

Summary

What we have found

- 1. The Competition and Markets Authority (**CMA**) has found that the anticipated acquisition (the **Merger**) of Activision Blizzard, Inc. (**Activision**) by Microsoft Corporation (**Microsoft**) (together, the **Parties**) may not be expected to result in a substantial lessening of competition (**SLC**) in console gaming services in the UK. However, the CMA has found that the Merger may be expected to result in an SLC in cloud gaming services in the UK.
- 2. In relation to console gaming services, we found that Xbox (Microsoft) and PlayStation (Sony) compete closely with each other, and that Activision's Call of Duty (CoD) is important to the competitive offering of each. The evidence suggests, however, that Microsoft would not find it financially beneficial to make CoD exclusive to Xbox after the Merger. We also found that making CoD available on Xbox on better terms than on PlayStation would not materially harm PlayStation's ability to compete. On this basis, we found that the Merger would not substantially reduce competition in console gaming services in the UK.
- 3. In relation to cloud gaming services, we found that Microsoft already has a strong position. It owns a popular gaming platform (Xbox and a large portfolio of games), the leading PC operating system (Windows), and a global cloud computing infrastructure (Azure and Xbox Cloud Gaming), giving it important advantages in running a cloud gaming service. With an estimated 60-70% market share in global cloud gaming services, it is already much stronger than its rivals.
- 4. We found that the Merger would make Microsoft even stronger and substantially reduce competition in this market. We found that Activision's titles—including *CoD*, *World of Warcraft*, *and Overwatch*—will be important for the competitive offering of cloud gaming services as the market continues to grow and develop. We found that, after the Merger, Microsoft would find it commercially beneficial to make Activision's titles exclusive to its own cloud gaming service. Given its already strong position, even a moderate increment to Microsoft's strength may be expected to substantially reduce competition in this developing market, to the detriment of current and future cloud gaming users.
- 5. Microsoft offered a behavioural remedy to address our concerns in cloud gaming services (the **Microsoft Cloud Remedy**). The Microsoft Cloud Remedy did not aim to restore competition to the level that would have

prevailed absent the Merger, but rather to impose obligations on Microsoft to support cloud gaming service providers using certain business models (such as by allowing them to stream certain games purchased by users through certain storefronts) for a ten-year period.

- 6. We found that the Microsoft Cloud Remedy had several shortcomings connected with the growing and fast-moving nature of cloud gaming services. In particular, the scope of the remedy was limited to cloud gaming providers with specific business models. As a result, Microsoft would not have to supply Activision's full range of games to providers that, absent the Merger, may have entered into a different type of commercial relationship with Activision (eg, through exclusive content, joint marketing arrangements, or a multi-game subscription service like Game Pass) or to cloud gaming providers that may decide to operate using a non-Windows PC operating system (eg Linux). It also did not provide for competition through differentiation in content. The complexity of the remedy, in the context of a dynamic market that is evolving, also meant that it had a high risk of circumvention, and that it would have been difficult to monitor effectively. In light of these shortcomings, we could not be sufficiently confident that the Microsoft Cloud Remedy would have addressed our concerns, and we found that the only effective remedy to the SLC is to prohibit the Merger.
- 7. At a late stage in our process—over a year after the Merger was announced and after competition authorities in the EU, the UK, and the US expressed concerns about the Merger—Microsoft told us that it had entered into agreements with Nintendo and three cloud gaming service providers to allow certain Activision content to be made available on their platforms after the Merger. Microsoft told us that these agreements, along with Microsoft's plan to enter the mobile gaming market and its intention to place Activision's content on Game Pass (Microsoft's multi-game subscription service), were relevant customer benefits (**RCBs**) that would make prohibition disproportionate.
- 8. We found that most of these did not qualify as RCBs. We found that the Merger itself would not increase—rather, it would decrease—the incentive that Activision would have had absent the merger to enter into these agreements. We also found that the impact of these agreements was highly uncertain, and we could not be confident that they would lead to material benefits for customers. As for Microsoft's plans to enter the mobile gaming market, we found that these plans were far from certain, especially in current circumstances where the largest mobile OS—Google's Android and Apple's iOS—either currently prohibit rival mobile gaming app stores or impose strict limits on their ability to monetise content.

- 9. We found that Microsoft's intention to place Activision's games on Game Pass on the date of their release amounts to an RCB. However, we found that this benefit would likely be limited. Having Activision's content on Game Pass would represent a new option to pay for content that is already available on a buy-to-play basis on Xbox, and it would only represent better value than the status quo for some consumers (which, in any event, would only start to accrue some time after the Merger completes). Moreover, we expect Microsoft to have the incentive to increase the price of Game Pass commensurate with the value enhancement of adding Activision's valuable content to it, and we found that even a modest price increase would significantly reduce or eliminate any potential RCB.
- 10. We compared the RCBs that would be foregone from prohibition to the harm that would arise from the SLC. We believe the likely future growth, competitive dynamism and innovation in the cloud gaming market that would be substantially reduced as a result of the Merger would lead to a significantly greater level of harm to UK consumers than any RCBs foregone. We also considered other factors such as the broader international context and extraterritorial impact of prohibition, but we found no effective remedy that would address the SLC in the UK without having an impact outside of the UK. Furthermore, given our SLC finding and the absence of an alternative effective remedy, we consider that prohibition is not disproportionate in order to protect competition and consumers in the UK.
- 11. On this basis, the CMA has decided to prohibit the Merger.

