small proportion of PC and console games are also available as native mobile apps.⁵⁵

CMA assessment

71. The CMA acknowledges that a sub-group of gamers may consider a number of different devices suitable for their gaming requirements. However, it considers that,

⁵⁰ [Merger Assessment Guidelines](#), March 2021, paragraph 9.3.

⁵¹ [Merger Assessment Guidelines](#), March 2021, paragraph 9.4-9.5.

⁵² [Merger Assessment Guidelines](#), March 2021, paragraph 4.22.

⁵³ FMN, paragraph 12.28.

⁵⁴ FMN, paragraph 13.30.

⁵⁵ FMN, paragraph 2.16.

for a large group of gamers, the unique experience offered by each device in terms of hardware capabilities and convenience, as well the difference in quality and range of content available is likely to mean that these devices would not be considered as substitutable. The CMA also notes the lack of substitutability on the supply side.

72. In addition, the CMA notes that PCs, consoles, and mobile devices are generally considered separately in the Parties' internal documents (both in terms of revenues and the competitive landscape).⁵⁶ The CMA has also seen third-party reports that also consider PC, console, and mobile gaming separately.⁵⁷
73. Several third parties told the CMA that the dynamics of competition (including the competitor set) differ between consoles and PCs.⁵⁸ One third party told the CMA that different device categories (ie PC, console, and mobile) are suited to different types of game.⁵⁹
74. The CMA has considered whether the frame of reference should be further segmented by console type. Whilst it recognises that buying a gaming device such as a console is a high-cost investment, it considers that the most important aspect of competition for this case is that for the next generation consoles where customers would be making fresh choices about which console to buy. This is discussed further in the competitive assessment.
75. Based on this evidence, the CMA considers that there are significant differences between PCs, consoles, and mobile devices, and that it is appropriate to distinguish between the manufacture and supply of each.

Cloud gaming services

76. Cloud-based game streaming services (**cloud gaming services**) are consumer-facing services which allow games to be streamed over the internet from gaming hardware in a data centre to a gamer's choice of supported device. This differs from gaming on PCs, mobile, and console, where customers are limited to playing games that have been downloaded to that specific piece of hardware. Although nascent, cloud gaming is developing rapidly, allowing even complex games to be played across different (and less powerful) devices.
77. Microsoft offers cloud gaming services through Xbox Cloud Gaming (**xCloud**). This is available to gamers as a bundled offering with its Xbox Game Pass Ultimate (**XGPU**) multi-game subscription service, as well as separately on a trial basis for

⁵⁶ [redacted].

⁵⁷ [redacted]; and [redacted].

⁵⁸ For example, see note of a call with a third party, dated 19 July 2022, paragraph 21 and note of call with a third party, dated 14 July 2022, paragraph 15.

⁵⁹ Note of a call with a third party, dated 19 July 2022, paragraph 4.

one game, *Fortnite*.⁶⁰ ABK does not currently offer gamers a cloud gaming service.⁶¹

Parties' submissions

78. The Parties told the CMA that they do not consider that there is a separate market for cloud gaming services (ie downloads vs streaming), including because gamers choose a gaming experience based on whether it provides enjoyment at an attractive price point, not based on the location of the content or means of delivery.⁶²
79. The Parties further explained that cloud gaming is an alternative way for gamers to access content that is not tied to a specific device and does not provide different content to what is available to download and play.⁶³

CMA assessment

80. The CMA notes that this is a dynamic area in which competition is still evolving, and that the precise boundaries of the market may change as the market continues to develop.
81. The CMA considers that the Parties' submissions fail to recognise the impact of cloud gaming services on demand for consoles, PCs, and games. As the Parties recognise, cloud gaming allows gamers to stream games from a server on any device.⁶⁴ This means that gamers can access games that were previously available only on console through a wider range of less powerful devices (eg smart TVs, mobiles). The Parties acknowledged that cloud gaming services could be attractive to a different pool of customers who do not have access to the current hardware required for playing more complicated games and will lower the barriers for certain gamers to access titles.⁶⁵ The CMA notes that, as hardware technology develops and cloud gaming services grow, hardware distinctions may become less important in future. As such, the CMA considers that cloud gaming services can be seen as an alternative for gamers to owning a console or PC.
82. From a supply-side perspective, cloud gaming services are very different from console gaming. To offer cloud gaming services, a provider needs access to cloud infrastructure that is close enough to gamers to operate within acceptable levels of latency. It also requires access to the operating system that supports the games on the user's device. Console gaming, by contrast, requires the manufacture, distribution, and ongoing support of physical devices.

⁶⁰ The Parties' response to question 6 of the CMA's RFI dated 12 July 2022.

⁶¹ The Parties' response to question 6 of the CMA's RFI dated 12 July 2022.

⁶² FMN, paragraph 13.49.

⁶³ Issues Letter response, paragraph 4.8.

⁶⁴ Issues Letter response, paragraph 4.8.

⁶⁵ Submission made during the Issues Meeting.

83. The evidence that the CMA received is generally consistent with cloud gaming services being a separate market. The Parties' internal documents, for example, regularly consider cloud gaming service providers separately, suggesting that they operate in a separate competitive landscape.⁶⁶
84. The CMA notes that several providers offer cloud gaming services as part of a multi-game subscription service, including Microsoft, Sony, Google, Ubisoft and Amazon.⁶⁷ The CMA considers, however, that this is not a necessary feature of cloud gaming services, and that it is technically possible to provide cloud gaming services as part of a different product offering (such as on a buy-to-play basis). The CMA considers the market for multi-game subscription services separately below.
85. Based on this evidence, the CMA has considered a separate frame of reference for cloud gaming services.

Computer operating systems

86. Gaming hardware, especially PCs and mobile devices, is typically provided with an OS. A computer OS provides a graphics-based interface between the user and the computer's hardware and software.⁶⁸
87. Microsoft is active in the design and supply of computer OS under the *Windows* brand for desktop PCs (Windows Client) and for servers (Windows Server), [REDACTED].⁶⁹ Microsoft also historically designed and supplied mobile OS under the *Windows Mobile* brand but ceased these activities in December 2019.⁷⁰
88. Activision Blizzard is not active in the design or supply of OSs.⁷¹

Parties' submissions

89. The Parties told the CMA that OSs compete at the device level, ie between different PC devices. The Parties submitted that, as demand moves away from traditional laptops and desktops to mobile computing devices, PC OSs also face increasing competition from mobile OSs.⁷²
90. Microsoft submitted that it licenses its Windows Server, but not Windows Client, to other cloud gaming services providers for use as an input in the cloud services they

⁶⁶ For example, see [REDACTED].

⁶⁷ FMN, paragraph 12.51.

⁶⁸ The Parties' response to question 1 of the CMA's RFI dated 12 July 2022.

⁶⁹ The Parties' response to question 5(b) of the CMA's RFI dated 19 July 2022.

⁷⁰ For completeness, Microsoft continues to produce a limited range of mobile devices but these utilise a third-party operating system. See, '[Windows 10 Mobile End of Support: FAQ](#)', accessed 4 August 2022.

⁷¹ The Parties' response to question 1 of the CMA's RFI dated 12 July 2022.

⁷² The Parties' response to question 2 of the CMA's RFI dated 12 July 2022.

provide to their end users. Microsoft explained that it has never licensed Windows Client to cloud gaming services providers, and that [REDACTED].⁷³

91. The Parties submitted there are various computer OSs available, as well as software that can convert games designed for use on one OS to enable use on another OS (eg to play games made or use on Windows OS on devices that run Linux OS).⁷⁴

CMA assessment

92. The CMA considers that PC and mobile OSs are different frames of reference. No third party contacted by the CMA considered that the two are substitutes.
93. As for the distinction between Windows Server and Windows Client, the evidence is mixed on whether they should form part of the same frame of reference. The CMA notes the Parties' submissions that Windows Client and Windows Server license OS products [REDACTED] and that each are optimised for their specific use. One cloud gaming service provider, however, told the CMA that Windows Client is superior for cloud gaming services because (i) Microsoft often deploys gaming-related updates to the Windows Client version some time before deploying the same updates to the Windows Server version; and (ii) games are compiled and tested for the desktop version, and gaming-related updates are often included earlier in the desktop version than in the server version.⁷⁵
94. Based on this evidence, the CMA has assessed the Merger based on separate frames of reference for PC and mobile OSs. The CMA did not have to conclude on whether there are separate frames of reference for client and server OSs (including in relation to cloud gaming services), since these features of the market can be adequately taken into account in the competitive assessment.

Game publishing

95. Game development refers to the creation of a game (including the design, art, programming and testing), using software development tools (including software development kits (**SDKs**) and 'game engines'). Game publishing refers to the subsequent making available to the public, for sale or free of charge, a game. For the purposes of this Decision, and in line with the Parties' submissions, the CMA has considered development and publishing activities jointly (under the single term, **publishing**).⁷⁶

⁷³ The Parties' response to question 5(d) of the CMA's RFI dated 19 July 2022.

⁷⁴ The Parties' response to question 1 of the CMA's RFI dated 12 July 2022; the Parties' response to question 5 of the CMA's RFI dated 19 July 2022; and the Supplementary Issues Letter response, paragraph 5.26.

⁷⁵ Third-party response to question 11 of the CMA's Cloud Gaming questionnaire.

⁷⁶ FMN, paragraph 13.3.

96. The Parties are both active in the publishing of games for PCs, consoles, and mobile devices.⁷⁷

Parties' submissions

97. The Parties submitted that the CMA should consider an overall market for game publishing. They also submitted, however, that technical differences between mobile and PCs/consoles lead to the development of different gaming content in each. The Parties explained that PC/console games tend to be more complex and narrative-driven than native mobile games and, therefore, cater to different audiences.⁷⁸

98. The Parties submitted that, whilst games are sometimes categorised by reference to their genre (eg role-playing games, shooters, puzzle games, etc), there is no need to further segment on that basis as many games combine aspects of multiple genres, and gamers generally just play whatever game they like best, irrespective of what genre that game may be.⁷⁹

CMA assessment

99. The CMA has seen evidence to support a market segmentation by device type:

- (a) Microsoft's stated rationale for the Merger is in part to improve its presence and expertise in mobile gaming.
- (b) The Parties' shares of supply vary between publishing games for each of PCs, consoles, and mobile devices, with the competitor sets varying between category of gaming hardware too.⁸⁰
- (c) The Parties' games are often published on only one form of hardware (for example, ABK's World of Warcraft games are only playable online on PCs, and have not been released on the latest generation consoles).⁸¹

100. Third parties support the view that there are material differences between publishing games for each of PC, console, and mobile devices:

- (a) One third party stated that mobile devices have physical limitations in terms of power, battery life, screen size, etc. As such, mobile games are generally lower quality, simple in design and concept, and frequently played to kill time, eg while commuting. The third party explained that mobile games tend to be free-to-play, with revenues driven almost exclusively by in-app purchases.⁸²

⁷⁷ FMN, paragraph 15.1.

⁷⁸ FMN, paragraphs 13.7 and 13.8.

⁷⁹ FMN, paragraph 13.16.

⁸⁰ FMN, Tables 9 - 15.

⁸¹ FMN, paragraph 3.12 and footnote 76.

⁸² Third-party response to question 3 of the CMA's RFI dated 25 May 2022.

- (b) A number of third parties told the CMA that they require SDKs from console original equipment manufacturers (**OEMs**) to publish games on console, which is not required for publishing PC games.⁸³
- (c) One third party explained that certain consoles have hardware limitations that PCs do not, which limits their ability to publish PC games on consoles.⁸⁴

101. The CMA received mixed evidence on whether the market for game publishing should be segmented by genre. Several of the Parties' internal documents indicate that the Parties categorise, distinguish, and compare games from different publishers according to genre.⁸⁵ The Parties also advertise games by genre in their digital storefronts.⁸⁶ Some third parties explained that certain game genres (such as shooter games) compete more closely with each other than with games from different genres.⁸⁷
102. On the other hand, the CMA received evidence suggesting that the importance of genre as a means of segmenting games has decreased in recent years. One third party told the CMA that many popular games have adopted elements of multiple genres, and games often compete across genre for the attention of gamers.⁸⁸ Other third parties told the CMA that factors beyond genre may lead to titles competing closely, such as the release date or overall popularity of the gaming franchise.⁸⁹
103. Based on this evidence, the CMA has assessed the Merger based on separate frames of reference for game publishing on mobile, console, and PC. The CMA notes that, as hardware technology develops and cloud gaming services grow, hardware distinctions may become less important in future. As for game genre, the CMA did not have to reach a conclusion on the precise product frame of reference, as it found that its competitive assessment would not change regardless of whether the market for game publishing is segmented by genre.

Game distribution

104. Games are predominantly distributed (i) individually from physical retail stores or digital storefronts in either physical form or as digital downloads (ie on a buy-to-play basis); and/or (ii) as a collection of games via multi-game subscription services, which allow gamers to access a game catalogue for a fixed period for a fee, typically recurring monthly.

⁸³ For example, see note of a call with a third party, dated 19 July 2022, paragraph 6; and a third-party response to question 6(c) of the CMA's Publisher and Developer questionnaire.

⁸⁴ Note of a call with a third party, dated 19 July 2022, paragraph 5.

⁸⁵ For example, see [REDACTED].

⁸⁶ See '[Xbox Games Catalog](#)', accessed 24 August 2022; and '[Battle.net](#)', accessed 24 August 2022.

⁸⁷ For example, see submission from a third party, submitted on 26 July, pages 31 and 32; and note of a call with a third party, dated 17 May 2022, paragraph 7.

⁸⁸ Note of a call with a third party, dated 19 July 2022, paragraph 9.

⁸⁹ Note of a call with a third party, dated 5 May 2022, paragraph 8; and note of a call with a third party, dated 17 May 2022, paragraph 10.

105. The Parties are both active in game distribution on digital storefronts. Microsoft operates the Microsoft Store on PC and the Xbox Store on Xbox, distributing both games developed by Microsoft as well as by third parties. ABK is active through Battle.net, although it does not currently distribute third-party games.⁹⁰ Microsoft also offers a multi-game subscription service, XGP, which allows gamers access to hundreds of titles for a monthly fee.⁹¹

Parties' submissions

106. The Parties told the CMA that individual game distribution and multi-game subscription services form part of a single distribution market for video games.⁹²

107. In relation to multi-game subscription services, the Parties told the CMA that:

- (a) multi-game subscription services are not an alternative channel of distribution for gaming content, rather that they are an alternative pricing model;
- (b) gamers on Microsoft's multi-game subscription service can interact with gamers playing games on the same platform (eg Xbox) even if they are accessing the game outside of the multi-game subscription service;
- (c) there is direct competitive interaction between buy-to-play games and multi-game subscription services; and
- (d) gamer behaviour suggests that multi-game subscription services are part of the same market. For example, internal Microsoft analysis shows [] in gamers' base game purchases 12 months following subscription to Microsoft's multi-game service.⁹³

CMA assessment

108. The CMA considers that multi-game subscription services are a different product proposition to traditional digital single-game purchases. Under a multi-game subscription service, gamers can access a bundle of games during a period of time for a fixed fee. The drivers of demand in that context are the price of the bundle, the range of content, and the quality of individual titles. By contrast, when accessing games through digital storefronts, gamers typically pay a higher up-front price for a single game. Although stores can monetise games using a range of methods (eg in-app purchases), gamers typically have unlimited access to the game after the

⁹⁰ FMN, paragraph 12.59.

⁹¹ One of ABK's titles, *World of Warcraft*, requires gamers to pay a monthly subscription to play the game. The subscription only covers access to this title, and so is not a multi-game subscription service. FMN, paragraph 22 of the Executive Summary and paragraph 2.9.

⁹² FMN, paragraph 13.46.

⁹³ Issues Letter response, paragraphs 4.2 to 4.4.

purchase. The drivers of demand in that context are the price and quality of the individual game.

109. On the supply side, several of the Parties' internal documents suggest that, whilst there is some overlap, the competitor set for multi-game subscription services is different from that of digital storefronts.⁹⁴
110. Third parties told the CMA that:
 - (a) the business model for multi-game subscription services is very different from storefronts;⁹⁵
 - (b) there are certain groups of customers who will only purchase individual games, as they wish to own the titles (and would therefore not consider a multi-game subscription to be a substitute to buy-to-play purchases); and⁹⁶
 - (c) each mode of distribution will likely suit different types of games/gamers.⁹⁷
111. Multi-game subscriptions are a nascent but rapidly growing area. Whilst the CMA acknowledges the Parties' submissions that there is a degree of diversion from buy-to-play purchases towards multi-game subscription services, the evidence shows that, at least at present, there is insufficient demand- or supply-side substitution between the two for it to be appropriate to assess them as a single frame of reference. As such, and on a cautious basis, the CMA considers that it is appropriate to assess the impact of the Merger on video game distribution via digital storefronts and multi-game subscription services separately.⁹⁸
112. The CMA also considered whether to segment multi-game subscription services by each type of device and cloud gaming. The CMA found that almost every multi-game subscription service already allows gamers to access some proportion of their gaming catalogue across different devices. This includes services like XGP or PlayStation Plus, which include a console and a cloud gaming services element, services like Apple Arcade, which allows users to download gaming content to a variety of devices, and services like Amazon Luna or Google Stadia, which allows gamers to stream their games directly to a range of devices. The CMA considers

⁹⁴ For example, see [REDACTED], and [REDACTED].

