

CLOUD SERVICES MARKET INVESTIGATION

Summary of hearing with Google held on 17 March 2025

Introduction

1. The CMA explained the purpose for the hearing, noting the recent publication of the Provisional Decision Report (PDR), and provided an overview of the timetable for the market investigation to the Final Report.

Introductory statement from Google

- 2. Google said that the CMA was right to provisionally find that Microsoft and AWS have significant market power in the cloud market in the UK on any metric, well ahead of other providers. Google said it did not expect the market structure to change any time soon and that any remedies should apply to Microsoft and AWS.
- 3. Google said that Microsoft's software licensing restrictions are harming competition and ultimately customers in the UK. Google's experience is that Microsoft has a strategy of leveraging its dominance in software to unfairly gain control of a large part of the cloud market.
- 4. Subject to the proposals in its written response to the PDR, Google said that the CMA's proposed remedies package to address Microsoft's conduct would go a long way towards resolving the concerns identified. Google said that it was imperative that the CMA acts quickly to implement its remedies as the longer Microsoft's conduct is allowed to continue, then the more customers suffer and the more enduring these effects will be on the competitive structure of the market.
- 5. Google said that it had industry estimates which show more than half of public cloud usage in 2024 was driven by migrated workloads compared to just three years earlier, when it was less than a fifth. Google said that it expected the pace of migration to continue to accelerate.
- 6. Google said that it noted the advantages of the CMA's digital market powers but that, given the lengthy processes of the Ofcom market study and CMA market investigation, there were good reasons for the CMA to implement

- remedies first as part of the market investigation, and that the DMU as and when Microsoft might be designated under the Digital Markets, Competition and Consumer Act (DMCCA) could then take responsibility for ongoing monitoring and any iterations.
- 7. Google said that the CMA was right to provisionally conclude that imposing egress remedies on the two market leaders, AWS and Microsoft, would change competitive conditions of the market as a whole and other providers would follow their lead.

Competitive landscape

- 8. Google said that it was a challenger cloud provider and a distant third in size to the two market leaders, AWS and Microsoft.
- 9. Google said that its growth in cloud comes primarily from digital native customers and from secondary workloads from traditional enterprise customers (for whom it is not the primary cloud provider).
- 10. Google said that data centre capacity is the best predictor for forward looking market shares. It said that Microsoft has the largest data centre capacity in Europe, reflecting its continued growth which is faster than Google's and AWS'.
- 11. Google said that while it had grown its revenue between 2020 and 2023, AWS and Microsoft have grown substantially faster than Google and, as a result, it was losing market share against AWS and Microsoft in real terms.
- 12. Google said that its growth is not coming from workloads associated with Windows Server, the primary laaS workloads of traditional enterprise customers or from the Al workloads of traditional enterprise customers.
- 13. Google said that traditional enterprise migration would continue to dominate the demand for cloud for years to come because analysts estimate only 30% of workloads have completed the migration to cloud. Google said that Microsoft was capturing a disproportionate amount of traditional enterprise workloads which are moving to the cloud.
- 14. Google said that its competitive position would remain as a challenger and that AI would not fundamentally change the market structure. Google said that industry analyst research shows that generative AI workloads will account for ten to 15 per cent of workloads from traditional enterprise and digital native customers by 2030.

- 15. Google said that Microsoft would likely dominate cloud in five years' time if nothing changed in the market.
- 16. Google said that there were new players entering each layer of the AI stack, including by offering accelerated compute solutions, and that the AI stack was competitive.
- 17. Google said that AI is not going to fundamentally change cloud competition to the extent that the harms found by the CMA will quickly become outdated.
- 18. Google said that, to the extent Al grows in importance, it was wrong for anyone to suggest Google is particularly well-positioned to benefit.
- 19. Google said that there were not insurmountable barriers to entry or expansion because cloud was fundamentally a scale-out industry where a provider could start small and grow. It said that new entrants could come into the market, for example, by leasing data centres and selling capacity to others.
- 20. Google said that, while at present standard compute chipsets and accelerated chipsets are sold and bought separately, which suggests there is separate demand for accelerated compute and standard compute, there is already evidence of convergence and it is too early to tell how the market will develop in the next few years.

Licensing

- 21. Google considered that Microsoft's licensing practices harm competition and restrict customer choice, which ultimately leads to higher prices and prevents UK companies from realising the full benefits of public cloud.
- 22. Google said that traditional enterprise customers do not start from scratch when deciding to migrate to the cloud as they have typically invested in onpremises technology to support business-critical systems and many of these are highly dependent on Microsoft Windows.
- 23. Google stated that these migrations to cloud happen in stages, initially 'lifting and shifting' existing workloads to the cloud. Google said that for companies that have built a dependency on Windows Server and/or SQL Server, it would take years and years to modernise to Linux after migrating as they would essentially need to rewrite all the Microsoft-based applications that they have accumulated over the years which is very challenging for most enterprises.
- 24. Google stated that the first workloads to be lifted and shifted tend to be very heavily oriented towards infrastructure as a service (laaS). Customers choose a cloud provider based on its offering for these initial services. Google said

that if it is not able to compete on offering these basic IaaS options, with Windows Server VMs 2000-5000% less competitive on GCP than on Azure, it does not matter how competitive it is across a broader portfolio of services such as AI that may or may not be used in the future. Given Microsoft's licensing practices, Google considered that it is not competitive for IaaS workloads for traditional enterprises with a material Windows footprint.