About the gaming industry

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

- 12. 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 2022, it generated around £5 billion in revenue in the UK.
- 13. 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.
- 14. 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, as well as high-

quality content from game developers. Consoles with a large user base attract more users, especially those who want to play multi-player games with their friends and other users (ie, direct network effects). Consoles with a lot of users attract better content, which in turn attracts more gamers to that console, which in turn attracts better content, and so on (ie, indirect network effects). 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.

- 15. Gaming consoles compete against each other across a wide range of parameters, including price, quality, and game range. Price is determined by the console manufacturer, both for the console itself and for the console provider's own games on its console. Quality reflects mainly a console's technical specifications (eg, CPU, GPU, RAM, storage, video output, audio output, connectivity, networking features, etc). These can affect the range of games that can run on the console and the quality of gameplay. Game range is determined by the titles available from the console manufacturer (first-party titles), together with the titles from other publishers (third-party titles) available on that console. In general, the console provider's first-party titles are less likely to be available on other consoles, whilst third-party titles are more likely to be available across different consoles.
- 16. The most important games for a console are typically referred to as 'AAA', which is a loosely defined term to denote the most popular, costly and/or graphically intensive games in the industry. Although there are thousands of games available on console and PC, only a handful of AAA games, including *CoD*, account for the majority of gametime and revenues on Xbox and PlayStation.
- 17. In recent years, gaming consoles have also started to compete on the basis of their multi-game subscription offerings. Unlike the traditional buy-to-play model, where users pay an up-front fee for lifetime access to a game, these services allow gamers to access a catalogue of games for a fixed, often monthly, fee. Although some multi-game subscription services have extensive gaming catalogues, several AAA games (such as *CoD*) are either not currently available on these services or only available in older versions. While most of the revenue in the industry continues to be generated from the purchase of individual games and in-game purchases, multi-game subscription services are expected to grow over the next few years.
- 18. In addition to consoles, people play games on PCs and mobile devices. Consoles and PCs designed for gaming can usually process more complex and technically demanding games (such as *CoD*). Mobile devices currently lack the technical capabilities to run most console games locally, and people

can use them to play more casual games specifically designed for mobile devices (such as *Candy Crush* or *Call of Duty Mobile*).

Cloud gaming services are growing as a potential alternative to consoles

- 19. In recent years, cloud gaming has started to emerge as an alternative to gaming consoles and PCs. Unlike consoles and PCs, where gamers typically download and run games locally on their device, cloud gaming services allow complex games to be accessed on remote servers and streamed directly to a range of devices.
- 20. The evidence we have seen suggests that cloud gaming may be an important disruptive force in the gaming industry. Since games are executed remotely, gamers can play using devices that can be less powerful, and are often cheaper, than consoles or gaming PCs (such as mobile phones, smart TVs, less powerful PCs, or tablets). This widens the pool of potential customers—including to those not willing or able to buy a gaming console or PC—and introduces new ways to compete that could facilitate new entry. Besides Microsoft, recent new entrants into cloud gaming include Amazon Luna, NVIDIA GeForce Now, Boosteroid, Shadow, and Google Stadia (now shut down).
- 21. Several industry experts predict that cloud gaming will continue to grow significantly in the coming years. While estimates vary, market reports forecast that global cloud gaming revenue will increase to \$6.1–11.4 billion by 2025, and \$11.9–13.5 billion by 2026. This suggests that the UK market will be worth \$0.6–1.1 billion by 2025, and \$1.2–1.3 billion by 2026. UK cloud gaming monthly active users more than tripled from the start of 2021 to the end of 2022.
- 22. The evidence we have seen suggests that, to succeed, cloud gaming providers will need to offer a strong gaming catalogue. For new entrants without an existing gaming console (including its games and operating system), we have found that this catalogue is most likely to come from games that are currently available on PC OS, as these can be streamed from any cloud gaming service that runs that OS (provided that adequate licensing arrangements are in place). As such, these cloud gaming service providers will either need a license for a proprietary PC OS—such as for Windows, the OS for which most PC games are designed—or they will need to operate their service using an open-source PC OS such as Linux. They will also need access to cloud infrastructure.

Who are the businesses and what services do they provide?