⁹⁵ For example, see note of a call with a third party, dated 16 May 2022, paragraphs 4 - 6; and note of a call with a third party dated 26 May 2022, paragraph 15.

⁹⁶ For example, see note of a call with a third party, dated 17 May 2022, paragraph 24; and note of a call with a third party dated 19 July 2022, paragraph 20.

⁹⁷ For example, see third-party response to question 4 of the CMA's PC Storefront questionnaire; and note of a call with a third party, dated 14 June 2022, paragraphs 14 and 17.

⁹⁸ The CMA notes that the Parties have submitted analysis indicating that gamers switch their gameplay between XGP and buy-to-play [REDACTED] (see Appendix A and B of the IL response). However, the CMA does not consider that this analysis is sufficient to demonstrate that buy-to-play and subscription services are part of the same frame of reference because (i) the analysis considers a sample of users that are already on XGP and, therefore, doesn't address the behaviour of users that never had XGP; (ii) the diversion observed is in user attention rather than actual users and is not wholly indicative of customer switching; and (iii) the diversion is driven by the availability of content, rather than changes in price or quality of the service.

that multi-game subscription services are continuing to evolve and may appeal more strongly to gamers who are device agnostic than to gamers who have a strong preference for console gaming. As such, the CMA considers that it is appropriate to use a single frame of reference for multi-game subscription services without segmenting further by device type.

113. Given that the 'buy-to-play' market is not experiencing the same dynamics as the multi-game subscriptions market, the CMA considered it appropriate to assess game distribution of 'buy-to-play' titles via digital storefronts for each of consoles, PCs, and mobile separately.

Geographic scope

114. The Parties submitted that their products and services are available on a global basis, including in the UK.⁹⁹ For each of the product frames of reference considered above, the Parties submitted the following:

- (a) In respect of PCs and consoles, the geographic market is at least wider than the UK (including the EEA) if not worldwide, as consoles supplied across the UK/EEA are technically equivalent and there are no impediments to cross-border sales of PCs/consoles within the UK and EEA.¹⁰⁰
- (b) The market for cloud gaming services is worldwide.¹⁰¹
- (c) In relation to game publishing, the relevant markets are worldwide, for example because many publishers typically produce one version of a video game for distribution worldwide without significant price differences.¹⁰²
- (d) For the digital distribution of games, the geographic market is worldwide, as the same digital distribution channels are available anywhere in the world without cross-border restrictions and the same game publishers compete across all major regions.¹⁰³

115. The Parties did not make any submissions on the geographic frame of reference for the design and supply of computer OSs.

116. For each of the product frames of reference under consideration, the Parties generally provided shares of supply on both a worldwide and UK basis. The CMA notes that, in each of the product frames of reference under consideration, the suppliers present in the area are generally active across a broader geographic region than the UK, and are often active globally. The Parties' internal documents

⁹⁹ FMN, paragraph 13.23.

¹⁰⁰ FMN, paragraph 13.31.

¹⁰¹ FMN, paragraph 13.70.

¹⁰² FMN, paragraph 13.23.

¹⁰³ FMN, paragraph 13.51.

suggest that these markets are often considered on a worldwide basis, but are sometimes also considered at a regional (eg Europe or North America) or national level.¹⁰⁴

117. The CMA also found evidence suggesting that these markets may have a national dimension. The market shares provided by the Parties show material differences between the UK and global shares, suggesting differences in the competitive landscape by geography. In particular, the Merged Entity generally has higher shares of supply in the UK as compared to worldwide. For example, in 2021, the Parties estimate Microsoft's share of supply of console hardware by sales volume to be [10-20]% globally but [20-30]% in the UK.¹⁰⁵ Similarly, in 2021, the Parties estimate the Merged Entity's combined share of supply for console game publishing was around [10-20]% globally and [10-20]% in the UK. In addition, the CMA has seen some evidence of differential availability of services in local markets, including of Microsoft's XGP offering.¹⁰⁶ Further, in relation to Xbox Live Gold, for example, Microsoft's website explains that '[t]o ensure that pricing for the Xbox Live Gold subscription service reflects the local market economies, Xbox Live Gold subscription cards are only redeemable in the country purchased and cannot be redeemed in any other country'.¹⁰⁷
118. As such, while recognising that there are multi-national aspects to competition in each of these product frames of references, there is also evidence of regional and national variations in supply and demand. The CMA therefore considers it is appropriate, on a cautious basis, to assess the impact of the Merger in these product frames of reference in the UK. However, where relevant, it has taken account of the broader global context and evidence that is not specific to the UK in the competitive assessment.

CMA preliminary conclusion on frame of reference

119. For the reasons set out above, the CMA has considered the impact of the Merger in the following frames of reference in the UK:
- (a) the manufacture and supply of each of:
 - (i) PCs;
 - (ii) consoles; and
 - (iii) mobile devices;

¹⁰⁴ For example, see [§] and [§].

¹⁰⁵ FMN, Tables 25 and 27.

¹⁰⁶ For example, see '[Xbox Supported Countries/Regions](#)', accessed 30 August 2022.

¹⁰⁷ '[Making sure your Xbox digital subscription is valid for your country | Xbox Support](#)', accessed 4 August 2022.

- (b) the supply of cloud gaming services;
- (c) the design and supply of computer OSs;
- (d) the publishing of games on each of:
 - (i) PCs;
 - (ii) consoles; and
 - (iii) mobile devices;
- (e) the distribution of games through digital storefronts in each of:
 - (i) PC;
 - (ii) consoles; and
 - (iii) mobile devices; and
- (f) the distribution of games through multi-game subscription services.

COMPETITIVE ASSESSMENT

120. In formulating theories of harm (**TOH**), the CMA will consider how a merger might affect rivalry between firms seeking to win customers' business over time by offering them a better deal. The theories of harm will depend on the levels of the supply chain at which the merger firms operate; the links between the merger firms and with their rivals; the nature of competition and how firms go about winning customers from each other; and any long-run dynamics in the relevant sectors.¹⁰⁸ For some mergers, the CMA may consider several theories, sometimes affecting the same market.¹⁰⁹ The CMA will generally take a forward-looking approach to the assessment of any theories of harm, considering the effects of the merger both now, and in the future.¹¹⁰
121. In this case, the CMA has assessed a number of theories of harm. In doing so, taking into account the nature of competition and market dynamics identified, the CMA has considered not only each individual theory of harm separately but, as will be outlined further below, also their interaction so as to assess the potential impact of the Merger in the round. The CMA notes that, whilst discussed as part of its assessment of input foreclosure, the importance of (i) network effects and (ii) ABK's

¹⁰⁸ [Merger Assessment Guidelines](#), March 2021, paragraph 2.12.

¹⁰⁹ [Merger Assessment Guidelines](#), March 2021, paragraph 2.16.

¹¹⁰ [Merger Assessment Guidelines](#), March 2021, paragraph 2.14.

content (and CoD in particular) to gaming platforms is a common element across all theories of harm in this decision.

Input foreclosure of rivals using ABK content

122. The concern with an input foreclosure theory of harm is that the merged entity may use its control of an important input to harm its downstream rivals' competitiveness, for example by refusing to supply the input (total foreclosure) or by increasing the price or worsening the quality of the input supplied to them (partial foreclosure). This might then harm overall competition in the downstream market, to the detriment of customers.¹¹¹
123. The Merger would combine Microsoft—one of only three console gaming platform providers and a leading multi-game subscription service provider—with ABK's strong and diversified catalogue of game content, including CoD, one of the world's largest game franchises.
124. The Merged Entity's games would include some of the biggest and highest selling franchises across various genres, such as shooters (eg CoD, *Halo*, *Gears of War*, *Doom*, *Overwatch*), role playing games (eg *World of Warcraft*, *Elder Scrolls*, *Fallout*, *Diablo*), racing and flying games (eg *Forza*), action and adventure games (eg *Minecraft*), and others.¹¹² According to one of the Parties' competitors, the only category where Microsoft would not have a leading position would be in sports games, where Electronic Arts (**EA**), a game producer and publisher, has the strongest position.¹¹³
125. The CMA has assessed whether adding ABK's portfolio of games to Microsoft's broad and integrated offering would enhance Microsoft's ability to engage in total or partial foreclosure strategies.
126. The CMA has considered whether the Merger may lead to foreclosure in the following target markets:¹¹⁴
 - (a) Console gaming platforms (**TOH1a**). The CMA uses this term to refer to gaming consoles and their respective digital storefronts.¹¹⁵

¹¹¹ [Merger Assessment Guidelines](#), March 2021, paragraph 7.9.

¹¹² The Parties overlap in game publishing within certain genres, such as shooter games for console and role-playing games for PC. The CMA did not have to conclude whether the Merger gives rise to competition concerns arising from horizontal unilateral effects in game publishing split by genre because any such concerns would be captured by the concerns found in the remaining theories of harm set out in this decision.

¹¹³ Note of a call with a third party, dated 23 May 2022, paragraph 15.

¹¹⁴ The CMA has not considered foreclosure in mobile markets as part of the Decision, given Microsoft's limited activities in mobile gaming.

¹¹⁵ This theory of harm is therefore relevant to two of the frames of references identified above: the manufacture and supply of consoles and the distribution of games through digital storefronts for consoles. However, the CMA notes that Microsoft and Sony each have an exclusive digital storefront for their console games so, in their case, these two potential frames of reference are inherently linked.

- (b) Multi-game subscription services (**TOH1b**). Multi-game subscription services are available across consoles, PC, mobile, and cloud gaming services, with cloud gaming services generally being device agnostic. Considering Microsoft’s activities, this theory of harm focuses on the impact of the Merger on PC, console, and cloud multi-game subscription services (and the term ‘multi-game subscription services’ will be used in that context).

127. The importance of network effects and ABK’s content (and CoD in particular) to gaming platforms are discussed below.

Network effects

128. Gaming platforms are two-sided, with users on one side and content providers on the other. Two-sided markets are often characterised by network effects, where the value of the product for customers on one side of the platform depends on the volume of users either on the same side (direct network effects) or on the other side (indirect network effects).¹¹⁶

129. The CMA found that console gaming platforms, cloud gaming services, and multi-game subscription services are characterised by strong direct and indirect network effects:

- (a) In terms of indirect network effects, the Parties explained that game publishers are more likely to develop content for a platform with a significant user base and, in turn, a strong content library attracts more users to a platform.¹¹⁷ One Microsoft internal document, for example, explains [REDACTED].¹¹⁸ Another Microsoft internal document explains that Microsoft’s gaming ecosystem creates ‘[REDACTED]’. The document goes on to illustrate a flywheel that shows [REDACTED].¹¹⁹
- (b) In relation to direct network effects, the Parties explained that gamers like to be on the same platform as their friends to play multiplayer games.¹²⁰ One Microsoft internal document explains that [REDACTED].¹²¹ Likewise, one ABK internal document shows that [REDACTED].¹²² The document explains that [REDACTED].¹²³ One third party submitted that leading AAA games have multiplayer functionality and have become social media platforms and that, as a result, established AAA video games benefit from significant network effects, which raise barriers to entry for new games and new developers.¹²⁴

¹¹⁶ [Merger Assessment Guidelines](#), March 2021, paragraph 4.22.

¹¹⁷ Issues Letter response, paragraphs 6.32 and 6.39.

¹¹⁸ [REDACTED].

¹¹⁹ [REDACTED].

¹²⁰ Issues Letter response, paragraphs 6.32 and 6.35.

¹²¹ [REDACTED].

¹²² [REDACTED].

¹²³ [REDACTED].

¹²⁴ Third-party response to question 2 of the CMA’s Cloud Gaming questionnaire.

- (c) The CMA found that multi-game subscription services, which is the most common pricing structure for cloud gaming services, also require considerable scale to be successful, which increases barriers to entry into this market. One of Microsoft's internal documents, for example, explains that [REDACTED]¹²⁵ ¹²⁶ The document concludes that [REDACTED].¹²⁷

130. The CMA's Merger Assessment Guidelines state that network effects generally mean that mergers are more likely to induce a tipping effect or accelerate the market towards tipping, whereas customers would have benefited from a longer period of competition.¹²⁸ These Guidelines also state that the presence of network effects means that barriers to entry are likely to be high and that incumbent platform operators that have market power derived from network effects may be able to amplify their effect.¹²⁹
131. The CMA considers the evidence above to suggest that there are strong network effects present in gaming and that they are particularly important for competition in the context of nascent markets like multi-game subscription services and cloud gaming.

Importance of ABK's catalogue of games

Parties' submissions

132. The Parties submitted that (i) ABK content lacks market power upstream, as demonstrated by ABK's low shares of supply in game publishing (both on the basis of revenues and monthly active users (**TOH1**)); (ii) that the publishing market is fragmented; (iii) a number of other publishers will continue to supply a wide range of content; and (iv) that CoD is not an important input (and that observed gamer behaviour is consistent with this).
133. The Parties told the CMA that, in upstream game publishing, ABK had a share by value across PC, console, and mobile in 2021 of just [5-10]% globally and [5-10]% in the UK.¹³⁰ The Parties noted that focusing on console only, ABK's share remains at just [5-10]% by value globally and [10-20]% in the UK.¹³¹ Combined console shares would be [10-20]% globally and [10-20]% in the UK,¹³² which the Parties consider to be below the level at which market power can typically be considered to

¹²⁵ [REDACTED].

¹²⁶ [REDACTED].

¹²⁷ [REDACTED].

¹²⁸ [Merger Assessment Guidelines](#), March 2021, paragraph 4.25(a).

¹²⁹ [Merger Assessment Guidelines](#), March 2021, paragraph 4.25(d).

¹³⁰ FMN, Tables 10 and 11.

¹³¹ FMN, Tables 14 and 15.

¹³² FMN, Tables 14 and 15; and Issues Letter response, paragraph 5.15.

arise, in particular given the wide range of competitors with greater or equivalent share.¹³³

134. According to the Parties, ABK's lack of market power upstream can be seen from its share of console based on MAU. Based on 2021 data, the Parties estimate that ABK has a share of MAU of only [10-20]% globally, whilst other publishers are of equal or comparable scale, including EA (eg *FIFA*, *Apex Legends*, *Star Wars*) at [10-20]% globally, Epic Games (eg *Fortnite*), with a share of [5-10]% globally and Take-Two (eg *Grand Theft Auto*, *Red Dead Redemption*) with a share of [5-10]% globally.¹³⁴
135. The Parties submitted that other rivals in game publishing have a greater or equivalent share of the upstream publishing segment across all gaming platforms.¹³⁵ These include EA, Nintendo, Take-Two, Ubisoft, Sony, Embracer, Square Enix, and Epic Games, together with a long-tail of smaller publishers. The Parties submitted that these publishers would continue to offer some of the most well-known and highly regarded console franchises as competitive alternatives to CoD.¹³⁶ The Parties consider that, in the context of this abundance of content, some of which is exclusive to Sony and Nintendo, it is not realistic to conclude that CoD has upstream market power.
136. The Parties submitted that gamer behaviour is consistent with ABK's lack of market power upstream. According to the Parties, an analysis of CoD's presence on Xbox shows that, whilst *Fortnite* and CoD account for a significant proportion of game-time played on Xbox ([10-20]% and [10-20]% in 2021, respectively), gamers also play popular franchises such as *Grand Theft Auto*, *FIFA*, *Minecraft*, *NBA2K*, *Tom Clancy*, *ROBLOX*, *Apex Legends*, and *Rocket League*, which account for a significant proportion of the remaining game-time.¹³⁷
137. The Parties additionally submitted that more than [X%] of gamers on Xbox played at least three games during 2021, with only [X%] of total game time accounted for by gamers that played two or fewer games throughout the year. The Parties consider that this demonstrates that gamers clearly engage with more than one

¹³³ Issues Letter response, paragraph 5.15.

¹³⁴ The Parties' submission in relation to vertical merger analysis, submitted on 28 July 2022, paragraph 2.14, in response to the CMA's RFI dated 26 May 2022.

¹³⁵ Issues Letter response, paragraph 5.15.

