Open Cloud Coalition Position Paper on the CMA Cloud Services Market Investigation

Introduction

The Open Cloud Coalition (OCC) is pleased to present its position on the key issues under consideration in the Competition and Markets Authority's (CMA) Cloud Services Market Investigation. The OCC, which launched on 29th October 2024, represents a diverse group of cloud providers and users committed to fostering a fairer, more competitive and open cloud market in the United Kingdom and in Europe. Our growing membership, currently comprising 15 companies including Adarga, Centerprise International, Civo, Clairo AI, ControlPlane, Dark Matter, DataVita, DTP Group, Gigas, Google Cloud, National Cloud, Prolinx, Pulsant and Room 101, collectively supports thousands of jobs and contributes significantly to the growth of the UK digital economy.

We believe that the CMA's investigation has rightly identified many competition concerns in the cloud market, notably the prevalence of anti-competitive software licensing practices that create an artificial price disadvantage for many providers and hinder competition, particularly for SMEs. While the CMA's working papers provide a valuable foundation, we believe that the issues identified and the proposed remedies do not fully address the breadth and depth of the issues at hand. All our members have first-hand experiences of the competition issues under investigation, most of which are linked to wider anti-competitive practices in the industry. This response outlines our key concerns and recommendations for a more effective and comprehensive approach to promoting competition and innovation in the cloud market.

We look forward to engaging constructively with the CMA to support a more open, transparent and fairer cloud market in the UK.

Key concerns and recommendations

1. Technical barriers to interoperability and portability

Concern: Technical barriers to interoperability and portability represent a significant impediment to competition in the cloud market. These barriers make it difficult for customers to switch between providers, utilise multi-cloud strategies, and avoid vendor lock-in, ultimately stifling innovation and competition.

Recommendations:

Prioritise seamless movement of basic workloads: To achieve tangible and immediate improvements in cloud market competition, the OCC recommends prioritising the seamless movement of basic workloads between different cloud platforms. This means enabling customers to easily transfer simple applications and data without facing technical obstacles. This achievable milestone would serve as a significant step towards a more open and competitive cloud ecosystem.

Standardisation should be proportionate and practical: The OCC strongly supports open standards, but recognises that achieving complete standardisation and interoperability may not always be desirable or feasible. In some cases, proprietary solutions and differentiated offerings are justified to meet specific customer needs and drive innovation. As noted in paragraph 10 of Microsoft's response to the CMA's technical barriers working paper, excessive or premature standardisation risks stifling innovation and harming the cloud ecosystem.

We agree with the CMA that common standards and standardisation in general are more appropriate for IaaS, ancillary services and tools and interfaces (APIs).

Building upon internationally recognised standards and common specifications already widely adopted by the industry offers a sensible starting point. Mirroring the European Commission's approach of establishing a repository of existing standards and assessing gaps that necessitate the development of new ones to comply with the Data Act's portability requirements would prove beneficial. This approach could be further strengthened by incorporating the CMA's proposal of principles-based requirements focused on achieving clearly defined, measurable outcomes. These outcomes should be accompanied by detailed guidance to ensure clarity and accountability for all stakeholders.

Address skills skew: The OCC believes that the CMA is right to consider the impact of skills skew in the cloud market. The prevalence of skills in certain cloud providers, often driven by aggressive training and certification programs, can create an artificial barrier to competition. Practices such as offering significant amounts of free training can potentially influence procurement decisions. We believe that a balanced approach, requiring a mix of provider-specific and cloud-agnostic training, would allow CSPs to highlight their unique strengths and innovations while also ensuring that individuals have access to broader, vendor-neutral training options.

2. Anti-competitive licensing practices

Concern: Microsoft's licensing practices are a significant concern and warrant the CMA's focused attention, as these practices, if unaddressed, have the potential to undermine any remedies the CMA might propose. Microsoft's licensing terms are often complex and opaque, making cost comparisons difficult for customers. Additionally, Microsoft imposes significantly higher fees for products like Windows Server and SQL Server when run on competing clouds, creating an artificial price disadvantage for rivals. This not only stifles competition but also carries a substantial financial cost. Research by Professor Jenny reveals that European businesses and public sector organisations collectively pay billions of Euros extra each year just to run their software on the cloud infrastructure of their choice. Similarly, the Social Market Foundation estimates that addressing restrictive software licensing practices could save the UK public sector alone £300 million annually.