Microsoft has a strong gaming ecosystem

- 23. Microsoft is a global technology company offering a wide range of products and services, with a global turnover of around £150 billion in FY2022. Since 2001, it has released several generations of Xbox gaming consoles. Gamers typically download digital copies of the games they want to play on Xbox from Microsoft's Xbox Store. They can also pay a monthly fee to gain access to a library of downloadable and cloud-based content via Xbox Game Pass, Microsoft's multi-game subscription service.
- 24. 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. Many of Microsoft's first-party titles are available exclusively on Xbox and PC, and some are licensed to rival console providers.
- 25. Microsoft has other business areas that are important to gaming. One is Xbox Cloud Gaming, Microsoft's current cloud gaming service, which is powered by custom Xbox Series X hardware. Another 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 OS. Many people play games on a PC rather than a console, and most of them use Windows OS. Because of its popularity, game developers generally make PC games that are designed and optimised for Windows OS.

Activision creates some of the most popular gaming content

- 26. Activision is a game developer and publisher with global turnover of £6.1 billion in FY2022. It develops gaming content for consoles, PC, and mobile. Activision's three most popular franchises—*CoD*, *World of Warcraft* and *Candy Crush*—account for most of its revenue. It publishes these games through three separate business divisions, ie, Activision, Blizzard, and King, respectively.
- 27. *CoD*, 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 PC. The latest game in the franchise, *CoD Modern Warfare II*, was released in November 2022 to what Activision described as the #1 top-selling opening weekend ever in the franchise.

Our Assessment

Why did we review this merger?

- 28. The CMA's primary duty is to seek to promote competition 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.
- 29. Microsoft announced in January 2022 that it had agreed to acquire Activision for a purchase price of USD 68.7 billion. The Merger was conditional on receiving merger control clearance from several global competition agencies, including the CMA.
- 30. While both Microsoft and Activision are US-based entities, the question for the CMA is whether the Merger may have an impact on competition in the UK. This link to the UK can be established based on the turnover of the business being acquired in the UK (ie whether the UK turnover of that business is more than £70 million). In this case, we concluded that the CMA had jurisdiction to review this Merger because Activision met that threshold in FY2021.

How did we examine this merger?

- 31. In deciding whether a merger may be expected to result in an SLC, the question we are required to answer is whether there is an expectation—a more than 50% chance—that the merger will result in an SLC within any market or markets in the UK.
- 32. To determine whether this is the case, we have gathered information from a wide variety of sources, using our statutory powers to ensure that we have as complete a picture as possible under the constraints of the statutory timetable to understand the implications of this Merger on competition.
- 33. We have focused on two ways, or 'theories of harm', in which the Merger could give rise to an SLC:
 - (a) The first considers whether Microsoft would be able to harm gaming console rivals now or in future, to the detriment of consumers, by making *CoD* exclusive to Xbox (or by only making it available to rivals on worse terms), whether it would be commercially beneficial to do so, and what the impact would be on competition in the market for console gaming services in the UK.
 - (b) The second considers whether Microsoft would be able to harm cloud gaming rivals now or in future, to the detriment of consumers, by making

CoD and other Activision games, such as World of Warcraft and Overwatch exclusive to its cloud gaming offering, whether it would be commercially beneficial to do so, and what the impact would be on competition in the market for cloud gaming services in the UK.

34. We concluded that the Merger is not likely to give rise to an SLC in console gaming services in the UK, but it is likely to give rise to an SLC in cloud gaming services in the UK. This is discussed in further detail below.

What evidence have we looked at?

- 35. In assessing this Merger, we looked at a wide range of evidence that we considered in the round to reach our decision. The evidence we have gathered has been tested rigorously, and the context in which the evidence was produced has been considered when deciding how much weight to give it.
- 36. We received a significant volume of evidence from the Parties. In response to targeted information requests, we received over 3 million internal business documents from Microsoft and Activision, including key strategy documents and email communications among senior staff. These documents which, for the most part, were created in the ordinary course of business, set out the Parties' views of the console and cloud gaming markets, as well as their future commercial strategy.
- 37. The Parties also had several opportunities to make submissions and comment on our emerging thinking throughout the investigation. In October 2021, the Parties submitted a response to our phase 1 decision. They subsequently submitted a response to our Issues Statement, where we set out the theories of harm on which we planned to focus our phase 2 investigation. We held a site visit with each of the Parties, where their senior business staff gave us several presentations on the nature of their businesses, the rationale for the Merger, and answered our questions relating to our investigation. We then produced working papers and an annotated Issues Statement with our emerging thinking, and the Parties submitted their views on that material. We held formal hearings with each of the Parties, in which we spoke to the Parties' senior management about topics that we were exploring in our investigation. In February 2023, we published our Provisional Findings and Notice of possible remedies. We held formal hearings with each of the Parties to discuss our Provisional Findings and possible remedies and held a hearing with Sony to discuss possible remedies. In March 2023, in light of the additional and updated evidence that we received from the Parties, we published an Addendum to the Provisional Findings in which we provisionally found that the Merger may not be expected to give rise to an SLC in console gaming in the UK. We continued to discuss possible remedies with the Parties

and third parties, focusing on cloud gaming. We also shared a supplementary evidence paper with the Parties covering further evidence gathered and analysed in the period following the Provisional Findings. In addition, we had several calls and considered a number of other submissions setting out the Parties' views on our theories of harm and possible remedies at different points in our investigation.

