Google

CMA CLOUD SERVICES MARKET INVESTIGATION

Google Cloud's public response to the CMA's Licensing Practices working paper dated 6 June 2024

I. Introduction and Executive Summary

1. Google Cloud welcomes the opportunity to comment on the CMA's licensing practices working paper dated 6 June 2024 (the **Licensing Practices WP**) and additional licensing disclosure dated 14 June 2024.

2. To assess whether Microsoft's licensing practices give rise to an adverse effect on competition (**AEC**) in the cloud services market, the CMA is considering whether Microsoft's licensing practices (a) raise rivals' costs of supplying cloud services[1] and/or (b) weaken rivals' ability to enter and expand the market by making a significant proportion of customer demand less contestable.[2]

3. We believe Microsoft's licensing practices both raise rivals' costs *and* weaken rivals' ability to compete for a significant proportion of customer demand, and as a result constitute a clear AEC. Adopting the CMA's analytical framework for assessing whether Microsoft's licensing practices constitute an AEC,[3] we note in particular that:

   a. Microsoft's licensing practices relate to software products that enjoy significant market power both individually and cumulatively (Section II),

   b. Microsoft's licensing practices and artificial restrictions make those software products significantly more expensive and less attractive when used with its closest rivals than with Azure (Section III),

   c. Microsoft's rivals cannot counteract these significant price differences and artificial restrictions (Section IV), and

   d. the significant price differences and artificial restrictions materially disadvantage Azure's main rivals and prevent them from competing effectively for a significant portion of the contestable demand (Section V).

4. The CMA's evidence underlines the urgent need for remedial action to address the AEC. We support the CMA's emerging views on potential remedies and believe there are straightforward ways to prevent Microsoft causing further damage to competition in this important market.

II. Microsoft's licensing practices relate to software products that enjoy significant market power both individually and collectively

5. Customer feedback overwhelmingly supports the CMA's emerging view that Microsoft has a "*significant degree of market power in relation to its supply of each of the following products: Windows Server, Windows 10/11, SQL Server, Visual Studio and its productivity suites.*"[4] Most notably, Windows Server has enjoyed a dominant market position that has persisted over many decades.

1 Licensing Practices WP, para. 1.12.
2 *Ibid.*, para. 1.13.
3 *Ibid.*, paras. 1.10(a) and 6.2.
4 *Ibid.*, para. 6.13.

a. In Microsoft's own words, Windows Server has been customers' "*trusted operating system for 30 years*"[5] and "*continues to power the hybrid cloud network today*."[6] Windows Server is "*key, critical, fundamental or foundational*"[7] because "*other software [and] applications require it, or integrate with it*,"[8] since there are often "*no alternatives [to Windows Server] for certain use cases*."[9]

b. This is consistent with the European Commission's finding in *IBM/RedHat* that Linux server operating systems form part of a distinct market to other paid supported operating systems, including Windows Server.[10]

c. Customers rely on Windows Server to power their business critical workloads, especially their existing on-premises workloads that comprise a significant portion of the total addressable market for cloud.

d. Given that customers prefer to migrate their on-premises workloads to the cloud by adopting a "lift-and-shift" strategy,[11] they will continue to rely on Windows Server even *after* they migrate to the cloud.

6. We also agree with the CMA that customer feedback relating to individual Microsoft software products may "*understate the overall extent of* [Microsoft's] *market power*."[12] Not only does Windows Server sit at the foundation of the Microsoft ecosystem, but the individual product market power Microsoft enjoys in relation to database management (SQL Server), desktop operating systems (Windows 10/11), identity and access management solutions (Active Directory) and productivity software (Microsoft Office / 365) are tightly integrated with – and reinforce – Windows Server's market power.

III. Microsoft's licensing practices make Windows Server and SQL Server significantly more expensive and less attractive when used with its closest rivals than with Azure

7. Microsoft charges AWS and Google Cloud significantly more for the right to offer Windows Server and SQL Server downstream than it charges Azure customers for the right to purchase Windows Server and SQL Server directly.

8. This is demonstrated by the CMA's analysis of the implied difference in the licensing costs for Windows Server and SQL Server when used with Azure as compared with AWS or Google Cloud. The CMA's analysis shows that there "*may be a significant difference*." The evidence supports this finding:

a. Microsoft's own advertising claims that "*AWS is up to 5 times more expensive than Azure for Windows Server and SQL Server*."[13]

b. Jigsaw's customer research found that "*[m]ost customers [...] identified that there were price advantages from using Microsoft software products on Azure*." Customers explained

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5 See Microsoft, Windows Server (here).
6 *Ibid.*
7 Licensing Practices WP, para. 3.59(a).
8 *Ibid.*, para. 3.41(a).
9 *Ibid.*, para. 3.52(c).
10 *IBM/Red Hat* (Case M.9205), decision of 27 June 2019, paras. 187-204.
11 Jigsaw, Cloud Services Market Investigation, Qualitative Customer Research (Jigsaw Report), 23 May 2024, p. 29.
12 Licensing Practices WP, para. 3.21.
13 See Microsoft, Azure Hybrid Benefit (here).