- 25. Google stated that there is a separate demand for Windows Server virtual machines. It gave an example of a customer that previously designated Google as their primary cloud provider: this customer has a very large Microsoft Windows Server estate and was happy with Google's services but nevertheless chose to move all of their Windows Server estate to Azure for licensing and commercial reasons.
- 26. Google said that traditional enterprises have very complex IT stacks that they have developed over many years and that are reliant on Windows software. They could not simply transfer all their core Windows-based applications onto Linux within a short timeframe; rather, they have to rewrite them. Google gave some examples of what it considers exceptional cases of customers moving some workloads away from Windows Server and SQL Server, but those processes took several years, came at significant expense to those customers, and would not have been possible for most customers due to lack of in-house software engineering resources.
- 27. Google said that, based on figures in the PDR, 70 to 80 per cent of Azure's revenues come from customers using Windows Server and SQL Server. In Google's view this demonstrates that Windows Server and SQL Server workloads are a critical part of the cloud market.
- 28. Google said that Windows Server remains important to customers because where workloads are lifted and shifted, many require Windows Server as a foundational component. It said that Windows Server is relied upon by organisations to support business critical applications and systems. When customers decide to migrate from on-premises and modernise, they tend to containerise their legacy Windows Server workloads, given the complexities of switching to Linux. Google said that workloads being migrated to the cloud tend to be dependent on SQL Server, Active Directory and other systems would add even more complexity.
- 29. Google said that migration to the cloud happens in stages and that migrating away from Windows Server would be very challenging for most enterprises. Google had some examples of larger enterprises taking the decision to move away from Windows, but noted that these instances were rare, expensive and

- took a lot of investment and longer timeframes to complete and were also dependent on having the right software engineering skillset in-house.
- 30. Google stated that customers who have built their systems on Windows Server are denied effective competitive choice or innovative alternatives for that part of their cloud requirements.
- 31. Google said that if Windows Server was declining in importance, there would be a corresponding decline in support for Windows as an operating system in the cloud from major software vendors. Google noted that it did not see any evidence of this.
- 32. Google said that there was significant variability across customers in the types, combinations, quantities of cloud services purchased and the timing of those purchases. Google said that this shows there is no set 'bundle' of cloud services purchased.
- 33. Google said that it would not be a rational strategy for a cloud provider to offer Windows Server VM at a loss with the expectation or hope to sell other products. Google said that it could not compete for that business even if it offers superior features.

Licensing remedies

- 34. Google agreed that the CMA's proposed licensing remedy would be effective and recognised the concerns set out in the CMA's PDR in respect of potential circumvention and the need for monitoring.
- 35. Google considered that the DMU was well placed to monitor these measures; however, swift action was required to prevent any further harm to the UK, businesses, customers and the public sector. It said that, if there was any doubt that the CMA was going to prioritise an SMS investigation into Microsoft or impose any remedies at the end of the SMS process, the inquiry group should use its powers to adopt Google's remedies proposal. It proposed three interim interventions that could be made under the CMA's market investigation powers, pending SMS designation. First to prevent Microsoft degrading Google's licensing terms; second in relation to other actions Microsoft might take in order to lock in new customers; and third prevent Microsoft from introducing restrictions on the ability of third parties (independent software vendors and managed-service providers) to sell Microsoft software for running on Google cloud.

Technical barriers remedies

36. Google said that third party Identity and Access Management tools should be enabled to interoperate with Active Directory on par with Entra ID by offering, for example, SCIM, which is an open standard for exchanging user identity information, or making Entra Connect, which Entra ID uses, configurable for third-party IAM tools.

Egress fees remedies

- 37. Google agreed that any egress remedies should be limited to AWS and Microsoft and that this would change the commercial conditions for the rest of the market, such that smaller providers would have to follow.
- 38. Google considered that a total ban on egress fees would be disproportionate and that it would not allow providers to recover the cost of providing the service. Allowing cloud providers to recover the cost would be aligned with the EU Data Act. It said that any remedy should be limited to standard tier services.
- 39. Google considered that there would be unintended and negative consequences from a total ban on egress fees or including all routing options. It stated that it would be extremely hard for cloud providers to offer differentiated value services (because they would not be able to recoup the value that they are providing). A total ban, or extension of any remedy to premium tier services, would also reduce investment in premium networking products by cloud providers.

Technical barriers

- 40. Google stated that use of open source was one way of promoting interoperability and technical specifications was another way of promoting interoperability.
- 41. In relation to its proposed way of addressing its concerns with Active Directory, Google said that Microsoft could still recoup the investment it had made in its intellectual property, but that it did not make sense to tie a dependency such that it precluded other cloud providers from competing fairly. Google said that it would be right to promote open standards, including open source.