- 38. We gathered evidence from other gaming console providers, game publishers, and cloud gaming service providers. We sent out over 90 requests for information, held several calls and meetings, and gathered hundreds of internal documents from these third parties. In our calls, we spoke to senior staff and business experts across the industry to have a better understanding of the competitive landscape and likely future developments in these markets.
- 39. We sought views from the public. In response to our Issues Statement of 14 October 2022, we received and reviewed over 2,100 emails containing views on the transaction. We considered those views and published a summary of these responses on 21 December 2022. In response to our Provisional Findings, our Addendum to the Provisional Findings, and Notice of possible remedies, we received and reviewed around 160 emails and submissions from the public. We considered those views and have included a summary of these responses as an appendix to our final report.
- 40. We engaged an independent market research company to conduct an online survey. The survey polled a random sample of PlayStation *CoD* gamers—defined for the purposes of the survey as those who played at least 10 hours or spent at least \$100 on the game between July 2021 and June 2022—to get a sense of how important this game franchise is to them, and what they might do if it became partially or totally exclusive to Xbox after the Merger.
- 41. While there are no pre-defined measures for assessing whether a merger may be expected to result in an SLC, market shares are a commonly used measure in merger control cases. There is a high degree of product differentiation in some of the markets in which Microsoft and Activision operate, which means that in this case market shares may not be the best indicator of how closely businesses compete with each other. As such, when assessing the impact of the Merger on competition, we have considered the evidence on market shares alongside other evidence on how closely the Parties compete with rivals (either currently or in the future). As well as the Parties' market shares, our assessment has taken account of the type of games that Activision offers, of the technical specifications of different consoles (and the types of games that users play on them), and of Microsoft's potential strengths in cloud gaming arising from its broader multi-product ecosystem. We have also taken account of the strength of competitive

- constraints on the Parties, and the extent of past entry and exit from the relevant markets.
- 42. Finally, as well as looking at how competition works currently (and the Parties' current market positions), we recognise that markets, and in particular markets for digital products and services such as those offered by the Parties, change over time. Our assessment is therefore forward-looking and considers how markets are evolving and the Parties' plans for their businesses in future.

What would have happened absent the merger?

- 43. To determine the impact that the Merger may have on competition, we have considered what is likely to happen absent the Merger. This is known as the counterfactual.
- 44. For an anticipated merger such as this, the counterfactual may consist of the prevailing conditions of competition or conditions involving stronger or weaker competition than under the prevailing conditions. In this case, based on the evidence we gathered, our conclusion is that the counterfactual is the prevailing conditions of competition.
- 45. We recognise that, as part of the prevailing conditions of competition, markets may continue to evolve and develop. In this case, our view is that the market is likely to develop in important ways absent the Merger in the near future (ie, within the next five years): in relation to gaming consoles, we consider the evidence shows that multi-game subscription services would continue to grow but would be unlikely to offer Activision's most valuable games on the date of their release (we note that several AAA games currently make most of their sales in the first 12 months after release). In relation to cloud gaming services, we consider that the evidence shows that the market would continue to grow, but we believe that at least some of these cloud gaming providers—especially those with a buy-to-play or bring-your-own-game offering—would have Activision's most valuable games available on their platforms on the date of their release in the foreseeable future. We explain the relevance of these findings in our assessment below.

What did the evidence tell us?

...about the importance of Activision's gaming catalogue

46. We have gathered substantial evidence from Microsoft, Activision, and third parties to assess the significance of Activision's gaming portfolio. This evidence consistently points towards Activision's content, especially *CoD*, as being important and capable of making a material difference to the

competitiveness of rivals' gaming platforms. Activision invests significant time and capital in creating regular *CoD* 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 popularity. Moreover, *CoD's* popularity has been consistent over time and is continuing. For example, Activision reported that the release of *CoD Modern Warfare II* on 28 October 2022 was the franchise's best-ever opening weekend, delivering more than \$800 million worldwide in the first three days from its release.

47. Activision also offers PC games and mobile games. Through its Blizzard division, its most popular release is *World of Warcraft*, a massively multiplayer online role-playing PC game. Through its King division, it offers *Candy Crush*, a free-to-play casual game available on mobile and PC. Although Activision's mobile games are not relevant to our SLC assessment on console or cloud gaming services, we found that some of Activision's broader catalogue of PC and console games, such as *World of Warcraft* and *Overwatch*, are popular games that may be important for cloud gaming services, thereby adding to Activision's already strong catalogue in this market.