¹³⁶ These include, for example, *FIFA*, *Apex Legends*, *Player Unknown Battlegrounds*, *Madden*, *Battlefield*, *Need For Speed*, *Elden Ring*, *Star Wars*, *The Legend of Zelda*, *Super Mario*, *Pokémon*, *Animal Crossing*, *Grand Theft Auto*, *NBA2K*, *Red Dead Redemption*, *Mafia*, *Assassin's Creed*, *Far Cry*, *The Tom Clancy Series*, *Gran Turismo*, *Uncharted*, *The Last of Us*, *Ghost of Tsushima*, *Spider-Man*, *Days Gone*, *Final Fantasy*, *Kingdom Hearts* and *Fortnite*. See FMN, paragraph 15.19.

¹³⁷ The Parties' submission in relation to vertical merger analysis, submitted on 28 July 2022, paragraph 2.18, in response to the CMA's RFI dated 26 May 2022.

game and that no one game can impact the downstream competitiveness of a console.¹³⁸

138. The Parties submitted that Xbox gamer data shows that [REDACTED]% of Xbox gamers did not play CoD in a specific year. According to the Parties, amongst those gamers that do play CoD, the majority only do so for a short period of time. In particular, among gamers who played at least one hour of CoD in 2021, more than [REDACTED]% played it for less than 5% of their total gaming time and [REDACTED]% of CoD gamers spent less than 50% of their gaming time on the game. The Parties consider that this illustrates that the gaming industry is extremely competitive and, for the vast majority of gamers, CoD is a small component of overall gaming consumption.¹³⁹
139. The Parties further submitted that CoD's popularity varies over time and does not equate to market power. The Parties cite the example of *CoD: Vanguard* (**Vanguard**), which they said was not generally well-received and showed drops in purchases and player engagement compared to previous CoD titles. The Parties submitted that, compared to the revenues of previous CoD titles such as *Modern Warfare* and *Black Ops Cold War* four months after their release, Vanguard achieved revenues that were [REDACTED] previous titles by its fourth month.¹⁴⁰

Internal documents

140. The CMA believes that the Parties' internal documents show that ABK has one of the most important gaming franchises.

ABK's catalogue

141. One ABK internal document shows that ABK has six franchises generating revenues greater than [REDACTED] based on owned IP across platforms and demos, including CoD, *Candy Crush*, *World of Warcraft*, *HearthStone*, *Overwatch*, and *Diablo*.¹⁴¹ Of these, CoD was the number one console franchise globally for [REDACTED] years. The document states that there is unprecedented demand for ABK content across new distribution outlets and devices.¹⁴²

CoD

142. The Parties' internal documents consistently highlight the size and importance of CoD across platforms. For example, one ABK internal document shows that CoD

¹³⁸ The Parties' submission, 'Assessing the risk of input foreclosure in console gaming', submitted on 27 July 2022, paragraph 4.4.1, in response to the CMA's RFI dated 9 June 2022. A gamer is defined to have played a game if they played more than 1 hour of that game during the course of 2021.

¹³⁹ The Parties' submission in relation to vertical merger analysis, submitted on 28 July 2022, paragraph 2.19, in response to the CMA's RFI dated 26 May 2022.

¹⁴⁰ Issues Letter response, paragraph 5.28.

¹⁴¹ [REDACTED].

¹⁴² [REDACTED].

generated [REDACTED] on Battle.net in 2020.¹⁴³ Several of the third-party consultancy reports submitted by the Parties show that *CoD: Modern Warfare* ranked [REDACTED].¹⁴⁴

143. ABK's internal documents also highlight the importance of CoD to Sony's PlayStation, in particular:
- (a) One ABK internal document shows that [REDACTED]. The document also shows that CoD remains the [REDACTED].¹⁴⁵
 - (b) Another ABK internal document shows that ABK's content played a pivotal role in the success of PlayStation and would continue to do so. The document explains that a six-year CoD partnership between Sony and ABK helped to increase PlayStation 4's console share from [REDACTED], and ABK's content drove around [REDACTED] PlayStation Plus engagement since the launch of PlayStation 4.¹⁴⁶ The document concludes that ABK can have a large impact on Sony's gaming business in the next generation.¹⁴⁷
144. The Parties' internal documents also highlight [REDACTED]. One Microsoft internal document explains that [REDACTED].¹⁴⁸ Microsoft believes that [REDACTED].¹⁴⁹

Third-party views

145. The CMA has received third-party evidence to suggest that ABK's gaming catalogue, in particular CoD, is important and could make a material difference to gaming platforms.

ABK's catalogue

146. Several of the third parties that the CMA contacted during its investigation confirmed that ABK's content is important and would give Microsoft's gaming platforms a significant advantage. For example, some of Microsoft's competitors explained that ABK games are critical to competition in high-end gaming; that they have no meaningful substitute; and that the acquisition would give Microsoft an unrivalled position in the gaming industry, leaving it with the greatest number of must-have games/iconic franchises.¹⁵⁰ Another competitor explained that ABK games constitute a significant share of overall spend and gameplay time on its platform.

¹⁴³ [REDACTED].

¹⁴⁴ For example, see [REDACTED]; and [REDACTED].

¹⁴⁵ [REDACTED].

¹⁴⁶ [REDACTED].

¹⁴⁷ [REDACTED].

¹⁴⁸ As submitted by the Parties, AAA games are developed by large development studios, requiring significant budget and time (up to several years), usually for consumption on multiple gaming devices and platforms. See FMN, paragraph 12.12.

¹⁴⁹ [REDACTED].

¹⁵⁰ Submission by a third party, submitted on 26 July 2022, page 5; and third-party response to question 11 of the CMA's Cloud Gaming questionnaire dated 28 July 2022.

This competitor also stated that having ABK games on its platform attracted gamers who then played against other gamers on the platform.¹⁵¹

147. The CMA also saw an independent survey report by YouGov, which polled 1,200 British adults and 1,200 US adults in January 2022 (the **YouGov Report**). It showed that 29% of PlayStation gamers in the UK (46% in the US) indicated that the inclusion of ABK games in XGP would make them consider subscribing to the service.¹⁵² The same was true for 26% of Nintendo gamers (46% in the US), 26% of PC gamers (42% in the US), and 20% of smartphone gamers (27% in the US) in the UK.¹⁵³ Overall, the YouGov Report suggested that 48% of Xbox gamers in the UK would consider signing up for XGP if it included ABK games. While the CMA cannot comment on the robustness of this survey, the results are consistent with the other evidence that the CMA has seen.

CoD

148. The CMA received evidence indicating that CoD is a particularly important game:
- (a) Sony Interaction Entertainment (**SIE**) submitted to the CMA that CoD has a large number of users on PlayStation, and a significant portion of these gamers spent a majority of their time playing CoD. CoD is a particularly important revenue stream for PlayStation, with the game having the highest awareness and ownership of all third-party franchises.¹⁵⁴ The CMA understood from SIE that CoD's fan base is very loyal towards the franchise, and that having access to the CoD franchise is likely to be a priority for a large number of players. SIE submitted to the CMA that if CoD were exclusively available on Xbox and/or XGP, this could severely adversely impact their ability to compete effectively.¹⁵⁵
 - (b) Another competitor explained that CoD had an indirect impact on its revenues, as it attracted a larger gamer base, who then purchased other games on their platform. This, in turn, impacted the attractiveness of their platform to other publishers. This competitor explained that successful games, such as CoD, create network effects that draw awareness and traffic to smaller games.¹⁵⁶
 - (c) The CMA reviewed an independent 2019 report submitted by a competitor stating that CoD had the most 'passionate' fan base among top gaming brands that year. It explained that 'Call of Duty's significance to entertainment at large

¹⁵¹ Third-party response to the CMA's RFI dated 25 May 2022.

¹⁵² ['How many users could the Microsoft/Activision deal bring to Xbox Game Pass?'](#), dated 21 January 2022, accessed 11 April 2022. The survey polled 1200 US adults and 1200 UK adults, with a margin of error of 2.8% by virtue of the sample size.

¹⁵³ ['How many users could the Microsoft/Activision deal bring to Xbox Game Pass?'](#), dated January 2022, accessed 11 April 2022.

¹⁵⁴ SIE's response to questions 1 and 24 of the CMA's RFI dated 25 May 2022.

¹⁵⁵ SIE's response to question 24 of the CMA's RFI dated 25 May 2022; and Submission from SIE, submitted on 3 August 2022.

¹⁵⁶ Note of a call with third party, dated 17 May 2022, paragraph 9.

cannot be overstated. The brand was the only video game IP to make it into the top 10 of all entertainment brands among fanatics, joining powerhouses like Star Wars, Game of Thrones, Harry Potter, and Lord of the Rings.’ The report goes on to explain that *CoD: Modern Warfare* had the biggest launch of 2019, earning over USD 600 million in just three days, marking the twelfth year in a row that a CoD game ranked as the best-selling game in its launch month.¹⁵⁷

149. Competitors also noted that very few game franchises can (or could ever) match CoD’s success. [X] noted that no other game publisher has come close to replicating the success of CoD, particularly in shooters. [X] also submitted that no other publisher can commit the same level of resources and expertise to game development; and even if they could, CoD is too entrenched for any rival to catch-up.¹⁵⁸ Another competitor explained that no game could substitute CoD, and that it would be difficult to pinpoint a game that would be a close alternative.¹⁵⁹

CMA views

150. Based on this evidence, the CMA believes that ABK content is important to the current and future success of console gaming platforms and multi-game subscription services.
151. The CMA considers that overall publisher shares do not present a complete picture of the importance of ABK content. As discussed below (and in the assessment of individual input foreclosure theories of harm), some ABK games, and CoD in particular, are especially important for attracting gamers to a platform. These gamers go on to play other games available on that platform, increasing that platform’s overall revenue. This aspect of competition cannot be captured in market shares solely. In particular, the CMA considers that:
- (a) **CoD is currently one of the largest game franchises** by user base and revenue. CoD has ranked in the top games available on console for many years and is expected to continue to do so. A substantial share of PlayStation gamers’ spend a significant amount of their time playing CoD. New entrants (eg in cloud gaming services) have also noted the importance of having CoD on their platform. CoD’s importance is also evidenced by [X].¹⁶⁰
 - (b) **CoD has a high level of awareness amongst gamers**, and is responsible for drawing a large, diverse, and loyal user base to a platform as noted above.

¹⁵⁷ ['Report: Call of Duty has the most passionate fan base among 2019's top gaming brands'](#), dated 12 December 2019, accessed 3 August 2022.

¹⁵⁸ [X].

¹⁵⁹ Note of a call with a third party, dated 17 May 2022, paragraph 10.

¹⁶⁰ The Parties’ response to question 12 of the CMA’s RFI dated 12 July 2022, Tables 12.1 and 12.2.

The presence of these gamers, who then spend money on other games on the platform, also attracts other game publishers to choose that platform.

- (c) **CoD has been consistently successful for nearly a decade.** Whilst the Parties submit that CoD's year-on-year success is not guaranteed based on the poorer reception of Vanguard,¹⁶¹ the CMA notes that the performance of a single CoD title does not determine the importance of the franchise. The persistent high revenues and player engagement across all CoD titles, even after the release of Vanguard, indicates that gamers who did not like Vanguard most likely continued to play older CoD titles rather than switch away to a different game.¹⁶²
- (d) **There exist very few franchises that can be considered alternatives to CoD or match CoD's level of success.** For example, in the shooter genre, there is only one competitor of a similar size (Epic Games' *Fortnite* franchise), which in any case differs significantly from CoD in terms of its gameplay functionalities and target audience.¹⁶³ Other competitors such as EA and Ubisoft are markedly smaller.¹⁶⁴ The remaining long tail of publishers that supply games are relatively small and do not command a large user base.
- (e) **There also exist few publishers that can afford to invest the time and capital required to develop a game franchise like CoD in the future.** The CMA understands that each CoD game takes about [X] years to develop.¹⁶⁵ ABK has multiple studios with a combined total of [X] game developers working on different versions of CoD at any one time to maintain yearly releases.¹⁶⁶ The CMA understands that this is difficult for other publishers to match.¹⁶⁷ Moreover, other large publishers—such as EA—focus on specific genres like sports, which means that they may not compete as closely with CoD.
- (f) **The Merger would result in CoD being part of a catalogue of games that includes some of the best-selling franchises in particular genres,** such as in shooters (eg *Call of Duty*, *Halo*, *Gears of War*, *Doom*, *Overwatch*), role-playing games (eg *World of Warcraft*, *Elder Scrolls*, *Fallout*, *Diablo*), racing and

¹⁶¹ Issues Letter response, paragraphs 5.27 - 5.28.

¹⁶² For example, CoD telemetry data submitted by the Parties indicates that [X] for each of PlayStation, Xbox and PC, including after the release of Vanguard.

¹⁶³ For example, *Fortnite* is largely free-to play, with a single title that gets regularly updated. It supports cross-play across devices and have different modes that are not also first-person shooter. The overall theme of the game is more casual, with fewer elements of serious combat as in CoD.

¹⁶⁴ For example, EA's *Battlefield*, despite being similar to CoD in terms of gameplay and story settings, had sold less than a quarter of CoD copies as of August 2021. See, '[Stealth Optional, Call of Duty vs Battlefield sales: Which FPS game has sold more units?](#)', dated 9 August 2021, accessed 26 August 2022.

¹⁶⁵ SIE's response to question 6 of the CMA's RFI dated 25 May 2022.

¹⁶⁶ The Parties' response to question 1 of the CMA's RFI dated 25 July 2022, Annex 028.1.

¹⁶⁷ For example, see [X].

flying games (eg *Forza*), action and adventure games (eg *Minecraft*), and others.

TOH1a Input foreclosure of rival console gaming platforms (excluding multi-game subscription services)

152. There are currently three main console gaming platform providers in the market – Microsoft, Sony, and Nintendo. The CMA has investigated whether the Merged Entity could harm Microsoft’s rivals and thus lessen current and future competition in console gaming platforms through strategies such as (i) making ABK content unavailable on rival consoles (ie exclusive to Xbox), (ii) making ABK content available for release on rival console gaming platforms at a later date compared to Xbox (ie timed exclusivity), (iii) degrading the quality of ABK gaming content available to rival console gaming platforms, (iv) making features or upgrades of ABK games unavailable to other console gaming platforms (ie content exclusivity), and/or (v) raising the wholesale price of ABK content on rival consoles gaming platforms.
153. The CMA considers that any foreclosure of Microsoft’s console rivals would affect console hardware and the related storefronts. This is because console platforms are integrated in terms of their offer of hardware and digital storefronts.
154. As noted further below, the CMA considers that Nintendo competes less closely with Xbox as compared to PlayStation, by virtue of its differentiated content, target audience, and differential technical capabilities. This theory of harm therefore focuses on Sony. The CMA has considered (i) the ability of the Merged Entity to harm Sony through total or partial foreclosure of ABK games, (ii) its incentive to do so, and (iii) the effect of such strategies on competition.

Ability

Parties’ submissions

155. As noted above, the Parties submitted that the Merged Entity would lack market power in game publishing. The Parties also submitted that any foreclosure strategy could not induce significant enough switching of gamers from rival platforms because (i) ABK content is not a critical input to rival consoles, (ii) gamers multi-home across gaming consoles (ie they simultaneously own more than one gaming console), (iii) even if exclusive games were to play an important role in a gamer’s decision regarding which console to purchase, players tend to remain loyal to their preferred console(s), and (iv) players are likely to face switching costs that may deter them from switching away from the Parties’ rival consoles.¹⁶⁸
156. As set out in further detail below, the Parties additionally submitted that CoD is not an important input to rival consoles because (i) Nintendo is successful without CoD;

¹⁶⁸ FMN, paragraph 19.14.

(ii) Sony has existing contractual protections (which ensure access to CoD on PlayStation), and the Merged Entity would make CoD available on PlayStation beyond these until the end of 2027; and (iii) evidence from past partial exclusivity strategies shows that they are ineffective.

157. The Parties submitted that Nintendo has built a successful console business without a single version of CoD being available on Nintendo Switch. The Parties stated that the overall quality and appeal of a platform are more important than any game. The Parties submitted that Nintendo cannot be dismissed as competing less closely with Xbox than PlayStation on the basis that it offers different types of games that are marketed to a different audience (ie family friendly games) because (i) there are several paths that a console platform can take without relying on a particular game franchise or genre; and (ii) Nintendo offers games across genres.¹⁶⁹
158. The Parties submitted that (i) CoD represents only [~~3~~] % of Sony's digital sales worldwide; (ii) only a small proportion of gamers (<[~~3~~] % of PlayStation's MAU) played CoD in 2021; (iii) even if all of PlayStation's MAU that play CoD were to leave PlayStation, it would still have more MAU than Xbox today; and (iv) the success of PlayStation is due to the technical superiority of its console rather than CoD's attractiveness.¹⁷⁰
159. In relation to Sony, the Parties further submitted that they would not be able to engage in a hypothetical input foreclosure strategy because ABK has existing contracts with Sony that pre-date the Merger and limit the extent to which the Merged Entity would be able to withhold CoD from the PlayStation platform. The Parties explained that a number of existing agreements between ABK and Sony, which provide for certain ABK content to be distributed on PlayStation, expire in 2024. The Parties further explained that they have proposed to Sony that the Merged Entity would make CoD available on PlayStation beyond the existing agreement till the end of 2027.¹⁷¹
160. In relation to partial foreclosure strategies, the Parties submitted that CoD has provided exclusive or timed-exclusive downloadable content for either Sony or Microsoft since 2005, and that these arrangements have not led to either Sony or Microsoft being foreclosed. The Parties also submitted that including 'extra content' on the Xbox platform would benefit consumers and would not harm PlayStation gamers.¹⁷²

¹⁶⁹ Issues Letter response, paragraphs 5.16 - 5.21.