One OCC SME member found that while their offering was 17% cheaper than Azure for non-SQL workloads, it became 15% more expensive for SQL workloads due to Microsoft's licensing terms. This demonstrates how such practices can distort competition and limit customer choice. Bundling practices and restrictions on software use further exacerbate this issue, reducing flexibility and forcing customers into less competitive options.

Recent developments indicate that Microsoft may be revising its licensing practices. Historically, the Service Provider License Agreement (SPLA) was the primary viable pathway for cloud providers to license Microsoft's product stack without encountering extensive barriers, such as restrictive license mobility requirements. As noted in the CMA's licensing working paper, Microsoft has introduced several changes:

- Introduction of "Flexible Virtualisation": This policy expands Cloud Solution Provider (CSP) hosting rights to include more products across diverse platforms, simplifies the Bring Your Own License (BYOL) program, and provides a transition period for SPLA partners to move away from outsourcing licenses to Listed Providers. While these steps represent progress, there are still critical areas that need addressing: pricing parity across platforms, standardising licensing policies globally, further simplifying the licensing structure, increasing transparency in licensing terms, and enhancing support for hybrid environments. Without these additional measures, the changes risk perpetuating existing imbalances rather than fostering genuine competition.
- CSP previously favouring Azure: For years, the CSP program created a distinct advantage for Azure, locking customers into Microsoft's ecosystem. Recent changes now allow customers to use CSP licenses across platforms, with initial cases suggesting potential cost savings. However, a significant concern persists: Windows Server licensing costs are effectively embedded in Azure Virtual Machine

(VM) pricing. This gives Azure a pricing advantage over other cloud providers, who must purchase separate Windows licenses under SPLA or other models. Even with improved license mobility and flexible virtualisation, this disparity makes it difficult for other providers to compete on an equal footing.

- Ongoing evolution: The shift towards making the CSP and New Commerce Experience (NCE) programs the standard across all platforms signals a changing landscape. While these changes may ultimately prove beneficial, they require ongoing scrutiny to ensure they result in true equity rather than merely surface-level adjustments.

Focusing solely on Microsoft fails to capture the broader extent of anti-competitive licensing practices across the cloud market, which may manifest differently across the industry. For instance, Broadcom's licensing practices have raised concerns among the OCC's members following forced bundling of products that has resulted in significant price increases. As a provider of VMware, Broadcom operates as the dominant virtualisation platform in the marketplace due to its advanced functionality and utility, rather than as a direct competitor in cloud infrastructure. Addressing licensing practices should therefore account for the nuances of each vendor's role in the ecosystem, ensuring remedies are tailored to foster fair competition while respecting the legitimate strengths of widely adopted platforms. By focusing on licensing practices across the industry, the CMA can create a level playing field that fosters innovation and customer choice.

Recommendations:

Prohibit discriminatory licensing: The OCC believes that strong remedies are necessary to effectively address anti-competitive licensing practices. While transparency measures can be helpful, the CMA should prioritise remedies that directly prohibit discriminatory practices and promote a level playing field.

Licensing practices that discriminate against competing cloud infrastructure providers should be explicitly prohibited. Providers should not be allowed to charge higher licensing fees for their software when it is run on a competitor's cloud infrastructure, nor should they be able to restrict or charge for the transfer of previously purchased software products to a competitor's cloud infrastructure.

To ensure a level playing field, we also support the CMA's proposed remedy requiring Microsoft to offer parity of product functionality for their software products across all cloud platforms. Features, performance, and security capabilities must remain consistent, whether software is used on Microsoft's own infrastructure or on a competitor's. This will not only address competition concerns but also critical security risks tied to vendor lock-in.

The OCC supports increased price transparency where software products are being sold as part of a larger bundle with cloud services. This will help customers understand the true cost of different offerings and make informed choices. However, as mentioned above, transparency alone will not solve this issue.

With regard to pricing, the OCC is open about whether this should be achieved on a per-product basis or through fair, reasonable and non-discriminatory ('FRAND') pricing terms.