...about the impact of the Merger on gaming consoles

- 48. Our assessment under this theory of harm has focussed on whether Microsoft would have the ability and incentive to limit access to *CoD*, and whether this 'foreclosure' would impact rivals' ability to compete with Microsoft in gaming consoles. In terms of 'ability', we considered whether limiting access to *CoD* would harm the competitiveness of Xbox's rivals. In terms of 'incentive', we considered whether Microsoft stands to gain from this strategy. And in terms of 'effect', we considered how this would impact overall competition in the market for gaming consoles.
- 49. CoD is currently available on two gaming consoles Xbox and PlayStation. We found that these consoles compete closely with each other in terms of content, target audience, and console technology. We found that Nintendo's consoles compete less closely with either of Xbox or PlayStation, generally offering consoles with different technical specifications, and with its most popular titles tending to be more family- and child-friendly. Nintendo does not currently offer CoD, and we have seen no evidence to suggest that its consoles would be technically capable of running a version of CoD that is similar to those in Xbox and PlayStation in terms of quality of gameplay and content.
- 50. The evidence we gathered shows that the *CoD* franchise is important to PlayStation.

- 51. First, the evidence shows that *CoD* accounts for a significant proportion of PlayStation's overall gametime, implying that making it exclusive to Xbox would represent an important reduction in range of games offered on PlayStation.
- 52. Second, the large majority of our survey respondents (ie, *CoD* gamers as described above) indicated that the content available on a console is important to their choice of console, and around 24% of them said they would divert away from PlayStation if *CoD* were no longer available on that platform. The level of switching in this analysis, which indicates that a significant proportion of all PlayStation gamers would switch away from the platform, suggests that PlayStation gamers would be affected by not having access to *CoD*, notwithstanding the availability of other games on PlayStation.
- 53. Third, even *CoD* gamers who would remain on PlayStation could be harmed by the reduction in choice in that console. They would also likely spend less time and money on PlayStation than they did before, which the evidence suggests would have a material impact on PlayStation's revenue and ability to compete.
- 54. We also found that Microsoft would not have the ability to foreclose PlayStation solely through partial foreclosure strategies. This is because PlayStation would not lose the full extent of the range that *CoD* represents; rather, that part of its range would suffer a quality deterioration (or price increase) that would likely amount to only a small fraction of the value that gamers derive from *CoD*. As such, and considering PlayStation's broader gaming catalogue, a partial foreclosure strategy would amount to a deterioration in a small fraction of PlayStation's overall range.
- 55. As to what Microsoft would do with *CoD*, we have found that it would not have an incentive to make it exclusive to Xbox.
- 56. First, we found that making *CoD* exclusive to Xbox would result in significant financial losses for Microsoft over a five-year time period. Given the magnitude of those losses, we placed considerable weight on this quantitative evidence.
- 57. Second, we found that Microsoft's past behaviour in relation to acquisitions of other gaming studios was inconclusive. We found that most of these acquisitions were, in effect, acquisitions of talent. The majority of studios that Microsoft has acquired (with some notable exceptions such as Bethesda) did not have regular releases of popular gaming franchises available on different platforms. As such, Microsoft did not have to decide whether to make multiplatform games with a large customer base exclusive to Xbox following these acquisitions; it acquired those studios with the specific purpose of

making exclusive games for its platform. Although the evidence shows that console providers, including Microsoft, place significant value in having exclusive content to differentiate their platform and attract more users, there seem to be exceptions to this rule. For example, when Microsoft acquired Minecraft (a multi-player franchise that was available on different platforms at the time of acquisition, although significantly different from *CoD* in many respects, such as its pricing model), it kept it on PlayStation and Nintendo.

- 58. Third, we found that there is a range of other potential gains and losses from a foreclosure strategy that are more difficult to quantify on a comparable basis. They include (i) furthering Microsoft's strategy of expanding Game Pass, (ii) any reputational impacts (good or bad), (iii) the strength of the Xbox brand and user loyalty, (iv) the impact of network effects (including for games that allow cross-play), and (v) the potential for entry, expansion, or repositioning by rivals to disincentivise foreclosure. We found that, on balance, these factors tend to contribute to Microsoft's incentive to engage in a foreclosure strategy. In light of the magnitude of the potential losses that Microsoft would incur from a total foreclosure strategy, however, we found that these longer-term strategic incentives, together with all other available evidence, are not sufficient to show that Microsoft would have an incentive to make CoD exclusive to Xbox post-Merger.
- 59. On this basis, we found that Microsoft would not have an incentive to make *CoD* exclusive to Xbox post-Merger. As such, we believe the Merger may not be expected to result in an SLC in console gaming services in the UK.