¹⁷⁰ Issues Letter response, paragraphs 5.23 - 5.25.

¹⁷¹ The Parties' submission in relation to vertical merger analysis, submitted on 28 July 2022, paragraph 2.2, in response to the CMA's RFI 2 dated 26 May 2022.

¹⁷² Supplementary Issues Letter response, paragraphs 4.17 - 4.21.

Internal documents

161. As described above, the CMA found that ABK's content, especially CoD, is important for rival gaming platforms, including console gaming platforms.
162. The CMA considered the Parties' submissions in relation to Nintendo being a successful platform that does not offer CoD and believes that this is because Nintendo generally offers a differentiated gaming experience to Xbox and PlayStation.
163. In general, Microsoft's internal documents track PlayStation more closely than Nintendo, with Nintendo often being absent from any internal competitive assessment.¹⁷³ One Microsoft internal document assesses [REDACTED].¹⁷⁴
164. Another Microsoft internal document points to the differences in the technical strategies of Xbox/PlayStation and Nintendo consoles [REDACTED].¹⁷⁵ This internal document considers [REDACTED].¹⁷⁶
165. The CMA has also received evidence from the Parties showing that [REDACTED].¹⁷⁷ This suggests that Xbox and PlayStation are closer substitutes to each other than to Nintendo Switch.

Third-party views

166. As described above, the CMA found that ABK's content, especially CoD, is important to rival gaming platforms, in particular Sony's PlayStation.
167. Regarding the Merged Entity's ability to foreclose Nintendo, third parties confirmed that Microsoft and Sony compete closely in gaming consoles, and that Nintendo is not as close a competitor.
168. One third party explained that Nintendo's business model differs from that of Sony's and Microsoft's, and that Nintendo competes more closely with companies outside of the gaming industry. For example, Nintendo has products such as Wii Fit, which are not traditional games and may compete with fitness apps and other non-game apps.¹⁷⁸ This third party also explained that Nintendo's audience differs from other consoles, as its games are marketed as family-friendly with less focus on heavy violence or shooting games (eg *Mario Kart* and *Super Mario*).¹⁷⁹

¹⁷³ For example, see [REDACTED].

¹⁷⁴ [REDACTED].

¹⁷⁵ [REDACTED].

¹⁷⁶ [REDACTED].

¹⁷⁷ 'Assessing the risk of input foreclosure in console gaming', section A.2.5, submitted by the Parties on 27 July 2022 in response to the CMA's RFI dated 9 June 2022.

¹⁷⁸ Third-party response to question 3 of the CMA's RFI dated 27 May 2022.

¹⁷⁹ Note of a call with a third party, dated 16 May 2022, paragraph 8.

169. Another third-party publisher commented on the technical differences of Nintendo's consoles, noting that they had encountered difficulties when bringing a game to Nintendo Switch but no difficulty in bringing the same game to Xbox or PlayStation. This third party explained that this was because of the different type of hardware that Nintendo offers relative to Xbox and PlayStation.¹⁸⁰
170. As for the Merged Entity's ability to foreclose Sony, consistent with ABK's internal documents discussed above, the CMA has received evidence that CoD has higher levels of user engagement and revenue spend on PlayStation than the Parties estimated. SIE submitted that it has the highest awareness and ownership levels of all third-party franchises.¹⁸¹ In addition, CoD plays an important role in attracting high-value gamers to the platform.¹⁸² These CoD gamers spend considerable amounts of money on other PlayStation games and hardware, which substantially increases the revenue impact of having CoD on the platform.¹⁸³
171. The CMA notes that the network effects in gaming mean that having players on a platform attracts content to that platform, and if a sufficient number of high-end gamers were to leave PlayStation, that could impact the level of investment that independent publishers devote to making or adapting games for PlayStation. As noted above, third parties further told the CMA that there currently exist very few game franchises that can match CoD's success.
172. Third-party views also covered the Merged Entity's ability to engage in partial foreclosure strategies. SIE told the CMA that, even if CoD games remained available on PlayStation following the Merger, the Merged Entity would still be able to engage in partial foreclosure by increasing the differentiation between the versions of CoD available on Xbox and on PlayStation. According to SIE, gamers may expect that CoD on Xbox will include extra content and enhanced interoperability with the console hardware, in addition to any benefits from membership in XGP. SIE submitted that these factors are likely to influence gamers' choice of console.¹⁸⁴

CMA assessment of ability

173. Based on the above evidence, the CMA has found that:
- (a) The Merged Entity would have significant upstream market power in publishing of games for consoles, with a share of [10-20]% by revenue and [30-40]% by minutes played on console in the UK.¹⁸⁵ ABK has a particularly high share in shooter games ([30-40]% in the UK), with CoD being one of the largest game

¹⁸⁰ Note of a call with a third party, dated 19 July 2022, paragraph 5.

¹⁸¹ SIE's response to question 24 of the CMA's RFI dated 25 May 2022.

¹⁸² SIE's response to question 24 of the CMA's RFI dated 25 May 2022.

¹⁸³ SIE's response to question 24 of the CMA's RFI dated 25 May 2022.

¹⁸⁴ SIE's response to question 18 of the CMA's RFI dated 25 May 2022.

¹⁸⁵ Parties' response to the CMA's RFI dated 26 May 2022, Annex 14.

franchises available to distribution platforms. In any event, the CMA considers that market shares are not completely indicative of upstream market power in such a market, which is characterised by network effects. The franchise's market power is enhanced by its high level of awareness and the presence of very few games that can match its level of success.

- (b) ABK's content is an important input for Sony, such that Microsoft may have the ability to foreclose Sony's PlayStation console gaming platform. Along with the evidence mentioned above on the importance of CoD, the CMA notes that:
- (i) CoD has higher levels of revenue and user engagement on PlayStation than was estimated by the Parties. Sony also generates significant revenues from CoD users spending on other PlayStation games.¹⁸⁶
 - (ii) PlayStation's success is not driven primarily by its technical superiority (as the Parties suggest). Gaming content is an important driver of demand, and PlayStation's competitive position could be materially harmed if CoD were not available (or not available on equal terms) on its console post-Merger.¹⁸⁷
 - (iii) Although PlayStation currently has a substantial number of non-CoD MAU, the CMA believes that some of these non-CoD gamers may also switch away from PlayStation following any total or partial foreclosure strategies. This is because the presence of strong direct network effects imply that some of these non-CoD gamers would want to continue to play other games with their friends who are CoD gamers, who in turn switch as a result of the foreclosure strategies.
- (c) There are few, if any, alternative franchises with CoD's level of brand awareness and popularity amongst gamers. Whilst the Parties submitted that PlayStation itself has some exclusive franchises, such as *Marvel's Spiderman*, the CMA believes that these do not come close to having CoD's level of success.

174. In relation to the Parties submissions that Nintendo is successful without offering CoD titles on its console, the CMA considers that this is likely due to its differentiated hardware and content that is generally targeted at a 'family-friendly audience.' The CMA believes that the availability of a few games exhibiting violence (such as *Postal Redux*) does not undermine its conclusion that most of Nintendo's content appeals to a different customer segment. In addition, the CMA notes that one of the reasons for the lack of CoD's availability on Nintendo suggested by the Parties is because the Nintendo Switch is not technically capable of supporting the

¹⁸⁶ SIE's responses to the CMA's RFIs dated 8 June 2022 and 25 July 2022.

¹⁸⁷ Several Microsoft internal documents state [REDACTED]. For example, see [REDACTED]; and [REDACTED].

latest version of CoD, which the CMA considers is further evidence that Nintendo is not as close a rival to PlayStation or Xbox.¹⁸⁸ As such, the CMA does not consider that Nintendo's current success is sufficient evidence to show that Sony does not require access on competitive terms to ABK's content in order to compete against Microsoft.

175. In relation to the Parties' submissions on Sony's contractual protections, the CMA notes that the proposal to extend ABK's agreement with Sony beyond 2024 is yet to be formally agreed (with the terms of the proposed agreement under continuing discussions).¹⁸⁹ In any event, consistent with the CMA's Merger Assessment Guidelines, while the CMA acknowledges that this contract may provide Sony with some protection at least in the short term, the CMA is not minded to place material weight on contractual protections when considering the ability of the merged entity to foreclose its rivals through, for example, denying access to current or future versions of the input (ABK content in this case).¹⁹⁰ This is because, for example, such contractual protections (i) may not account for all the possible foreclosure mechanisms that could be available to the Merged Entity, (ii) may be renegotiated or terminated early, or (iii) may not be enforced depending on the respective parties' respective bargaining positions.
176. The CMA considers that the above conclusions also hold in relation to the Parties' ability to foreclose rival console platforms using partial foreclosure strategies. Whilst the CMA recognises that strategies such as timed exclusivity or marketing exclusivity may not have foreclosed rivals in the past, the Merged entity could engage in additional partial foreclosure strategies that remain untested (such as degrading quality of ABK content or increasing prices on rival platforms). When combined, these strategies could significantly impact the ability of Sony to compete.
177. Based on the above evidence, in particular the market power of the Merged Entity in relation to game publishing for consoles and the importance of ABK's content as an input, the CMA believes that the Merged Entity may have the ability to engage in total and partial foreclosure of rival console platforms, in particular Sony who is currently Microsoft's main and closest competitor in this area.

Incentive

178. The CMA notes that gaming is a complex and dynamic market, where firms' current positions and profit margins may not be a good guide to the future, and where strategic considerations may play a greater role.¹⁹¹ As such, the CMA considers it is appropriate for it to place greater weight on qualitative rather than quantitative

¹⁸⁸ Statement made during the Issues Meeting.

¹⁸⁹ The Parties' submission in relation to vertical merger analysis, paragraph 2.5, submitted on 27 July 2022 in response to the CMA's RFI dated 9 June 2022.

¹⁹⁰ [Merger Assessment Guidelines](#), March 2021, paragraph 7.15.

¹⁹¹ [Merger Assessment Guidelines](#), March 2021, paragraph 7.18.

evidence when assessing the incentives of the Merged Entity to foreclose rivals. In terms of its quantitative assessment, the CMA's focus is on the relative magnitude of the costs and benefits of foreclosure, not on predicting the exact size of each element.¹⁹² As such, the CMA has not performed a quantitative analysis of incentives but has assessed the Parties' submissions on this point.

Financial modelling

179. The Parties submitted that ABK games, particularly CoD, generate large revenues on PlayStation so it would not be in the interest of the Merged Entity to withdraw them from PlayStation. The Parties submitted that PlayStation accounts for approximately [X] of CoD MAU, and a correspondingly large proportion of ABK's revenues from CoD.¹⁹³
180. To illustrate this point, the Parties submitted an economic analysis to show that the Merged Entity would not have an incentive to withhold the CoD franchise from Sony's console gaming platform between 2024 and 2028. The Parties submitted that, for such a strategy to be profitable, over [X]% of CoD players on PlayStation would need to purchase a new Xbox, a figure they consider to be implausibly high.¹⁹⁴
181. The Parties submitted that their analysis of incentives represents an accurate view of the decisions facing the Merged Entity, as it was prepared using Microsoft's ordinary course of business data. Sony separately submitted a similar analysis relying on its own data, which suggested that a lower proportion of CoD players on PlayStation would need to switch to Xbox for such a strategy to be profitable. The Parties consider Microsoft's ordinary course of business data be superior to any data available to Sony for this analysis.¹⁹⁵
182. The CMA believes, however, that the methodology underlying the Parties' incentives analysis, and the data inputs on which it is based, may be flawed or incomplete, and that the approach to estimating the critical diversion ratio is not likely to be accurate. In addition, the CMA considers that the number of gamers that would switch to Xbox if Microsoft made ABK's content exclusive could be significantly higher than the Parties predict, given the importance of ABK's content to gamers, which again would make the model inaccurate.
183. First, the Parties' model is likely to understate the benefits to the Merged Entity of withholding CoD from PlayStation:

¹⁹² [Merger Assessment Guidelines](#), March 2021, paragraph 7.18.

¹⁹³ Issues Letter response, paragraph 5.37.

¹⁹⁴ Submission by the Parties, 'Assessing the risk of input foreclosure in console gaming', dated 27 July 2022, paragraphs 7 – 8.

¹⁹⁵ Issues Letter response, paragraph 5.52.

- (a) The model does not capture the impact of network effects in gaming, and the corresponding increase in revenues that these could bring to Microsoft. An increase in its user base would boost the attractiveness of Xbox to developers, thereby attracting more users and content in future (in line with the network effects in gaming discussed above), which would increase the return to Microsoft from engaging in such a strategy.
- (b) The Parties assume that the value to Microsoft of acquiring a new Xbox user [REDACTED]. In other words, [REDACTED], which the CMA considers is not credible and suggests that the model understates the benefit of an acquired user.¹⁹⁶ For comparison, one ABK document estimates that the lifetime value of a PlayStation user is approximately [REDACTED].¹⁹⁷ Under the Parties' analysis, the average lifetime value of an Xbox user over the five years of the analysis is [REDACTED].¹⁹⁸ The CMA further notes that [REDACTED]¹⁹⁹ and lacks explanation of how they were constructed.
- (c) The model assumes a very limited value to Microsoft [REDACTED], despite the evidence that this is a key driver of Microsoft's strategy. More specifically, the model estimates this based on [REDACTED].
- (d) The model assumes that [REDACTED].

184. Second, the CMA considers that the model may overstate the costs to the Merged Entity of withholding CoD from PlayStation:

- (a) The CMA believes that the model overestimates the revenue that is made from each CoD gamer on PlayStation. This has been calculated by dividing total expected CoD revenues on PlayStation by an estimate of the annual number of users worldwide of [REDACTED]. However, the CMA understands that in fact a substantially larger number of PlayStation users play CoD within a year, implying that, all else being equal, the true revenue per user may be substantially smaller than the model assumes.²⁰⁰
- (b) The analysis assumes that the Merged Entity would [REDACTED] on PlayStation. Specifically, it assumes Microsoft will receive [REDACTED]% of these revenues, based on historical commission rates and partnerships. The analysis [REDACTED].²⁰¹

¹⁹⁶ The Parties submitted that the value to Microsoft of selling a console [REDACTED]. The Parties submitted that [REDACTED]. The CMA does not consider this credible, as it implies that [REDACTED]. See Issues Letter response, Annex ILR002, paragraphs 1.9 – 1.10.

¹⁹⁷ Issues Letter response Annex, 'Annex ILR 005 - CONFIDENTIAL TO ABK', dated 1 April 2021, page 1.

¹⁹⁸ FMN Annex 026.2, 'Microsoft's incentive to withhold ABK content from Sony - Appendix A1 derivations'.

¹⁹⁹ Submission by the Parties, 'Assessing the risk of input foreclosure in console gaming', dated 27 July 2022, paragraph 67.

²⁰⁰ Submission from SIE, submitted on 31 July 2022, slide 5.

²⁰¹ The Parties' response to question 12 of the CMA's RFI dated 12 July 2022.

185. Third, the CMA considers that the methodology chosen by the Parties to conduct their analysis does not represent a standard approach to estimating a critical diversion ratio. The complex methodology used by the Parties appears to depend heavily on the assumptions listed above rather than to reflect the relative profits which would be gained in the downstream market and lost in the upstream market from foreclosure.
186. The CMA considers that these flawed assumptions, combined with the Parties' choice of a non-standard methodology to calculate critical diversion ratios, limit the evidential weight which may be placed on the findings of the analysis. Robustness tests by the Parties allow for small changes in these parameters, but the CMA believes that these sensitivities do not address the limitations identified in this analysis. In these tests, the Parties estimate that small parameter changes lead to large changes in the critical diversion ratio.²⁰²
187. The CMA notes that this analysis is also limited only to the CoD franchises. As discussed above, the CMA considers that ABK's other gaming franchises, across both its back catalogue and new releases, are also highly appealing to gamers, including those who play them on rival consoles. As such, a foreclosure strategy which included these additional ABK games alongside CoD may decrease the critical diversion ratio.
188. SIE submitted to the CMA its own analysis of the Merged Entity's incentive to make the CoD franchise exclusive to the Xbox console.²⁰³ This analysis estimates the critical diversion ratio, using data from Sony, as being [1 to 10%] of PlayStation gamers.²⁰⁴ SIE states that, given the levels of engagement with CoD observed among PlayStation gamers, actual switching as a result of an exclusivity strategy will be higher than the critical diversion ratio.²⁰⁵
189. The CMA considers that this illustrates that there is a range of results that can be achieved by making reasonable changes to certain assumptions. While the CMA has placed limited evidentiary weight on SIE's analysis, the CMA considers that even the Merged Entity's static incentive to foreclose Sony may be considerably stronger than suggested by the Parties.
190. In any event, the CMA considers that a static analysis of vertical arithmetic is of only limited value in assessing the Merged Entity's incentive to foreclose, as the Merged Entity may be pursuing objectives other than the maximisation of short-term

²⁰² For example, the Parties submit [REDACTED]. See Issues Letter Response, Annex ILR002, paragraph 1.11.