Expand scope beyond Microsoft: In anticipation of remedies addressing Microsoft's licensing practices, it is crucial that these remedies are sufficiently wide-ranging to encompass the licensing practices of other providers, such as Broadcom, which have also raised significant concerns among CSPs. Changes to VMware licensing by Broadcom have resulted in significant price hikes for VMware products. Broadcom have introduced a simplified portfolio with only four Stock Keeping Units (SKUs) and a shift from licensing based on virtual CPUs to physical cores. While this streamlining aimed to reduce the cost of sale, it has instead led to price increases of over 300% in some cases. This has resulted in CSPs paying for functionality they do not require and incurring costs for unused resources. A failure to provide ongoing security updates for perpetual licenses has also created issues, forcing customers to migrate to subscription models, increasing costs and creating vendor lock-in.

For smaller cloud providers, this level of cost escalation leaves little room to adapt. In one instance, a provider with three platforms architected according to VMware's recommendations saw their direct costs per client solution skyrocket almost overnight. The short notice left little opportunity to mitigate the financial impact, forcing price increases on end customers and compounding the competitive challenges already faced by smaller providers.

Although some providers, in this case, were able to migrate customers to platforms more compatible with the new licensing model, the broader implications remain clear. Such sudden changes have the potential to destabilise cloud providers, ultimately reducing competition and harming consumers. To address these dynamics, the CMA's remedies must be designed to curb the disproportionate power that large players like Broadcom can wield, ensuring a fair and competitive cloud ecosystem.

3. Egress fees

Concern: The limited concessions made by dominant providers on egress fees are inadequate and do not address their fundamental anti-competitive nature. For example, a customer wishing to leave an AWS cloud platform will need to undergo multiple approvals from AWS in order to receive a "credit" to move the data, the data will be transferred via the internet (rather than faster, more efficient methods like Snowball or Snowmobile) and must be moved within 60 days. Any data that remains at the end of the 60-day period must be deleted.

Given that most large enterprises now store significant quantities of data in the cloud, 60 days is unlikely to be sufficient time to move all of the data and the prospect of deleting data will act as a major disincentive to migrate.

These fees – and the multiple approvals required – create significant barriers to switching providers, discourage multi-cloud strategies, and ultimately limit customer choice.

Recommendations:

Eliminate or significantly reduce egress fees: The OCC supports the CMA's proposed remedies to ban egress fees for data exiting a cloud platform or, at the very least, to cap them so that they are significantly reduced. This would remove a major barrier to competition and encourage greater customer choice. Many cloud providers, including OCC members, have already demonstrated the viability of a competitive, customer-focused model by eliminating egress fees or choosing never to impose them, demonstrating that such a model is both feasible and effective.

Remove caveats and conditions: While the CMA's focus on transparency is welcome, it falls short of addressing the underlying issue. Restrictive caveats and conditions attached to existing egress fee waivers often make them ineffective in practice. Customers frequently find themselves unable to meet the narrow terms required to benefit from such waivers. The CMA must go further, requiring the outright removal of these restrictions rather than merely ensuring transparency, as transparency alone offers little relief to customers already locked into a provider.

4. Committed spend agreements

Concern: The CMA's analysis of committed spend agreements (CSAs) does not fully capture their potential for anti-competitive effects when wielded by dominant providers, particularly when combined with other practices like cross-product bundling. While CSAs may appear attractive to customers, especially large enterprises with significant cloud expenditures, they can effectively lock customers into long-term contracts with a single provider. This restricts customer flexibility and forecloses market opportunities for challenger cloud providers.

For smaller or emerging providers, CSAs can be a legitimate competitive tool, enabling them to attract customers from dominant players by offering similar benefits albeit at a significantly smaller scale. However, the scale and market power of the dominant providers allow them to exploit CSAs in ways that entrench their dominance. The OCC agrees with the CMA's conclusion that remedies targeting CSAs should focus specifically on the dominant providers to ensure fair competition without imposing undue burdens on the challengers.