...about the future of cloud gaming

- 60. The evidence we found suggests that cloud gaming could be transformative for the gaming industry in the next few years, helping to reach new customers and improve choice for existing customers (potentially replacing expensive consoles and gaming PCs altogether for some of them).
- 61. Cloud gaming has historically faced some unique challenges relative to consoles. It requires users to have a fast and stable internet connection capable of streaming graphically complex games. It must overcome latency (ie, the time it takes for data to travel from a gaming device to a cloud server and back), which can introduce delays and affect gameplay. The computing, bandwidth, warehousing, and utilities costs associated with cloud gaming are high, and this has led some in the industry to question whether it can ever be profitable.
- 62. The evidence we have gathered indicates that cloud gaming service providers already have, or soon will, overcome these challenges. In terms of demand,

as set out above the market is already sizeable, and the evidence indicates it is poised to continue growing in the next few years. In terms of latency, some providers noted that they have already successfully streamed graphically complex games, such as CoD, with good results in terms of gameplay. As for profitability, although providers have had mixed results and continue to explore different avenues to monetise their service and gaming content, the evidence suggests that costs will continue to fall as demand grows and providers are able to scale their offering. These expectations are backed up by considerable amounts of investment into this market by a range of market participants.

...about Microsoft's position in cloud gaming

- 63. 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. It 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, and developing its cloud infrastructure to better support its gaming activities.
- 64. In relation to cloud gaming services, Microsoft has a combination of assets that we consider is difficult for other cloud gaming service providers to match. By owning Windows, the OS for which the vast majority of PC games are designed, Microsoft could stream games from Windows servers without having to pay a Windows licensing fee or adapt games designed for Windows to an alternative OS. By having Xbox Cloud Gaming and Azure, Microsoft has both a short-term and a longer-term solution to host cloud gaming, leveraging its large and well distributed global cloud infrastructure to stream its games without having to pay a fee to third-party cloud platforms. And by having an existing console ecosystem, Microsoft has a range of popular games that it can offer. As such, we consider that Microsoft has a strong position in cloud gaming services and will remain an important competitor as the market expands and evolves.

...about the impact of the Merger on cloud gaming

65. Our assessment under this theory of harm focused on whether Microsoft would have the ability and incentive to limit access to Activision's titles, and whether this 'foreclosure' would impact rivals' ability to compete with Microsoft in cloud gaming services. In terms of 'ability', we considered whether limiting access to Activision's games would harm the competitiveness of Microsoft's cloud gaming rivals. In terms of 'incentive', we considered whether Microsoft

- stands to gain from this strategy. And in terms of 'effect', we considered how this would impact overall competition in the market for cloud gaming services.
- 66. We have found that Activision's games are likely to be important for the growing market for cloud gaming services. Given that cloud gaming services aim to achieve a similar quality of gameplay as consoles and gaming PCs, we would expect customers' preferences in cloud gaming to be similar to their preferences in consoles and gaming PCs. As explained above, CoD is already one of the most important games for consoles. We have also seen evidence that CoD is a popular game in the PC market, and that it is consistently one of the most requested titles by current cloud gaming users. A range of the evidence that we gathered, including from multiple third parties, suggests that CoD could make a material difference to the success of a cloud gaming provider. And we found evidence that Activision has other games, such as World of Warcraft (a PC-only game) and Overwatch that are currently popular in consoles and/or gaming PCs and, as such, could also be important to cloud gaming. Overall, therefore, we found that Activision's titles are likely to be an important input for the success of cloud gaming services, as they are today for consoles and gaming PCs.
- 67. As to what Microsoft would do with Activision's titles, we found that it would have an incentive to make them exclusive to its cloud gaming service.
- 68. Cloud gaming is a relatively new market characterised by some elements of direct and/or indirect network effects. In this type of market, success is highly uncertain, and there's an opportunity (and strong incentive) for incumbents to develop a unique offering in a bid to gain market power (which can itself be reinforcing as a result of network effects and scale advantages). One way for Microsoft to achieve this would be to offer exclusive games on its cloud gaming service. The evidence suggests that this is already part of Microsoft's cloud gaming strategy – except for a few Bethesda titles, most of which were old or already available on rival cloud gaming services before Microsoft acquired Zenimax, Microsoft has not made its games available on rival cloud gaming platforms. We do not consider that the agreements Microsoft has entered into with NVIDIA, Boosteroid and Ubitus change this, as we consider there is material uncertainty around the scope, terms, and enforceability of these agreements. They also apply only to a few existing cloud gaming service providers, rather than to the full spectrum of actual and potential rivals.
- 69. We are concerned that making Activision's titles exclusive to Microsoft's cloud gaming service would harm competition, particularly since our view is that Microsoft already holds a strong position in this market by virtue of its unparalleled advantages through its ownership of Windows, its cloud infrastructure, and its existing catalogue of first party titles. There are a few

emerging rivals with their own respective strengths, such as Amazon, Sony, and NVIDIA, but none seem to be as well positioned as Microsoft in this market. We consider that Google's recent decision to shut down its own cloud gaming service, Stadia, shows that merely having some strengths relevant to cloud gaming is not enough to guarantee a platform's success. The evidence also indicates that there are significant barriers to entry and expansion, including the cost of cloud infrastructure, the cost of acquiring content, and the need for economies of scale in order to drive down costs. Since Microsoft already appears to face limited competitive constraints from current and potential rivals, we are concerned that withholding Activision's content from rival cloud gaming platforms is particularly likely to harm competition now and in the foreseeable future.