²⁰³ Submission from SIE, submitted on 3 August 2022.

²⁰⁴ The average profits per PlayStation user to the Merged Entity from the CoD games are estimated to be [USD 5 to 10] per year. The estimated profits to the Merged Entity from acquiring a new Xbox user are based on Sony's revenues and margins for a new PlayStation user, and is [USD 100 to 200] per year. The critical diversion ratio is then calculated by dividing the first profits figure by the second.

²⁰⁵ Submission from SIE, submitted on 3 August 2022, page 2.

profits.²⁰⁶ [The CMS considers] Microsoft's strategy for its gaming division is long-term, well-financed, and focused on user acquisition. The evidence suggests that Microsoft has shown itself to be willing to make losses in the short term in order to build scale and increase its user base.²⁰⁷ The future growth of the gaming industry increases Microsoft's incentive to prioritise increasing its size in the short run, as does the presence of strong direct and indirect network effects.

Microsoft's past business practices

191. In assessing Microsoft's incentives to engage in foreclosure strategies post-Merger, the CMA has considered Microsoft's past conduct following the acquisition of other gaming studios. The CMA believes that this is informative as to Microsoft's broader strategic objectives, its costs and benefits of engaging in foreclosure using gaming content, and ultimately its incentive to engage in foreclosure following this Merger.²⁰⁸
192. The CMA found a pattern of Microsoft acquiring development studios and making their upcoming games exclusive to Xbox. All of these studios developed games for other gaming consoles before being acquired by Microsoft. These include:
 - (a) **ZeniMax Media:** Microsoft chose to make several of ZeniMax's major gaming franchises exclusive in consoles to Xbox, including the upcoming games *Starfield* and, based on Microsoft's public statements,²⁰⁹ *The Elder Scrolls VI*, following its 2021 acquisition.²¹⁰
 - (b) **Obsidian:** Microsoft chose to make *The Outer Worlds 2* and the upcoming *Avowed* exclusive to Xbox consoles following its 2018 acquisition.²¹¹
 - (c) **inXile:** This developer is now developing an Xbox exclusive game following its acquisition by Microsoft in 2018.²¹²
 - (d) **Ninja Theory:** This developer, acquired by Microsoft in 2018, released an Xbox exclusive game, *Bleeding Edge*, in 2020 and its upcoming *Hellblade 2*, is planned to be released as an Xbox console exclusive.²¹³

²⁰⁶ [Merger Assessment Guidelines](#), March 2021, paragraph 7.19(e).

²⁰⁷ For example, see '[Microsoft confirms it's never turned a profit on sale of Xbox consoles](#)', dated 6 May 2021, accessed 3 August 2022.

²⁰⁸ [Merger Assessment Guidelines](#), March 2021, paragraph 7.19(a).

²⁰⁹ For example, see '[How Xbox outgrew the console: inside Phil Spencer's multi-billion dollar gamble](#)', dated 15 November 2021, accessed 15 August 2022.

²¹⁰ For example, see '[Peter Hines on Starfield frustrations: "I'm not apologizing for exclusivity" but rather "expressing empathy"](#)', dated 22 June 2021, accessed 29 July 2022.

²¹¹ For example, see '[Everything we know about Avowed, the new Obsidian RPG for Xbox Series X](#)', dated 27 July 2022, accessed 29 July 2022.

²¹² For example, see '[Next-gen inXile Xbox exclusive RPG will be powered by Unreal Engine 5](#)', dated 20 May 2020, accessed 29 July 2022.

²¹³ For example, see '[Hellblade 2: everything we know about the Xbox Series X game](#)', dated 14 July 2022, accessed 29 July 2022.

- (e) **Compulsion:** The developed upcoming game *Midnight* will be exclusively on Xbox following its 2018 acquisition by Microsoft.²¹⁴
193. The Parties submitted that there are examples of Microsoft having released games on PlayStation following past acquisitions of publishers.²¹⁵ In particular:
- (a) **Double Fine:** *Psychonauts 2* was released on multiple consoles following the publisher's acquisition by Microsoft.
 - (b) **inXile:** *Wasteland 3* was released on multiple consoles following the publisher's acquisition by Microsoft.
 - (c) **Compulsion:** The CMA notes that *We Happy Few* was released on multiple consoles following the publisher's acquisition by Microsoft.
 - (d) **ZeniMax Media:** Two games with pre-existing contractual obligations to be timed exclusives on PlayStation, *Deathloop* and *Ghostwire: Tokyo*, were released as such following the acquisition by Microsoft, and two multiplayer games which were released prior to the acquisition, *Elder Scrolls Online* and *Fallout 76*, have continued to receive support and updates following the acquisition.
 - (e) **Mojang:** The main *Minecraft* game (released in 2014) remains available on rival consoles, and the more recent releases in the *Minecraft* franchise, *Minecraft Dungeons* and the upcoming *Minecraft Legends*, are multi-console.
194. The CMA does not consider it necessary to assess Microsoft's incentives in every previous acquisition. Rather, the CMA considers that Microsoft's course of conduct is sufficiently strong evidence of its broad incentives that it may have an incentive to acquire valuable content and make it exclusive. This is because (i) Microsoft has often pursued a strategy of acquiring publishers and making their upcoming games exclusive to Xbox, even when those publishers previously made their content available to all consoles, and (ii) Microsoft has pursued this strategy when acquiring content that is far less valuable than ABK's games, and hence far less likely to divert customers to its console. As such, the CMA considers that Microsoft may have an even stronger incentive to make ABK's content exclusive to Xbox post-Merger.

Partial foreclosure

195. While the above examples of Microsoft's exclusivity strategies following past acquisitions of publishers relate primarily to full exclusivity (total foreclosure), the

²¹⁴ For example, see '[New upcoming Xbox exclusives revealed: Project 'Midnight' from Compulsion and 'Pentiment' from Obsidian](#)', dated 11 November 2021, accessed 29 July 2022.

²¹⁵ Issues Letter response, paragraph 5.46.

CMA believes that the Merged Entity could have the incentive to use partial foreclosure strategies with respect to ABK games.

196. The Parties submitted that cross-platform play is an important feature of CoD that would be threatened by the Merged Entity pursuing a strategy of partial foreclosure.²¹⁶ Cross-platform play creates a large pool of players, which allows for improved matchmaking between players of similar ability and allows gamers to play with their friends across different consoles.²¹⁷
197. The CMA considers that, given the high number of CoD players, high-quality matchmaking would continue to be possible even if cross-play were compromised. Cross-play would also be less important if a foreclosure strategy succeeded in attracting more gamers to Xbox (an effect that would be strengthened by the existence of strong direct network effects). In any event, the CMA considers that there are mechanisms of partial foreclosure that are compatible with cross-platform play, such as exclusive in-game items or price differences.
198. The CMA considers that partial foreclosure strategies could allow Microsoft to increase its user base while minimizing revenue losses from CoD players in PlayStation. In particular, the CMA notes that PlayStation gamers have varying degrees of attachment to CoD – some would switch to Xbox in response to a total foreclosure strategy and others would not. A partial foreclosure strategy would allow Microsoft to capture the most dedicated gamers—those who would switch to Xbox to benefit from enhanced content, interoperability or earlier releases —whilst continuing to generate revenues from less dedicated PlayStation CoD gamers who may not have switched to Xbox in response to a total foreclosure strategy.

Reputational damage

199. The Parties submitted that they would not engage in partial foreclosure strategies because this would damage the reputation of both Xbox and CoD.²¹⁸ The Parties submitted two examples to illustrate that reputations can be damaged by any such strategies: the Xbox timed exclusivity of Square Enix's 2015 *Rise of the Tomb Raider*,²¹⁹ and the PC port of Warner Brothers' 2015 *Batman: Arkham Knight*.²²⁰
200. The Parties did not, however, explain how any such reputational damage would remove their incentive to engage in a partial foreclosure strategy. This would require showing that a sufficient number of users would refuse to purchase CoD on Xbox, which the CMA considers to be unlikely given the popularity of the franchise. The CMA considers that the two examples that the Parties provided are not directly relevant to the Merged Entity's incentive to make ABK games exclusive, especially

²¹⁶ Supplementary Issues Letter response, paragraphs 4.41 - 4.44.

²¹⁷ Issues Letter response, paragraphs 5.39 - 5.40.

²¹⁸ Issues Letter response, paragraph 5.38.

²¹⁹ Issues Letter response, footnote 73.

²²⁰ Supplementary Issues Letter response, paragraph 4.45.

since one example relates to a game published by a third-party publisher (and the Parties did not provide evidence that it performed poorly as a result of reputational damage), and the other is unrelated to any form of exclusivity. Moreover, the CMA notes that many games are exclusive to certain consoles without any reputational or financial damage to the games or the consoles.²²¹

CMA assessment of incentives

201. For the reasons set out above, the CMA believes that the Merged Entity may have the incentive to engage in total or partial foreclosure strategies using ABK's content in order to expand its user base and grow its gaming platform. The CMA believes that the benefits to the Merged Entity could outweigh the costs associated with either total or partial foreclosure.

Effect

202. The Parties submitted that Sony will not be marginalised as a console platform if it loses access to CoD. The Parties submitted that Sony is superior to Xbox in various metrics, such as installed console base and MAU, and [X]. The Parties also submitted that Sony has a large portfolio of exclusive content that accounted for [X]% of consumer spend on PlayStation. The Parties provided the example of *Marvel's Spiderman: Miles Morales*, which outsold all Xbox titles combined in the week that PlayStation 5 launched.²²²

203. The CMA acknowledges that PlayStation is currently outperforming Xbox in terms of metrics such as installed console base and MAU. However, the CMA also notes that:

- (a) Given the importance of CoD to PlayStation, and the existence of strong direct and indirect network effects, any foreclosure strategy could have a significant impact on Sony's revenues and user base. As noted above, very few other titles on PlayStation, including Sony's exclusive titles, are currently able to replicate CoD's success.
- (b) The impact of any foreclosure strategy, total or partial, on Sony may be particularly strong at the launch of the next generation of consoles, when both new and existing users decide which console to buy. If CoD is made exclusive to Xbox at that point (either permanently or for a period of time after the launch of the new consoles), a significant number of current PlayStation users could switch to Xbox, rendering Sony's current market-leading position immaterial.

²²¹ One third party told the CMA that they do view the possibility of retaliation by consumers in response to unfair behaviour as a constraint on Microsoft. See, note of a call with a third party, dated 19 July 2022, paragraph 26.

²²² Issues Letter response, paragraphs 5.5 - 5.8 and 5.23.

- (c) The CMA notes with respect to the example submitted by the Parties that enhanced versions of games that are launched alongside a new console, such as *Marvel's Spiderman: Miles Morales*, would be expected to have particularly high sales the week that the console launches as consumers will purchase games together with the new consoles. The CMA further understands that in the second week following the launch of PlayStation 5, the top selling game for the system was *CoD: Black Ops Cold War*.²²³

204. When it has been established that there will be harm to competitors this will often directly imply that there will be harm to overall competition, where the foreclosed firms play a sufficiently important role in the competitive process on the downstream market.²²⁴ Based on the evidence above, the CMA believes that PlayStation is Xbox's closest competitor in a highly concentrated market for gaming consoles and, therefore, plays a very important role in the competitive process. The CMA believes that the Merged Entity may have the ability and incentive to engage in total and/or partial foreclosure strategies using ABK's content, and that this could materially affect Sony's ability to compete. The CMA therefore believes that a material impact on Sony's ability to compete would have a detrimental impact on overall competition in the market and ultimately harm consumers.

Conclusion on TOH1a

205. For the reasons set out above, the CMA believes that the Merged Entity may have the ability and incentive to engage in strategies to foreclose Sony—Microsoft's closet rival in console gaming platforms—and that this could significantly harm competition. Accordingly, the CMA found that the Merger raises significant competition concerns as a result of vertical effects in relation to the manufacture and supply of consoles (together with their digital storefronts) in the UK.

TOH1b Input foreclosure of rival multi-game subscription services

206. The Parties' rivals in multi-game subscription services include providers that, for a regular subscription payment, offer access to a catalogue of games that can be downloaded to a user's PC or console, or otherwise streamed to different devices via cloud. Some providers offer a combination of downloads and streaming (eg, Sony PlayStation Plus, Nintendo Switch Online and Ubisoft+), and others offer only streaming (eg Google Stadia, Amazon Luna and NVIDIA GeForce Now). As noted above, this theory of harm focuses on the impact of the Merger on PC, console, and cloud multi-game subscription services based on Microsoft's current offering.

207. The CMA investigated whether the Merged Entity could harm Microsoft's rivals and lessen current and future competition in multi-game subscription services through

²²³ ['Spider-Man: Miles Morales was the best selling game physical PS5 launch game'](#), dated 23 November 2020, accessed 29 August 2022.

²²⁴ [Merger Assessment Guidelines](#), March 2021, paragraph 7.21.

strategies such as (i) making ABK content unavailable on rival multi-game subscription services (ie exclusive to XGP), (ii) making ABK content available for release on rivals multi-game subscription services at a later date compared to Microsoft's subscription services (ie timed exclusivity), (iii) degrading the quality of ABK gaming content available to rival multi-game subscription services, (iv) making features or upgrades of ABK games unavailable to other multi-game subscription services (ie content exclusivity), and/or (v) raising the wholesale price of ABK content on rival multi-game subscription services.

208. By way of background, the CMA notes that:

- (a) The gaming content available in multi-game subscription services is currently more limited than the gaming content available on a buy-to-play basis. If a significantly expanded range of content (including day one releases) were exclusive to XGP in future, this could significantly impede the ability of other subscription services to compete.
- (b) Microsoft has stated its intention to [redacted], which would be consistent with its prior course of conduct after acquiring certain gaming studios, as discussed in TOH1a above. The CMA has considered whether a significantly expanded range of content (including new releases) were exclusive to XGP in future, this could significantly impede the ability of other subscription services to compete.
- (c) As submitted by the Parties, the multi-game subscription services market is still nascent with a range of competitors vying for market share. The CMA considers that, given the presence of strong direct and indirect network effects in multi-game subscription services, there is a heightened risk that the Merger could significantly increase Microsoft's market power, or even tip the market in its favour (as a strong incumbent with its XGP offer), before future rivals have a chance to develop.

209. The CMA has assessed (i) the ability of the Merged Entity to harm Microsoft's rivals in multi-game subscription services through total or partial foreclosure, (ii) its incentive to do so, and (iii) the effect of such strategies on competition.

Ability

Parties' submissions

210. The Parties submitted that Microsoft's share of supply in multi-game subscription services across all platforms in the UK was [50-60]% in 2021, with the share on console being [50-60]% and PC being [60-70]%. The Parties submitted that ABK

does not currently offer and has no current plans to offer a multi-game subscription service similar to XGP.²²⁵

211. The Parties submitted that it is possible that Microsoft may differentiate XGP by including ABK games in the multi-game subscription service, whilst [REDACTED] other multi-game subscription services.²²⁶
212. According to the Parties, this would not raise foreclosure concerns because:
- (a) Multi-game subscription services represent a nascent monetisation strategy and will continue to co-exist with other payment models such as traditional buy-to-play and freemium models. By 2030, Microsoft anticipates that the value of multi-game subscription services will be USD [REDACTED], whereas transactional revenue (including upfront game purchases) will be around USD [REDACTED].²²⁷ The Parties also estimate that multi-game subscription services will account for [REDACTED]% of total gaming revenue by 2025 (or [REDACTED]% excluding hardware sales).²²⁸
 - (b) XGP represents a small share of gaming distribution revenue and cannot be considered a strong incumbent in multi-game subscription services. XGP has grown gradually since its launch in 2017, and XGP MAU represented [REDACTED]% of Xbox total MAU in 2021 – primarily due to a shift of Xbox Live Gold subscribers.²²⁹
 - (c) XGP subscribers will [REDACTED] as a result of the Merger. By 2025 Microsoft estimates that [REDACTED] as a result of the Merger – a [REDACTED]% increase in the number of subscribers forecast absent the Merger.²³⁰
 - (d) Gamers will continue to have access to ABK games, including CoD, via traditional buy-to-play channels. This will reduce any incentive to switch to XGP, as gamers could easily remain with their preferred subscription service and purchase a copy of CoD separately.²³¹
 - (e) ABK content is not currently an important input for multi-game subscription services, nor is there any realistic prospect of it becoming so. ABK currently only makes limited back-catalogue titles available on subscription, and only on a limited time-period basis.²³²

²²⁵ FMN, paragraph 12.60.