that (i) "*Microsoft make[s] it cheaper to use [some of the services that the customer wanted to use in the cloud] in [Azure] than they do if you use it in somebody else's cloud*"[14] and (ii) "*[b]ecause Microsoft owned those licence agreements [for software like Windows Server and SQL Server], they were in control. They were able to heavily discount down.*"[15]

c. Google's own experience from engagements with customers who often relay that due to price differentials they have no effective choice but to opt for Azure, notwithstanding the fact that they otherwise might opt for a competing cloud provider based on other factors.

9. Microsoft has significant market power in relation to enterprise software. By imposing significant price differences and artificial restrictions[16] on software that customers rely on even *after* they migrate to the cloud, Microsoft is skewing competition in its favour by giving customers no choice but to migrate their existing on-premises workloads to Azure.[17] Price is an essential parameter of competition in cloud. By creating such large price differences depending on where customers deploy Windows Server and SQL Server, Microsoft is driving customers to Azure.

IV. Microsoft's rivals cannot counteract the significant price differences and artificial restrictions that Microsoft imposes

10. The CMA has explained that Microsoft's licensing practices are also "*more likely to harm competition in the markets for cloud infrastructure services if* [...] *Microsoft's rivals in providing cloud infrastructure services do not have an effective counter strategy.*"[18] In light of the entrenched market dominance of Microsoft's software ecosystem and the tactics deployed which raised rivals' costs, there is no effective counter strategy available.

11. The CMA has also explained that Microsoft's licensing practices are more likely to prevent rival cloud providers from competing if (i) the proportion of customers using Microsoft's software is significant, and (ii) Microsoft's licensing practices induce customers to use the same cloud provider for both Microsoft- and non-Microsoft workloads. We agree with this finding, which reflects our day-to-day experience in the market.

The proportion of the addressable market using Microsoft software licences is significant

12. On-premises workloads make up the vast majority of the total addressable market for cloud infrastructure services. We therefore strongly agree with the CMA's observations that:

a. "*[t]he scope for [Microsoft's] conduct to have a material impact on the cloud infrastructure market may be measured not only in relation to the current usage of Microsoft software on the cloud, but also by reference to the potential future usage of Microsoft software on the cloud.*"[19]

b. "*[a]n important source of growth for the cloud market is migration from on-premises solutions*".[20]

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14 Jigsaw Report, para. 7.1.6.
15 *Ibid.*, p. 86.
16 Including, for example, by refusing the same access to Extended Security Updates to customers that use rival cloud infrastructure as is available for Azure customers.
17 Competition Commission, Guidelines for market investigations (CC3 as revised), para 290.
18 Licensing Practices WP, para. 1.10(b).
19 *Ibid.*, para. 5.11.
20 *Ibid.*, para. 5.11.

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13. In this regard, we also note that Microsoft's CEO has said that he believes the migration of on-premises workloads to the cloud to be at an early stage and that Azure will continue to gain share as customers migrate their on-premises workloads to the cloud.[21]

14. This is important because, as the CMA has outlined and as addressed above, Microsoft has amassed significant market power in relation to many of the traditional IT services that make up on-premises workloads. It follows that a significant proportion of on-premises workloads – which make up the vast majority of the addressable market for cloud infrastructure services – use Microsoft software.

Microsoft's licensing practices induce customers to use the same cloud provider for all their workloads

15. As many providers have told the CMA, one of the key parameters of competition in the supply of cloud services is ease of migration.[22] In other words, the easier it is for a customer to migrate their existing on-premises workloads to a particular cloud environment, the more likely that customer is to adopt that particular cloud environment.

16. Customers that migrate workloads from on-premises to the cloud have a strong preference to "lift-and-shift" those workloads. This means that those workloads are likely to rely on Microsoft software, both before and after being migrated. As we have also explained, Microsoft's licensing restrictions result in significant price differences and artificial restrictions for Microsoft software when used on Google Cloud compared to when used on Azure.

17. Naturally, this drives customers towards Azure at the point of first migration (which can be seen in the data showing that Microsoft acquired 50-60% and then 60-70% of new customers (by revenues) in 2021 and 2022 respectively and has a significant (and growing) share of Windows Server workloads in the cloud). By contrast, AWS' share of new customers (again by revenues) was around 10-20% in each of 2021 and 2022, and Google Cloud's share was 10-20% in 2021 and only 5-10% in 2022.[23] In other words, Microsoft managed to win between six and 14 times more new customers than Google Cloud and between three and seven times more new customers than AWS in 2022, with that differential increasing year on year. The only reasonable explanation for this vast discrepancy is the unfair benefit Microsoft confers on itself through its licensing practices.