70. On this basis, we found that the Merger may be expected to result in an SLC in cloud gaming services in the UK, as a result of vertical effects in the form of input foreclosure.

...about the overall impact of the Merger on consumers

- 71. Our statutory duty is to assess whether the Merger may be expected to result in an SLC within any market or markets in the UK for goods or services. Any such reduction in competition can have a potential impact on consumers.
- 72. In this case, we are concerned that the Merger will ultimately harm current and future gamers. By stifling competition in the growing and dynamic market for cloud gaming services, the Merger could alter the future of gaming. The market for cloud gaming seems poised to grow and become an important conduit for playing games, both for new users who are unable or unwilling to buy an expensive console or gaming PC, and for existing gamers looking for an alternative to these devices. Absent the Merger, strong competition in this market could make cloud gaming better and more affordable for consumers. By contrast, we found that the Merger would make an already strong incumbent in this market even stronger, which could result in Microsoft retaining a big share of the market and facing limited competition from current and potential rivals. This reduction in competition could harm consumers, such as by increasing prices and reducing quality, innovation, and choice over time.

What remedy did Microsoft offer?

73. To address our concerns, Microsoft offered the Microsoft Cloud Remedy. Under this remedy, Microsoft committed to license Activision games, including *CoD* and *World of Warcraft*, royalty-free to certain cloud gaming providers for a period of 10 years. Microsoft proposed to update the consumer licenses on its website, giving the right to any consumer who acquired an Activision game

in one of the online stores designated by Microsoft to stream that game in the cloud gaming services that were covered by the remedy. Microsoft offered to appoint a monitoring trustee to monitor and seek to ensure Microsoft's compliance with the remedy, and a fast-track dispute resolution mechanism carried out under arbitration.

- 74. The CMA's guidance sets out the established position that behavioural remedies are, due to their overall risk profile, unlikely to deal with an SLC and its adverse effects as comprehensively as structural remedies. Behavioural remedies can operate satisfactorily in limited circumstances, such as where the company operates in a regulated environment, where there are expert monitors, or where the SLC is expected to have a short duration. In this case, the market for cloud gaming is a new and unregulated sector. We have nevertheless engaged in a detailed assessment of the proposed Microsoft Cloud Remedy, including through multiple discussions with the Parties and third parties to establish whether this could constitute an effective remedy in the specific circumstances of this case.
- 75. We found two significant limitations in scope for the Microsoft Cloud Remedy.
- 76. First, it was limited to a model whereby gamers had to first acquire the right to play certain games (eg, by purchasing them on certain stores or subscribing to them on certain services) in order to stream those games on certain cloud gaming services. It did not make any provision for a different type of commercial relationship between cloud gaming service providers and the game publisher (ie, Activision). As such, it restricts the ability of cloud gaming service providers to access Activision's games through other strategies and business models (some of which we already see in the cloud gaming market), such as joint marketing arrangements, exclusive or early access to content, or multi-game subscription services. In our view, and consistent with our competitive assessment, this is a dynamic market in which there is a reasonable chance that different providers will compete using a range of different business models, and that these providers would have had access to Activision's content absent the Merger.
- 77. Second, the Microsoft Cloud Remedy applies to current and future PC and console versions of Activision games. The PC versions are those that are developed to run on a Windows OS, as well as other PC OS versions as may be released by Microsoft during the term of the remedy. We found that, absent the Merger, Activision would seek to maximise the value that it can derive from these games, which would have involved considering making non-Windows PC versions of its games (as it has already done in some cases). However, after the Merger, Microsoft's incentives to make these games compatible with rival OS would be significantly lower, as this would both increase the

attractiveness of rival cloud gaming services and divert demand away from Windows OS. This means that, in effect, cloud gaming services wishing to stream these games would have to use, or be compatible with, the Windows OS version of those games. This could exclude or restrict providers that may wish to provide cloud gaming services using other operating systems (such as Linux), either now or in the future. The Microsoft Cloud Remedy would therefore put non-Windows based cloud gaming services at a disadvantage, and potentially distort the choice of OSs for new entrants.