²²⁶ FMN, paragraph 19.21.

²²⁷ FMN, paragraph 13.44.

²²⁸ Issues Letter response, paragraph 6.8(a).

²²⁹ Issues Letter response, paragraphs 6.12 - 6.14.

²³⁰ Issues Letter response, paragraph 6.15(a).

²³¹ FMN, paragraph 19.24.

²³² Issues Letter response, paragraph 6.18.

- (f) While XGP has pioneered the multi-game subscription payment model, it is a dynamic space with many services offering a similar monetisation model at a variety of price points (eg Sony, Nintendo, EA, Ubisoft, Apple, Amazon, Google, Facebook, and Netflix). Each of these entrants has access to various assets (eg in terms of user base, capital, and existing content) that they can leverage to compete with XGP.²³³

Importance of multi-game subscription services

213. The CMA notes that, in line with the Parties' submissions, the number of ABK games available on multi-game subscription services is currently limited. However, the CMA considers that this would likely change as the market for multi-game subscription services develops absent the Merger. In particular:

- (a) As set out below, subscription services are growing in popularity. Although they may continue to coexist with traditional payment models for some time, the evidence shows that subscription services may soon be sufficiently important to attract more and better content from game publishers (including ABK).²³⁴
- (b) Rival publishers such as Ubisoft are already offering a selected portfolio of their games as part of their own subscription service, and Ubisoft has also made its content available on Amazon Luna and Google Stadia subscription services.²³⁵
- (c) ABK has offered titles to platforms on subscription in the past. Some of its older titles (including CoD) used to be included in multi-game subscription services in support of larger [redacted], such as with [redacted] and as part of Sony's subscription offerings for limited periods (ie 1 to 2 months).²³⁶

214. The CMA has already set out the importance of ABK's content, and in particular CoD, to rival game distribution platforms. The CMA believes that, as the market for multi-game subscription services grows, ABK would be likely to start making more of its content available on a range of multi-game subscription services absent the Merger. The CMA believes that ABK's content will be equally important to those multi-game subscription services as it currently is to consoles on a buy-to-play basis.

²³³ FMN, paragraph 19.22.

²³⁴ The CMA considers that the Parties' estimates of the split between transactional revenue and subscription revenue above likely understates the revenue from subscriptions. For example, in-game purchases can also be a feature of subscription services, and it is unclear whether the analysis considers this.

²³⁵ FMN, Table 5.

²³⁶ Activision internal documents also show that [redacted].

215. The CMA sets out below the evidence that it has gathered on the growth and future importance of multi-game subscription services, and its assessment of this evidence.

Internal documents

216. Several of the Parties' internal documents show that, along with the traditional buy-to-play model, the importance of multi-game subscription services as an alternative payment model in the gaming industry is increasing. For example:

- (a) One ABK internal document states that multi-game subscription services gained traction as Microsoft continues to invest in XGP. The document added that multi-game subscription services are increasing on console and mobile.²³⁷ Additionally, a third-party report held by ABK and shared with the CMA states that the expansion of new business models has boosted monetisation in the gaming industry, one of those models being multi-game subscription services.²³⁸
- (b) A third-party report provided to the CMA by ABK states that multi-game subscription services are one 'key theme' for the gaming industry in 2022. The document explained that the gaming industry is going through a transition towards digital services, particularly multi-game subscription services. Gamers will be attracted to these services because they have a lower cost access point and a large game library.²³⁹
- (c) Microsoft internal documents, including third-party reports held by Microsoft and shared with the CMA, state that that [REDACTED].^{240 241 242} Another Microsoft document explains that [REDACTED].²⁴³

Third-party views

217. The CMA received third-party evidence showing that gaming is expected rapidly to shift towards a subscription-based payment model:

- (a) One competitor considers that the gaming sector has already seen a recent shift from purchasing individual games (either digitally or physically) towards multi-game subscription services, and this competitor considers that this is as a result of consumers' desire to access a wide variety of content.²⁴⁴

²³⁷ [REDACTED].

²³⁸ [REDACTED].

²³⁹ [REDACTED].

²⁴⁰ [REDACTED].

²⁴¹ [REDACTED].

²⁴² [REDACTED].

²⁴³ [REDACTED].

²⁴⁴ Note of a call with a third party, dated 16 May 2022, paragraph 4.

- (b) One third-party publisher told the CMA that multi-game subscription services will be an increasingly important way that consumer access content.²⁴⁵
- (c) One competitor explained that the gaming industry is gradually moving towards multi-game subscription service business models.²⁴⁶
- (d) One competitor anticipates that multi-game subscription services will become a sizeable part of the gaming industry within three to five years and wants to be present in this segment.²⁴⁷

218. One multi-game subscription provider also submitted that the Merged Entity would be able to foreclose rivals by degrading the quality of ABK's content on rival multi-game subscription services.²⁴⁸

CMA assessment of ability

219. The CMA found that multi-game subscription services are becoming increasingly important. As set out above, the CMA believes that ABK's content would likely be available on those platforms in future, in which case it would be expected to be as important as it is to consoles today on a buy-to-play basis. As such, the evidence set out in TOH1a in relation to the importance of ABK's content (including CoD) applies equally to the assessment of the Merged Entity's ability to foreclose rivals in multi-game subscription services using ABK's content.

220. The CMA notes that its assessment does not rest on multi-game subscription services representing the 'only future model for game distribution', or for there to be a 'seismic shift' to subscription services, as submitted by the Parties.²⁴⁹ It only requires multi-game subscription services to grow to the point that game publishers find it sufficiently attractive to make their best content available on them, which is something that is already starting to happen (as with Ubisoft).

221. As for XGP, the CMA found that it is already the strongest provider of multi-game subscription services. It offers a catalogue of popular games (with over 400 games) and accounts for over [50-60]% of the UK market.²⁵⁰ The Parties estimate that, by 2030, it will grow to [X] subscribers absent the transaction.²⁵¹

222. The CMA is concerned that, especially given that multi-game subscription services is a nascent area with strong direct and indirect network effects and has created an opportunity for potential disruption in the gaming market, combining ABK's content with XGP could raise barriers to entry, entrench Microsoft's position as the leading

²⁴⁵ Note of a call with a third party, dated 5 May 2022, paragraph 21.

²⁴⁶ Note of a call with a third party, dated 23 May 2022, paragraphs 4 - 5.

²⁴⁷ Note of a call with a third party, dated 17 May 2022, paragraph 12.

²⁴⁸ Submission from a third party, submitted on 26 July 2022, page 13.

²⁴⁹ Issues Letter response, paragraphs 6.7 - 6.9.

²⁵⁰ FMN, Table 33.

²⁵¹ Issues Letter response, paragraph 6.15.

provider of multi-game subscription services, and substantially reduce existing and potential competition.

223. As such, based on the above evidence, the CMA believes that the Merged Entity may have the ability to engage in partial and/or total foreclosure of Microsoft's multi-game subscription rivals and lessen existing and potential competition in this market.

Incentive

224. As set out above, the CMA does not consider that a static quantitative analysis of incentives would be particularly informative in a dynamic market that exhibits direct and indirect network effects. This type of analysis is even less informative in the nascent and rapidly developing market of multi-game subscription services.
225. The CMA believes that the Merged Entity may have an incentive to make ABK's content exclusive to XGP, or to engage in the partial foreclosure of rival subscription services, on the basis of (i) Microsoft's own statements and course of dealing, (ii) internal documents, and (iii) third-party evidence.

Microsoft's statements and past business practices

226. Microsoft's statements suggest that one of the most important reasons behind the Merger is adding ABK's games to XGP to differentiate XGP from other multi-game subscription services. Microsoft's announcement of the Merger stated:

'The acquisition also bolsters Microsoft's Game Pass portfolio with plans to launch Activision Blizzard games into Game Pass, which has reached a new milestone of over 25 million subscribers. With Activision Blizzard's nearly 400 million monthly active players in 190 countries and three billion-dollar franchises, this acquisition will make Game Pass one of the most compelling and diverse lineups of gaming content in the industry. Upon close, Microsoft will have 30 internal game development studios, along with additional publishing and esports production capabilities.'²⁵²

227. The CMA notes that none of Microsoft's first-party titles are available on multi-game subscription services other than XGP, even where those titles are available for purchase on rival consoles.

Microsoft's internal documents

228. A number of internal documents confirm [redacted], further highlighting incentives to foreclose competitors:

²⁵² ['Microsoft to acquire Activision Blizzard to bring the joy and community of gaming to everyone, across every device'](#), dated 18 January 2022, accessed 1 August 2022.

- (a) One Microsoft internal document explained that [REDACTED].²⁵³
- (b) Another Microsoft internal document explained that [REDACTED].²⁵⁴
- (c) One Microsoft internal document discussed [REDACTED].²⁵⁵
- (d) One Microsoft internal document explained [REDACTED].²⁵⁶
- (e) Another Microsoft internal document explained that [REDACTED].^{257 258}
- (f) Microsoft also recognises the value of ABK’s content specifically to grow its XGP platform. For example, a Microsoft internal document shows that [REDACTED].²⁵⁹

229. The Parties’ internal documents also show the importance of [REDACTED], demonstrating an incentive to engage in partial foreclosure strategies such as timed exclusivity. Microsoft recognises, in particular, the value of new releases for attracting users to XGP. One Microsoft internal document explains, for example, that [REDACTED].²⁶⁰

Third-party views

230. Several competitors who spoke to the CMA referred to Microsoft’s behaviour in relation to past acquisitions, including that of ZeniMax Media, where Microsoft did not uphold its promise to continue making Bethesda content available on multiple stores and platforms.²⁶¹

231. One of these competitors explained that, in relation to this Merger, Microsoft would have the incentive to withhold ABK games from rival multi-game subscription services, as it would allow Microsoft to drive game distribution through its own services and secure the leading position in multi-game subscription services.²⁶² This competitor believes that many gamers will switch to Microsoft from other multi-game subscription services, which will generate direct and indirect profits for Microsoft in a variety of ways.²⁶³ In the competitor’s view, the incentives to draw users to the Microsoft console gaming platform will far outweigh any downside from reduced sales of individual games on rival platforms.²⁶⁴

²⁵³ [REDACTED].
²⁵⁴ [REDACTED].
²⁵⁵ [REDACTED].
²⁵⁶ [REDACTED].
²⁵⁷ [REDACTED].
²⁵⁸ [REDACTED].
²⁵⁹ [REDACTED].
²⁶⁰ [REDACTED].

²⁶¹ Submission from a third party, submitted on 26 July 2022, pages 18 and 19; note of a call with a third party, dated 23 May 2022, paragraph 12; note of a call with a third party, dated 6 May 2022, paragraph 22; and third-party response to the CMA’s Cloud Gaming questionnaire dated 28 July 2022, page 29.
²⁶² Submission from a third party, submitted on 26 July 2022, page 16.
²⁶³ Submission from a third party, submitted on 26 July 2022, page 17.
²⁶⁴ Submission from a third party, submitted on 26 July 2022, page 18.

Conclusion on incentives

232. Based on this evidence, the CMA believes that the Merged Entity may have the incentive to engage in total or partial foreclosure of rival multi-game subscription services using ABK's content.

Effect

233. Competition concerns may be particularly likely to arise if one of the merger firms has a degree of pre-existing market power in the downstream market, and already faced limited competitive constraints pre-merger.²⁶⁵ The CMA believes that Microsoft's XGP holds a strong position in multi-game subscription services pre-Merger, and that most of its competitors are significantly smaller in terms of user base and revenues.²⁶⁶ Most XGP rivals lack the popularity and range of content that XGP would own post-Merger. Given the importance of ABK's content, the CMA considers that current and future rivals could be affected by any foreclosure strategies using that content.

234. The CMA also notes that multi-game subscription services is a nascent market that exhibits both direct and indirect network effects. The CMA believes that combining XGP, as the strongest incumbent, with ABK's important gaming catalogue could substantially reduce competition as a result of total or partial foreclosure or a combination of both. The CMA believes this could raise barriers to entry, reduce the number of competitors to one or only a few providers, and significantly increase Microsoft's market power. The CMA believes that the Merger may cause this effect, or at least accelerate this process, thereby depriving consumers of a longer period of competition between platforms.

Conclusion on TOH1b

235. For the reasons set out above, the CMA believes that the Merged Entity may have the ability and incentive to engage in strategies to foreclose rival multi-game subscription service providers, which includes cloud gaming services to the extent they are also multi-game subscription services, and that this may significantly harm competition. Accordingly, the CMA found that the Merger raises significant competition concerns as a result of vertical effects in relation to:

- (a) Multi-game subscription services (including cloud gaming services, to the extent these are distributed through multi-game subscription services).

²⁶⁵ [Merger Assessment Guidelines](#), March 2021, paragraph 7.21.

²⁶⁶ Based on the shares of supply in multi-game subscription services submitted by the Parties, Microsoft's share of supply in 2021 was [30-40]% worldwide, and more than [50-60]% in the UK across all platforms. This is a highly concentrated market both globally and in the UK, with only Sony having a share of supply similar to Microsoft worldwide.

TOH2 Foreclosure of cloud-gaming service providers through leveraging Microsoft's ecosystem

236. Cloud gaming technology allows gamers to stream games running on gaming hardware in a data centre to their choice of supported device.²⁶⁷ Cloud gaming is a nascent and rapidly developing market that is expected to grow significantly in the future. Some of the Parties' internal documents suggest that [REDACTED].²⁶⁸
237. Over the past few years, there have been several new entrants into cloud gaming services. These include Amazon Luna, Google Stadia, and NVIDIA GeForce Now, as well as publishers (eg Ubisoft+). The Parties submitted that each of these competitors is leveraging its own strengths, which are diverse and diversified from Microsoft's, and as such would continue to compete effectively against Microsoft following the Merger.²⁶⁹
238. The CMA considers, however, that Microsoft's multi-product ecosystem already places it in a much stronger position than rivals in cloud gaming services. In particular, the combination of an existing gaming console (Xbox) and a strong portfolio of content, a dominant PC OS (Windows), and a strong cloud platform²⁷⁰ (Azure), gives Microsoft an advantage that is difficult for rivals to replicate.
239. This theory of harm considers whether the Merged Entity could leverage its gaming content and broader ecosystem to harm competition in cloud gaming services. TOH1 set out the importance of ABK's content and focused on how Microsoft could use that content to foreclose rivals in gaming console platforms and multi-game subscription services. By contrast, this theory does not rely on any single element of Microsoft's ecosystem post-Merger—including ABK's content—to explain how Microsoft could foreclose rivals. Rather, it considers that (i) Microsoft already has an advantage over rivals by having a broad multi-product ecosystem, including a leading cloud platform and PC OS, and (ii) Microsoft could leverage this ecosystem together with ABK's gaming content to strengthen network effects, raise barriers to entry, and hence foreclose rivals in cloud gaming services.²⁷¹
240. For the avoidance of doubt, and as set out in TOH1, the CMA believes that ABK's content alone could give Microsoft the ability to foreclose rivals in gaming consoles and multi-game subscription services (including cloud gaming services). What this theory of harm captures is that Microsoft also has a broader ecosystem that it could

²⁶⁷ FMN, paragraph 22 of the Executive Summary.

²⁶⁸ For example, see [REDACTED]. See further internal documents and evidence referred to in paragraph 244 below.

²⁶⁹ Issues Letter response, paragraph 7.55.

²⁷⁰ For the purposes of this Decision, the CMA considers a cloud platform to be a network of data centres and cloud computing infrastructure.

²⁷¹ The Merger Assessment Guidelines state that 'the CMA will consider whether the harm to competitors it has identified will result in substantial harm to overall competition in the downstream market. This will include through raising barriers to entry for potential entrants, where the negative impact on customers may take some time to materialise'. According to the Guidelines, 'competition concerns may be particularly likely to arise if one of the merger firms has a degree of pre-existing market power in the downstream market, and already faced limited competitive constraints pre-merger.' See [Merger Assessment Guidelines](#), March 2021, paragraphs 7.20 - 7.21.

leverage post-Merger to gain market power in cloud gaming services. It considers that Microsoft could use ABK's content in combination with other elements of its multi-product ecosystem to reduce competition in cloud gaming services.