18. To make their first migration as seamless as possible, customers typically migrate all their on-premises IT workloads – i.e., those that use Microsoft software *as well as* those that do not – to a single cloud environment. As a result, customers tend to migrate their workloads to a cloud environment that can host both Windows Server and Linux workloads, which ultimately means Microsoft's software licensing restrictions – which drive customers to migrate their workloads that depend on Microsoft software to Azure – also induce customers to use Azure for their non-Microsoft software workloads.

19. At the critical point of first migration,[24] customers with existing Microsoft software are pushed into migrating *all* their on-premises workloads to Azure. This is critical because as the CMA has itself noted, and as its quantitative analysis suggests, Microsoft's licensing restrictions can and do

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21 In his annual letter to investors in 2023, Microsoft CEO, Satya Nadella, told investors that it is still "*early when it comes to the long-term cloud opportunity*." He later told investors during Microsoft's Q1 2024 earnings call that "*Azure again took share as organisations bring their workloads to our cloud*."

22 CMA, Cloud Services Market Investigation, *Competitive Landscape Working Paper* (**Competitive Landscape WP**), para. 2.49.

23 *Ibid.*, para. 5.53.

24 Ofcom, Cloud Services Market Study, *Final Report*, paras. 4.32 and 5.281.

"*discourage both switching or a potential multi-cloud strategy,*"[25] meaning that once customers have migrated all their workloads to Azure they will likely remain with Azure.

20. Microsoft's licensing practices induce customers to use Azure not only for existing workloads that involve Microsoft software, but also for other existing workloads that do not *and* for future cloud-native workloads. This is evidenced by the CMA's data, which shows that Microsoft's share of new revenues from existing customers increased from 30-40% to 40-50% in 2022.[26] The proportion of customer demand that is less contestable to Microsoft's rivals is therefore significant.

V. Microsoft's conduct is already having significant, demonstrable harmful effects

21. For Microsoft's licensing practices to give rise to an AEC it is not necessary for the CMA to find that, as a result of its practices, rival cloud providers are forced to exit the market. It is sufficient for these rivals to be "*materially disadvantaged*" and to "*consequently compete less effectively*."[27] There is a strong body of evidence demonstrating that Microsoft's licensing practices constitute a clear AEC.

22. Google Cloud's ability to compete effectively in the cloud services market has been significantly hampered, as shown in particular by:

   a. the fact that Microsoft has won more than [50-60%] and [60-70%] of revenues from new cloud customers in 2021 and 2022 respectively[28] (a figure that far exceeds its overall share of the market for cloud infrastructure services),

   b. the Jigsaw customer feedback, which demonstrates that customers recognise there is a significant price advantage to choosing Azure over Google Cloud and AWS, and

   c. Google Cloud's own experience from engagements with customers who often relay that due to price differentials they have no effective choice but to opt for Azure, notwithstanding the fact that they otherwise might opt for a competing cloud provider based on other factors.

23. Microsoft's frequent use of discounting structures across cloud and non-cloud products – in particular those offered under its Enterprise Agreements – create sticky demand and remove the ability for other cloud providers to compete once a customer has already migrated to Azure. As explained in the Jigsaw Report, after migrating to Azure customers will "[*struggle] to even justify reviewing their Azure usage*."[29] This demonstrates the urgent need for customers to have a fair choice of cloud provider at the critical point of first migration to the cloud.

VI. Conclusion

24. The evidence the CMA has already gathered demonstrates that:

   a. Microsoft has significant market power in relation to several individual software products, and its market power in relation to each product reinforces its overall market power in relation to enterprise software;

   b. Microsoft leverages its market power in relation to enterprise software to impose significant price differences and artificial restrictions on Microsoft software when used

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[25] Jigsaw Report, para. 7.2.3.
[26] Competitive Landscape WP, para. 5.55(b).
[27] Competition Commission, [Guidelines for market investigations](#) (CC3 as revised), para 269.
[28] Competitive Landscape WP, para. 5.51.
[29] Jigsaw Report, para. 1.4.32 and page 29.

with rival cloud infrastructure compared to when used with Azure, driving customers to Azure;

c. Microsoft's rivals cannot counteract the significant price differences and artificial restrictions; and

d. the significant price differences and artificial restrictions – caused by Microsoft's licensing practices – materially disadvantage Azure's rivals and prevent them from competing effectively for a significant portion of the contestable demand.

25. In summary, Microsoft's licensing practices "*have the effect of making a significant proportion of customer demand less contestable to rivals*," thereby weakening "*its rivals' ability*" to compete.[30]

26. Google Cloud welcomes the CMA's ongoing investigation of Microsoft's software licensing practices and we look forward to assisting the CMA as it continues to explore ways to remedy what is clearly a persistent feature of the market that gives rise to an AEC.

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30 *Ibid.*, para. 1.13.