- 78. We also found limitations in terms of the duration, monitoring, and enforcement of the proposed remedy. The fact that the remedy is only for 10 years represents a clear weakness in terms of its effectiveness as a comprehensive solution to the SLC, which is not itself time limited. Since the remedy applies only to a defined set of Activision games, which can be streamed only in a defined set of cloud gaming services, provided they are purchased in a defined set of online stores, there are significant risks of disagreement and conflict between Microsoft and cloud gaming service providers. Given the information asymmetry between Microsoft and any monitoring trustee or the CMA, it would be difficult to monitor and enforce this remedy, even with significant information gathering. We found several additional concerns with the practicalities of implementing the remedy, which are detailed in the Final Report.
- 79. Based on this evidence, we found that the only effective remedy to the SLC and its adverse effects was to prohibit the Merger.

Is it proportionate to prohibit this Merger?

- 80. The CMA seeks to ensure that no remedy is disproportionate in relation to the SLC and its adverse effects. An effective remedy to an SLC, such as in this case prohibition, could be considered disproportionate if it prevents customers from securing benefits resulting from the Merger where this is disproportionate to the scale of the SLC and its adverse effects. Insofar as these benefits constitute RCBs, we take them into account when we assess whether a remedy is proportionate.
- 81. Microsoft submitted that the Merger would give rise to a number of RCBs. During our merger investigation, Microsoft entered into agreements with different console and cloud gaming service providers to place its content and/or Activision's content on their respective platforms. These agreements included a 10-year agreement with Nintendo to develop and publish future native console versions of the *CoD* titles for Nintendo platforms post-Merger, as well as 10-year agreements with NVIDIA, Boosteroid, and Ubitus to make Activision's content available on their service. In addition, Microsoft submitted

- that the Merger would give rise to RCBs as a result of (i) Microsoft placing Activision content on Game Pass (Xbox and PC) on the date of release, and (ii) Microsoft expanding into mobile gaming.
- We found that most of these did not amount to RCBs under the Enterprise Act 82. 2002 (the **Act**). In relation to the agreements with Nintendo and cloud gaming services providers, we found that nothing about the Merger—such as any potential changes in the market structure or commercial incentives that arise from Microsoft and Activision ceasing to be distinct—would increase Activision's incentive to enter into these agreements relative to the situation pre-Merger. To the contrary, being part of a corporate group that owns a competing console (Xbox) and cloud gaming service (Xbox Cloud Gaming) would suggest that Activision's incentive to enter into these agreements would be significantly reduced post-Merger. There is also considerable uncertainty in the scope, enforceability, and potential benefits brought about by these agreements. Microsoft itself acknowledged in the context of its agreements with cloud gaming platforms that such a rapidly evolving market could give rise to unanticipated and unforeseeable future events over a ten-year period beyond its control.
- 83. In relation to Microsoft expanding into mobile gaming, the chances of Microsoft succeeding seemed low in circumstances where the two largest mobile OS—Google's Android and Apple's iOS—either currently prohibit rival mobile gaming app stores or impose strict limits on their ability to monetise content. In any event, there seemed to be other, less anti-competitive ways, through which Microsoft could reasonably attempt to enter this market, such as by licensing mobile gaming content from publishers.
- 84. We consider that bringing Activision's content to Game Pass would amount to an RCB under the Act. The Merger would bring Game Pass and Activision's content under common ownership, creating an opportunity to exploit synergies and eliminate double marginalisation. And we believe it's unlikely that Activision would have made its most valuable content available on Game Pass on the date of release absent the Merger.
- 85. We found that the scale of this benefit, however, would be limited. Having Activision's content on Game Pass would represent a different way to pay for the same content, which would not necessarily be cheaper for all consumers. We would also expect Microsoft to have the incentive to increase the price of Game Pass commensurate with the value enhancement of adding Activision's valuable content to it, and we found that even a modest price increase would significantly reduce or eliminate any potential RCB.

86. We recognise that having Activision's content available on Game Pass is an attractive prospect to some customers and something that, based on the comments that we received from the public during this investigation, seems to explain much of the support for this Merger by those in favour of it. But, on balance, we found that having this new option to pay for content that is already available on a buy-to-play basis on Xbox would not outweigh the overall harm to competition (and, ultimately, consumers) arising from this Merger in the sizeable and rapidly expanding market for cloud gaming services.

Conclusions

- 87. As a result of our investigation and our assessment, we concluded that the anticipated acquisition by Microsoft of Activision would result in the creation of a relevant merger situation.
- 88. We have also concluded that the Merger may be expected to result in an SLC in the supply of cloud gaming services in the UK due to vertical effects resulting from input foreclosure.
- 89. We have found that the Microsoft Cloud Remedy proposal would not be effective in addressing the cloud gaming services SLC that we found.
- 90. We found that the only effective remedy to this SLC and its adverse consequences is to prohibit the Merger. We also found that this remedy is proportionate in relation to the SLC and its adverse effects, including taking into account any RCBs.