241. This theory of harm is non-horizontal, but also involves consideration of network effects. The CMA therefore considers the ability, incentive, and effect framework to be appropriate to assess the effects of this Merger,²⁷² whilst adapting this framework to the particular circumstances of the case.
242. This theory of harm first sets out the evidence for the growing importance of cloud gaming services. It then sets out Microsoft's pre-Merger advantages over current and potential rivals as a provider of cloud gaming services. Finally, this theory of harm sets out how the Merger will increase Microsoft's ability and incentive to foreclose cloud gaming service rivals and harm competition using ABK's content in combination with its broader multi-product ecosystem, and the effect this could have on competition.

Shift to cloud gaming services

243. The Parties submitted that there remain technical challenges before streaming will deliver the most sophisticated games with a user experience matching that of today's PCs and consoles.²⁷³ The Parties submitted that (i) consumer spend on cloud gaming is relatively minor, (i) that Microsoft [✂], (i) and that industry reports and some internal documents suggest that it will take a long time before cloud gaming overtakes consoles.²⁷⁴
244. The CMA found that several of the Parties' internal documents suggest that the gaming industry is expected to shift from device-based gaming to cloud-based game streaming. For example:
- (a) A third-party report provided to the CMA by Microsoft states that cloud gaming services and multi-game subscription services will become an increasingly important part of the games market.²⁷⁵
 - (b) One Microsoft internal document explains that [✂].²⁷⁶ ²⁷⁷ The document also notes [✂].²⁷⁸
 - (c) A third-party report provided to the CMA by ABK states that the 'recurring theme' surrounding game streaming over the last decade is that 'it will eventually become ubiquitous, replace consoles, and be the primary means of

²⁷² As set out in Chapter 7 of the [Merger Assessment Guidelines](#), March 2021.

²⁷³ FMN, paragraph 2.14.

²⁷⁴ Issues Letter response, paragraphs 7.44 - 7.48.

²⁷⁵ [✂].

²⁷⁶ [✂].

²⁷⁷ [✂].

²⁷⁸ [✂].

accessing game libraries on multiple devices'.²⁷⁹ Whilst this document suggests, as the Parties highlighted,²⁸⁰ that in the shorter term game streaming though subscription services will be an important but mostly complementary way of providing multiplatform access and cross-play, and that the 'inevitable transition' to streamed gaming faces expensive technical hurdles, the CMA considers this document overall supports the notion that the gaming industry is expected to shift to cloud-based streaming.

- (d) One ABK internal document states that '[redacted]'.²⁸¹ The document notes that game streaming has been well received by the gaming community and is expected to grow from [redacted] in 2019 to [redacted] in 2023.²⁸²
- (e) An independent report shows that cloud gaming will become an increasingly important part of the games market. The document states that in 2022 more countries will have access to major cloud gaming services, and that cloud gaming will appeal to both hardcore and casual gamers.²⁸³

245. The CMA also received third-party evidence suggesting that gaming is expected to move towards cloud gaming services. For example:

- (a) One competitor told the CMA that cloud gaming services have gained momentum in the past few years and, if fair and effective competition is available, could be poised for significant, rapid growth, with great benefits.²⁸⁴ The competitor added that technological barriers to streaming games over the internet are quickly dropping, including the global expansion of high-speed, high-bandwidth, low-latency, highly reliable internet, 5G rollouts, and improved cloud technology.²⁸⁵
- (b) Another competitor told the CMA that current cloud technology can support a significant transition to cloud gaming services, and that this shift is already happening.²⁸⁶ This competitor sees a long-term shift from gaming on physical devices to cloud gaming services, and thinks cloud gaming services will be popular amongst most gamers.²⁸⁷
- (c) One third-party publisher estimated that cloud gaming will be a viable alternative to native devices in major markets within five years.²⁸⁸

²⁷⁹ [redacted].

²⁸⁰ Issues Letter response, paragraph 7.47.

²⁸¹ [redacted].

²⁸² [redacted].

²⁸³ [redacted].

²⁸⁴ Third-party response to question 6 of the CMA's Cloud Gaming questionnaire.

²⁸⁵ Third-party response to question 6 of the CMA's Cloud Gaming questionnaire.

²⁸⁶ Third-party response to question 6 of the CMA's Cloud Gaming questionnaire.

²⁸⁷ Third-party response to question 6 of the CMA's Cloud Gaming questionnaire.

²⁸⁸ Third-party response to question 12 of the CMA's Publisher and Developer questionnaire.

246. On the basis of this evidence, while the CMA acknowledges the Parties' submissions that cloud gaming is at an early stage and faces some technical challenges, the evidence suggests that it will grow significantly over the coming years and become an increasingly important means of accessing gaming content.

Microsoft's current ecosystem advantages

247. For the reasons set out below, the CMA found that, as well as quality content, building a successful cloud gaming service offering requires (i) access to a cloud platform that is sufficiently large and distributed to reach customers in different countries and provide a gaming experience with minimum latency, and (ii) access to the OSs that customers use to play games on their devices.

248. The CMA considers that pre-Merger Microsoft is already in a uniquely strong position to offer cloud gaming services because it is the only provider with a strong position across console, OS, and cloud platform. The importance of each of these products for the supply of cloud gaming services is explained below.

Users and content – Xbox

249. As set out in TOH1, Microsoft is one of only three global gaming console providers. The Parties estimate that, in 2021, Microsoft's share of UK console hardware by yearly sales value was approximately [30-40]%.²⁸⁹ The two other console providers are Sony (PlayStation) and Nintendo (Switch and 3DS).²⁹⁰

250. The CMA considers that having an existing console ecosystem gives Microsoft two important advantages over most other existing and potential cloud gaming service providers. First, Microsoft already has a large user base to which it can promote its cloud gaming services. The Parties estimate that, in 2021, Xbox had approximately [X] MAU.²⁹¹ The Parties submitted that XGP alone has approximately 25 million subscribers worldwide and that Microsoft estimates that XGP will grow to nearly [X] subscribers by 2030.²⁹²

251. Second, Microsoft already has a large gaming library. Microsoft's Xbox Game Studios includes a collection of 24 first-party development studios, including the recently acquired ZeniMax studios. Examples include games in the *Minecraft*, *Forza*, *Elder Scrolls* and *Halo* game titles.²⁹³ Microsoft also has existing relationships with a range of third-party studios who develop games for Xbox.²⁹⁴

²⁸⁹ FMN, Table 26.

²⁹⁰ FMN, Table 26.

²⁹¹ Slide deck accompanying the Issues Letter response, slide 14.

²⁹² FMN, paragraph 2.13.

²⁹³ FMN, paragraph 6 of the Executive Summary.

²⁹⁴ FMN, paragraph 41 of the Executive Summary.

252. Microsoft’s internal documents suggest that rival non-console cloud gaming service providers looking to enter and expand in this market lack [REDACTED]:
- (a) One third-party report shared with the CMA by Microsoft suggests that Microsoft is uniquely placed to take advantage of game streaming because rival cloud providers entering cloud gaming services will be at a disadvantage if they do not already have a substantial original content library.²⁹⁵ The document explains that unlike the costs of technology (ie compute and bandwidth), which increase more linearly with user growth, the marginal cost of content can drop significantly if more subscribers join the platform.²⁹⁶ The CMA notes that this document pre-dates the agreement of the Merger.
 - (b) Another Microsoft internal document shows that [REDACTED].²⁹⁷ The CMA notes that this document pre-dates the agreement of the Merger.
 - (c) One Microsoft email to the CEO of Microsoft Gaming explains that [REDACTED].²⁹⁸ ²⁹⁹
300
253. On this basis, and in light of the strong network effects described in TOH1, the CMA believes that having an existing gaming console, together with the existing content portfolio and developer/publisher relationships that Microsoft has built over time to support that gaming console, may give Microsoft a significant advantage over cloud gaming services rivals without one.

Cloud platform - Azure

254. Microsoft explained that it offers a public cloud platform and associated services called Azure. Azure offers over 200 services, including computing, storage, networking, databases, OSs, developer tools, and runtimes, to help enterprises build and run their systems, analytics, and applications in the cloud.³⁰¹
255. Microsoft submitted that, in 2020, it had a share of approximately [20-30]% of cloud services in the UK and [10-20]% worldwide.³⁰² The CMA has also seen one public source that suggests that Microsoft’s global share of supply was [20-30]% in the second quarter of 2022³⁰³ – [5-10]% higher than the 2020 estimate submitted by the

²⁹⁵ [REDACTED].

²⁹⁶ [REDACTED].

²⁹⁷ [REDACTED].

²⁹⁸ [REDACTED].

²⁹⁹ [REDACTED].

³⁰⁰ [REDACTED].

³⁰¹ FMN, paragraph 12.82.

³⁰² FMN, paragraph 13.71.

³⁰³ See [‘Amazon Leads \\$200-Billion Cloud Market’](#), dated 2 August 2022, accessed 16 August 2022. The Parties submitted that this source explains that Amazon’s market share still exceeds the combined market share of its two largest competitors, Microsoft Azure and Google, with Amazon being shown to have 34% worldwide market share in Q2 2022 (Supplementary Issues Letter response, paragraph 6.5). The CMA acknowledges Amazon’s currently higher global share of cloud services, but simply notes that this source indicates that the Parties’ own market share estimates may understate Microsoft’s position.

Parties (this also suggests that the UK share may be higher than the Parties' 2020 estimate of [20-30]%). The CMA notes that the two other major cloud platform suppliers are Amazon and Google.

256. Microsoft submitted that having Azure does not give it a material advantage that it can leverage to improve its gaming offering because [redacted] xCloud is provided on [redacted] Xbox consoles [redacted] economies of scale [redacted] does not expect to be in a position to implement this in the next five years.³⁰⁴

257. Microsoft's internal documents suggest, [redacted]. For example:

(a) One internal email [redacted].^{305 306}

(b) One Microsoft internal document explains [redacted].³⁰⁷

258. The CMA also received third-party evidence suggesting that only firms with strong cloud infrastructures will be able to compete effectively in cloud gaming services:

(a) One Microsoft internal document prepared by a [redacted].³⁰⁸

(b) One independent report submitted by Microsoft notes that compute cost per hour (ie the cost per hour of cloud usage) is [redacted] expense item for a cloud gaming platform ([redacted]%), [redacted] first party content costs and bandwidth costs.³⁰⁹ [redacted].^{310 311}

(c) Sony submitted that cloud infrastructure is a critical input into game streaming, and that Microsoft's strong position in cloud gives it a substantial advantage over rivals. Sony explained that, because Microsoft is vertically integrated in cloud services, Microsoft will not incur licensing and use fees that its rivals have to pay in order to offer cloud games. By contrast, Microsoft is in a position to charge fees that may make it untenable for developers to host their games on a cloud platform.³¹²

(d) One cloud service provider explained that Microsoft already has a 'massive cloud presence', and can leverage its existing infrastructure to enjoy a significant cost advantage over new entrants.³¹³ The competitor also noted that Microsoft has advantages in hardware, power, space, bandwidth, and

³⁰⁴ FMN, paragraph 19.45.

³⁰⁵ [redacted].

³⁰⁶ Issues Letter response, paragraph 7.51.

³⁰⁷ [redacted].

³⁰⁸ [redacted].

³⁰⁹ [redacted].

³¹⁰ [redacted].

³¹¹ [redacted].

³¹² SIE's response to question 32 of the CMA's RFI dated 25 May 2022.

³¹³ Third-party response to question 7 of the CMA's Cloud Gaming questionnaire.

many other key features of cloud infrastructure, because it contracts at much higher volumes than others.³¹⁴

259. On this basis, the CMA considers that the Merged Entity may have a significant advantage over rivals without a cloud platform. This will allow Microsoft to attract more users to its cloud gaming services, further strengthening network effects in this market.

Operating system - Windows

260. Microsoft owns Windows OS, which is the market leader in the supply of PC OSs. According to the Parties, Microsoft had a share of supply of OSs of approximately [70-80]% worldwide and [60-70]% in the UK in 2022.³¹⁵ The CMA has seen evidence that Microsoft's hypothetical market share of OS software for personal computers used for gaming is even higher than this, upwards of 95%.³¹⁶ Microsoft's rivals include Mac OS, Chrome OS, and other Linux OSs.
261. The CMA understands that OS software provides the interface between videogame applications and the gaming hardware and software, and cloud gaming platforms require both (i) access to cloud infrastructure; and (ii) an OS licence to allow the cloud infrastructure where their games are hosted to run the relevant OS.³¹⁷
262. As set out above, Microsoft told the CMA that it offers two types of licences for Windows OS: Windows Client (for PCs) and Windows Server (for servers). Microsoft explained that it has a policy of licensing (i) Windows Client and Windows Server to end-users for their own internal use; and (ii) Windows Server to cloud-computing providers as an input for purposes of hosting cloud services.³¹⁸ Microsoft does not license Windows Client to cloud-computing providers for use as an input in the hosting of cloud services. [✂] the vast majority of Windows applications (including games) run equally well on both Windows Client and Windows Server.³¹⁹
263. The CMA believes that, as a result of having Windows OS, Microsoft is in a strong position relative to other cloud gaming service providers. First, it has a significant cost advantage. For example, one cloud gaming service provider explained that the cost of a Windows Server licence is a significant proportion of overall costs and ensures that Microsoft will always have a competitive advantage.³²⁰ Second, Microsoft has unrestricted access to Windows OS. Although the Parties submitted that most Windows applications (including games) run equally well on Windows Client and Windows Server, one cloud gaming service provider explained that the

³¹⁴ Third-party response to question 7 of the CMA's Cloud Gaming questionnaire.

³¹⁵ The Parties' response to question 1 of the CMA's RFI dated 12 July 2022.

³¹⁶ ['Steam Hardware & Software Survey: July 2022'](#), dated July 2022, accessed 15 August 2022.

³¹⁷ Third-party response to question 2 of the CMA's Cloud Gaming questionnaire.

³¹⁸ Supplementary Issues Letter response, paragraph 5.13.

³¹⁹ Supplementary Issues Letter response, paragraph 5.20.

³²⁰ Third-party response to question 7 of the CMA's Cloud Gaming questionnaire.

Windows Client version of OS is superior to the Windows Server version for gaming, since games are compiled and tested for the desktop version, and gaming-related updates are often included earlier in the desktop version than in the server version.³²¹

Windows Promotions

264. Microsoft submitted that it has adopted two broad strategies to make use of Windows to increase awareness and adoption of XGP by PC gamers:³²²
- (a) Microsoft has entered into partnerships with several PC OEMs for the provision of a month's free subscription to XGPU for customers purchasing a new PC.
 - (b) Microsoft has used [REDACTED].
265. The Parties submitted that Microsoft [REDACTED] promotional strategies using Windows aimed at converting PC users to XGP, despite concerted efforts to do so³²³ and that Windows is [REDACTED] to drive customer uptake of XGP.³²⁴
266. In relation to Microsoft's free trial programme with OEM partners, Microsoft provided conversion rate estimates since the launch of the programme in July 2020 up to May 2022. According to Microsoft, [REDACTED] PC units were sold and activated with a XGP free trial offer in that time, and just over [REDACTED] trials were redeemed by PC users (ie [REDACTED]%), of which approximately [REDACTED] were new XGP members (ie [REDACTED]%). Of these new to XGP users, around [REDACTED] converted their free trial to a paid XGP membership worldwide. As such, approximately [REDACTED]% of PC users to whom a free trial of XGP was made available through the OEM programme became incremental paying XGP members.³²⁵ The CMA notes that a [REDACTED]% conversion does not, by itself, show that these promotional strategies are unimportant. This could, for example, represent a high proportion of purchasers of PC units who are also potential customers for multi-game subscription services.
267. In respect of the other tools that Microsoft uses to increase awareness of XGP among PC users, Microsoft [REDACTED].³²⁶
268. One of Microsoft's internal documents shows that [REDACTED].³²⁷
269. On the basis in particular of the importance to game developers of accessing the Windows OS, and also of the role the Windows OS may play in promoting gaming content, the CMA considers that the Merged Entity may have a significant

³²¹ Third-party response to question 11 of the CMA's Cloud Gaming questionnaire.

³²² The Parties' response to question 4 of the CMA's RFI dated 19 July 2022.

³²³ Issues Letter response, paragraph 7.35.

³²⁴ Issues Letter response, paragraph 7.36.

³²⁵ The Parties' response to question 4 of the CMA's RFI dated 19 July 2022.

³²⁶ The Parties explained that it [REDACTED]. See the Parties' response to question 4 of the CMA's RFI dated 19 July 2022.

³²⁷ [REDACTED].

advantage over rivals without a leading OS. This could allow Microsoft to attract more users to its cloud gaming services, further strengthening network effects in this market.

Microsoft's rivals

270. The CMA notes that several industry participants are trying to enter or expand in the cloud gaming services space. These include large tech companies (eg Google, Amazon, and Meta), current console providers (eg Sony and Nintendo), game publishers (eg Ubisoft and EA) and others (eg NVIDIA and Vortex). The Parties submitted that several of these rivals have a collection of assets that they can use to compete in cloud gaming services – for example, Google has Android, YouTube, Chrome, and Play Store; Apple has iOS, Apple Store, and Apple Arcade; Amazon has Twitch, Prime Gaming, and Luna; Valve has Steam, Steam OS, and Steam Deck.³²⁸

271. The CMA has seen evidence that Microsoft is the only cloud gaming services provider to have the full set of capabilities—including relevant technology and content—required to compete effectively in cloud gaming. For example, one Microsoft internal document [✂].³²⁹

[✂]

272. The CMA considers that Microsoft's internal assessment of the competitive landscape is consistent with the CMA's view that no rival currently matches Microsoft's ecosystem advantages for providing cloud gaming services.

Impact of the Merger on Microsoft's ability to foreclose rivals

273. As set out above, Microsoft already has a multi-product ecosystem that places it in a uniquely strong position to provide cloud gaming services. To some extent, therefore, Microsoft can already offer a cost-competitive cloud gaming service that is difficult for rivals to match, and it can use different elements of its ecosystem to weaken its rivals (for example, by charging expensive licensing fees for Windows Server OS).

274. The CMA believes, however, that the Merger could nonetheless harm competition by significantly strengthening Microsoft's integrated offering. Absent the Merger, rivals could still hope to compete against Microsoft by offering a different value proposition that is stronger than Microsoft's offering on at least some parameters of competition (for example, by offering a better gaming catalogue at a lower price). Following the Merger, it may be significantly more difficult for rivals to compete against Microsoft on any parameter of competition, as Microsoft would have by far

³²⁸ Issues Letter response, paragraph 7.58.

³²⁹ [✂].

the strongest integrated offering across cloud, computer OSs, and gaming content. The CMA believes that the investment required by a competitor to develop an offering that could compete effectively with that of Microsoft could be significantly increased following the Merger.

275. The CMA believes that further strengthening of its cloud gaming services offering post-Merger could also change Microsoft's ability and incentive to foreclose rivals using different parts of its multi-product ecosystem. Strategies that may not have succeeded absent the Merger could succeed after the Merger, especially when deployed in combination. These include:
- (a) **Gaming content.** Engaging in total or partial foreclosure strategies using the Merged Entity's gaming content (as set out in TOH1);
 - (b) **Azure.** Denying access to Microsoft's cloud platform to rival cloud gaming services providers (or offering it on worse terms, including price, location, and/or processing power);³³⁰ and
 - (c) **Windows.** Denying access to a Windows OS licence (or offering it on worse terms, including price).
276. In relation to gaming content, the CMA has set out in TOH1 the total and partial foreclosure strategies that Microsoft could engage in post-Merger.
277. In relation to cloud platforms, Microsoft submitted that it is a smaller provider of traditional cloud services to the gaming industry than Amazon (ie AWS) and Google (ie GCP), both of which have built their own cloud-based game streaming services. According to Microsoft, Amazon's strategy is to integrate its cloud-based game streaming service with AWS, promoting Luna as the world's most comprehensive and broadly adopted cloud platform.³³¹ The Parties submitted that Google also promotes its Stadia offering as a 'cloud-native developer platform purpose-built for the 21st century and powered by the best of Google'.³³² Microsoft also submitted that there are a number of other rivals launching cloud-based streaming services which build on their competitive strength in cloud computing, including Meta, NVIDIA, Tencent, and Sony.³³³
278. The CMA notes, however, that:
- (a) Microsoft is the second largest cloud platform provider in a market where there are three main players and a long tail of smaller players.

³³⁰ Including intermediary companies, such as Ubitus, who provide B2B cloud gaming software and services that enable their enterprise customers to create their own consumer-facing cloud gaming offerings.

³³¹ FMN, paragraph 19.47. See, [Introducing Amazon Luna \(developer.amazon.com\)](https://developer.amazon.com).

³³² FMN, paragraph 19.47. See, [Welcome to Stadia \(stadia.dev\)](https://stadia.dev).

³³³ FMN, paragraph 12.51.

- (b) The CMA does not consider that the presence of Microsoft’s main cloud platform rivals—Amazon (AWS) and Google (GCP)—is sufficient to suggest that if Microsoft chose to foreclose its other rivals there would not be an impact on their ability to access cloud server space or the terms on which they are able to do so.
- (c) Moreover, in relation to cloud gaming services, market shares may be less informative of market power because cloud gaming services require a large and well-distributed cloud platform to minimise latency across different locations, and smaller cloud platform providers may not be sufficiently well placed to offer this.

279. In relation to OSs, the Parties submitted that cloud gaming service providers have alternatives to Windows, such as Linux.³³⁴ The Parties submitted that Google Stadia uses servers running on Linux, and that this has not limited its growth.³³⁵ The Parties also submitted that Amazon is planning to move away from Windows following the successful launch of the Valve Steam Deck, which plays Windows PC games on Linux without using Windows at all by using Linux-based software, *Proton*.³³⁶

280. However, the CMA understands that running its servers on Linux OS has been one of the factors that has limited the growth of Google Stadia. This is supported by third-party evidence and public sources as well as Microsoft’s own internal documents, one of which states the following:

[REDACTED].³³⁷

281. Another ABK internal document compares various cloud gaming services (namely, Google’s Stadia, Microsoft’s xCloud, and Amazon’s Luna), and states that the Windows-based solutions are easier to port games to than the Linux-based solution.³³⁸ One Microsoft internal document [REDACTED].³³⁹

282. The CMA considers that the existence of strong network effects in this market also means that Windows is likely to have a lasting advantage over other OSs. The popularity and installed base of gamers that use Windows OS means that publishers write video games for Windows OS and often not for other OSs. This includes the most popular and complex games, such as CoD, which the Parties told the CMA has only been available on Windows OS for the past few years, and not on any other OS. One cloud gaming service competitor told the CMA that cloud gaming

³³⁴ Supplementary Issues Letter response, paragraph 5.22.

³³⁵ Supplementary Issues Letter response, paragraph 5.23.

³³⁶ Supplementary Issues Letter response, paragraphs 5.26 - 5.27.

³³⁷ [REDACTED].

³³⁸ [REDACTED].

³³⁹ [REDACTED].

service providers are also likely to choose the OS used by most gamers.³⁴⁰ The CMA considers that the possibility of Amazon using *Proton* on its Luna service to avoid using Windows is speculative at this point in time, and that the technology is untested in a cloud gaming context.

283. The CMA considers that the Merged Entity would control an important portfolio of gaming content, a leading cloud platform that could be used for delivering cloud gaming services, and the main PC OS used by gamers. The Merged Entity may have the ability to foreclose cloud gaming services rivals by refusing them access to one or more of these (or offering access on worse terms).

Impact of the Merger on Microsoft's incentives to leverage its ecosystem

284. Where the CMA considers several possible ways in which the Merged Entity may foreclose its rivals, it may either undertake one common assessment of incentives or several related assessments.³⁴¹ In this case, the CMA considers that Microsoft's ability to foreclose rivals may derive from leveraging all three elements of its ecosystem in combination (users and content, cloud, and OS). The CMA therefore considers that a common assessment of incentives is also appropriate across all three elements.
285. The CMA believes that acquiring ABK's content could change Microsoft's incentive to engage in foreclosure strategies using its ecosystem. For the reasons set out in ToH1, the CMA believes that ABK's content is important to gamers, and Microsoft could use it to attract more users to its cloud gaming services platform. This would make a foreclosure strategy using Microsoft's broader ecosystem more effective, which could incentivise Microsoft to engage in the foreclosure strategies described above, in circumstances where it may not have had the incentive to do so absent the Merger.
286. Moreover, the CMA considers that the existence of strong network effects (as described earlier in this Decision) also increase Microsoft's incentive to engage in the foreclosure strategies described above post-Merger. In markets with strong network effects and high barriers to entry, there is an increased risk of the market 'tipping' towards one platform. As a platform accumulates users and content, it becomes difficult for other platforms to attract the user base, acquire the content, and ultimately reach the scale necessary to provide a competitive offering. The Parties submitted that the CMA has not explained how and why Microsoft's incentives would change post-merger as a result of the existence of network effects.³⁴² However, the CMA believes that, by leveraging ABK's content and its

³⁴⁰ Third-party response to question 2 of the CMA's Cloud Gaming questionnaire.

³⁴¹ [Merger Assessment Guidelines](#), March 2021, paragraph 7.17.

³⁴² Supplementary Issues Letter response, paragraph 5.30.

wider ecosystem, Microsoft could strengthen network effects and raise barriers to entry for current and potential cloud gaming services rivals.

287. This strategy is consistent with Microsoft's own internal documents. For example:

(a) One Microsoft internal document shows that [REDACTED].³⁴³

(b) The same internal document explains that, [REDACTED].³⁴⁴ According to that document, [REDACTED].³⁴⁵

288. On this basis, the CMA believes that the Merger may result in Microsoft having the incentive to leverage its ecosystem to strengthen network effects, increase barriers to entry, and foreclose rivals in cloud gaming services.

Effects

289. The CMA considers that the market for cloud gaming services is at an early stage of development. There are several recent and potential new entrants that may be able to compete by offering different value propositions and disrupt the highly concentrated gaming console market. As a result, the current competitive landscape could change significantly over the coming years.

290. The CMA is concerned that this Merger could strengthen Microsoft's already strong cloud gaming services offering. As set out above, Microsoft's broader ecosystem already gives it a unique set of advantages over rivals in cloud gaming services. The Merger would significantly improve its first-party content library, which Microsoft could use in combination with the rest of its ecosystem to tip the market in its favour and gain market power. This could have the effect of further strengthening network effects and raising barriers to entry and expansion for other rivals or potential rivals.

291. The CMA considers that strengthening network effects and raising barriers to entry as described in this theory of harm could affect all current and potential rivals in cloud gaming services. In particular, it could make it very difficult for new and recent entrants without the required technological capabilities and gaming content to compete effectively against Microsoft.

292. The CMA believes that, in the absence of the Merger, either these competition concerns would not materialise, or customers would at least benefit from a longer period of competition between platforms vying to be the 'winning platform' in these markets prior to any tipping occurring.³⁴⁶

³⁴³ [REDACTED].

³⁴⁴ [REDACTED].

³⁴⁵ [REDACTED].

³⁴⁶ [Merger Assessment Guidelines](#), March 2021, paragraph 4.25.

293. In addition, the CMA recognises that the competition concerns identified in this theory of harm could also have consequences for the game publishing market. If Microsoft were to acquire significant market power in cloud gaming services, it could become a *de facto* gatekeeper³⁴⁷ between game publishers and gamers. This could have knock-on effects on independent game developers and publishers who compete against Microsoft's own gaming portfolio, ultimately giving it the ability to control access to gamers, charge high fees for game distribution, and manipulate game rankings. The CMA therefore also recognises that the effects of this theory of harm could impact competition in other markets, such as game publishing.

Conclusion

294. For the reasons set out above, the CMA believes that the Merged Entity may have the ability and incentive to engage in foreclosure strategies using ABK's content which, when combined with the rest of its multi-product ecosystem, could strengthen network effects and raise barriers to entry in the supply of cloud gaming services. Accordingly, the CMA found that the Merger raises significant competition concerns as a result of non-horizontal effects in relation to cloud gaming services.

COUNTERVAILING CONSTRAINTS

Barriers to entry and expansion

295. Entry, or expansion of existing firms, can mitigate the initial effect of the acquisition on competition, and in some cases may mean that there is no SLC. In assessing whether entry or expansion might prevent a substantial lessening of competition, the CMA considers whether such entry or expansion would be timely, likely and sufficient.³⁴⁸ In terms of timeliness, the CMA's guidelines indicate that the CMA will look for entry to occur within two years; the CMA has discretion however to consider a longer timeframe, and typically will do so where the theories of harm under consideration are 'dynamic'.³⁴⁹

296. The evidence received by the CMA from the Parties and third parties in the investigation does not indicate that entry or expansion will be timely, likely or sufficient to mitigate any SLC arising, in any of the markets in which the CMA has identified competition concerns.

297. For example, internal documents of both Microsoft and ABK show that the development and marketing costs of console and PC games (particularly those characterised as AAA) are high, and rely on scarce resources such as software development skills. One ABK internal document explains that the investments

³⁴⁷ See '[Unlocking digital competition, Report of the Digital Competition Expert Panel](#)' (the Furman Report), dated 13 March 2019, page 41, accessed 04 August 2022.

³⁴⁸ [Merger Assessment Guidelines](#), March 2021, paragraph 8.31.

³⁴⁹ [Merger Assessment Guidelines](#), March 2021, paragraph 8.33.

required to make a great game are substantially above [REDACTED], in addition to marketing budgets of a similar scale, and that budgets for backend infrastructure and customer service have ‘exploded’. The document estimates that launching new IP such as *Skylanders* requires an all-in upfront investment in the range of [REDACTED]. The document notes there are very few publishers who have the financial resources to compete at this scale.³⁵⁰

298. One competitor told the CMA that the cost of creating a brand new game is greater than USD 100 million, and that doing so is particularly difficult and expensive for independent developers and publishers.³⁵¹ The high costs of game development and publishing have also been noted in the media.³⁵²
299. In relation to subscription services, the Parties’ internal documents show [REDACTED].³⁵³
300. The CMA has also set out in detail evidence of strong direct and indirect network effects across the gaming industry (including in console gaming platforms, subscription services, and cloud gaming services). That evidence is indicative of high barriers to entry and is not repeated here.
301. The CMA notes that there has not been a successful major entrant into console gaming ecosystems since Microsoft’s own entry in 2001.
302. As such, the CMA believes that barriers to entry and expansion into the publishing of high-quality gaming content are high, meaning the possibility of entry or expansion replacing ABK’s content does not alleviate the CMA’s concerns around input foreclosure.

THIRD-PARTY VIEWS

303. The CMA contacted customers and competitors of the Parties, as well as academics and trade associations in the gaming industry.
304. Most competitors raised concerns regarding (i) Microsoft making ABK games exclusive to its own platform; and/or (ii) degrading the quality of ABK games on other platforms; and/or potential self-preferencing behaviour by Microsoft. These concerns have been taken into account where appropriate in the competitive assessment above.
305. In addition to the theories of harm outlined above, third-party concerns were also raised in relation to the potential foreclosure of rival PC storefronts and PC OSs

³⁵⁰ [REDACTED].

³⁵¹ Note of call with third party, dated 23 May 2022, paragraph 18.

³⁵² For example, see [‘Why video games are so expensive to develop’](#), dated 25 September 2014, accessed 1 August 2022.

³⁵³ [REDACTED].

using ABK's content.³⁵⁴ The most substantive submissions and evidence on these concerns were provided to the CMA relatively late within the phase 1 timetable, limiting the CMA's ability to investigate. Some third-party game publishers also raised concerns that the Merger could foreclose game publishers.³⁵⁵ The CMA found mixed evidence on this but considered that any potential harm to game publishers would be captured already by the theories of harm investigated in this decision.

CONCLUSION ON SUBSTANTIAL LESSENING OF COMPETITION

306. Based on the evidence set out above, the CMA believes that it is or may be the case that the Merger may be expected to result in an SLC as a result of non-horizontal effects in relation to the following frames of reference in the UK:

- (a) the manufacture and supply of gaming consoles (together with their digital storefronts);
- (b) the distribution of games through multi-game subscription services; and
- (c) the supply of cloud gaming services.

³⁵⁴ Note of a call with a third party, dated 9 June 2022, paragraph 25; note of a call with a third party, dated 27 June 2022, paragraph 11; and submission by a third party, submitted to the CMA on 26 July 2022, page 28.

³⁵⁵ Third-party responses to question 13 of the CMA's Publisher Developer questionnaire; and note of a call with a third party, dated 17 May 2022, paragraph 20.

DECISION

307. Consequently, the CMA believes that it is or may be the case that (i) arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation; and (ii) the creation of that situation may be expected to result in an SLC within a market or markets in the United Kingdom.
308. The CMA therefore believes that it is under a duty to refer under section 33(1) of the Act. However, the duty to refer is not exercised whilst the CMA is considering whether to accept undertakings under section 73 of the Act instead of making such a reference.³⁵⁶ The Parties have until 8 September 2022³⁵⁷ to offer an undertaking to the CMA.³⁵⁸ The CMA will refer the Merger for a phase 2 investigation³⁵⁹ if the Parties do not offer an undertaking by this date; if the Parties indicate before this date that they do not wish to offer an undertaking; or if the CMA decides³⁶⁰ by 15 September 2022 that there are no reasonable grounds for believing that it might accept the undertaking offered by the Parties, or a modified version of it.

Sorcha O’Carroll
Senior Director, Mergers
Competition and Markets Authority
1 September 2022

³⁵⁶ Section 33(3)(b) of the Act.

³⁵⁷ Section 73A(1) of the Act.

³⁵⁸ Section 73(2) of the Act.

³⁵⁹ Sections 33(1) and 34ZA(2) of the Act.

³⁶⁰ Section 73A(2) of the Act.