CSAs present two primary challenges:

- Bundling and discounting: Dominant providers can leverage CSAs to offer steep discounts, which challengers cannot match, effectively excluding them from competitive bids. For example, Microsoft can bundle Azure with Office 365, offering a "discount" that requires customers to overspend on Office 365 licenses in exchange for Azure credits. This tactic can lock customers into a more expensive agreement when those unused credits are clawed back upon renewal. There have been prominent examples of this both in the US and the UK, where E2e Assure and UKCloud, two companies providing a secure Security Operations Center (SOC) for the Home Office, lost their contract (valued in the millions of pounds) because Microsoft offered "free" security products as part of a bundled deal.
- Market foreclosure: By committing significant portions of enterprise cloud budgets to long-term agreements, such as the UK government's OGVA and OGVA2 preferential pricing agreements with AWS, CSAs result in chronic lock-in and market foreclosure for challengers for a number of years. This leaves little opportunity for smaller or newer providers to compete or innovate effectively. This effect was illustrated by the experience of one OCC member, who witnessed the Home Office terminate contracts with numerous smaller cloud providers in order to consolidate their cloud spend with AWS and qualify for higher discounts. This decision, made without proper business case justification, handed AWS majority control of the Home Office's cloud estate, stifling competition and consolidating their market share.

Recommendations:

Restrict cross-product bundling: Prohibit or severely restrict the practice of bundling committed spend agreements across different product lines. This practice can leverage dominance in one market to unfairly disadvantage competitors in another, with Microsoft's bundling of Office 365 with Azure being a case in point.

Increase transparency and customer information: We agree with the CMA's proposed remedies relating to increasing information transparency on CSAs. Clear and comprehensive information on the terms and conditions of committed spend agreements should be required, including potential penalties for not meeting commitments. This will help customers make informed decisions and avoid being locked into unfavourable contracts.

Impose restrictions on CSAs: The CMA has suggested sensible remedies to address the pricing structures of CSAs. The OCC supports measures such as limiting the duration of discount periods and capping the maximum discount levels as strong initial steps towards promoting fair competition.

5. Commercial incentives

Concern: The CMA has overlooked the anti-competitive impact of various commercial incentives, such as free credits, training, and migration services, particularly when employed by dominant providers. Free credits may have little additional, variable cost for such providers, who have already more than recovered their fixed infrastructure costs across their customer base, but create long-term lock-in effects that limit customer choice and entrench dominance. Small, private cloud providers cannot afford to compete with them in offering free credits. Moreover, AWS partners with venture capital providers and other investors,

who require the start ups that they fund to take the AWS free credits, thereby effectively locking other cloud providers out of the start up market.

For example, a customer could benefit from a "free trial" with a credit value that could in some cases run into months or years and many hundreds of thousands of dollars. The most extreme example the OCC has noted is the AWS $500,000 credit for AI start-ups. The levels of credits available give ample time for the customer to build a significant presence within the cloud platform, along with significant bills when the "credit" has ended, making the customer more likely to, for example, make use of a CSA in order to keep bills under control. One OCC member described losing a large deal at the last moment due to a competitor offering substantial free credits.

Furthermore, some OCC members have experienced situations where potential customers delay their decision-making process until they have exhausted all available free credits from dominant providers. This tactic not only undermines the OCC members' ability to close deals but also highlights how free credits can distort the market and create an artificial barrier to entry for smaller providers.

For challenger cloud providers, offering similar incentives may be far more restrictive. For example, Microsoft's SPLA (Service Provider License Agreement) imposes a 60-day limit on trial use. This raises important questions about whether Microsoft adheres to the same restrictions within its own commercial programmes. If not, this creates an uneven playing field, where dominant providers have more freedom to attract and lock in customers while challengers are constrained by restrictive licensing terms. The CMA should investigate whether such disparities in trial agreements undermine fair competition and create additional barriers for smaller providers.

Moreover, the complexity of cloud platforms creates additional barriers. Most cloud engineers specialise in one platform, meaning the costs of switching providers often involve expensive re-skilling and re-architecting of applications, which can far exceed data egress fees. Dominant providers exacerbate this by offering free, platform-specific training, a resource that challengers often cannot match. While training is essential for fostering skills, tying it excessively to a specific platform reinforces customer dependency and limits broader competition.

It is important to distinguish between the legitimate use of commercial incentives as a competitive tool – especially for challenger providers – and practices that distort the market. Regulations should focus on addressing anti-competitive behaviour by the dominant providers without stifling innovation or placing unnecessary burdens on the challenger companies.

Recommendations:

Investigate the impact of commercial incentives: The CMA should explicitly evaluate the impact of incentives like free credits, training, and migration services on competition. This analysis should focus on whether these practices entrench market share or distort customer choice, ensuring a more comprehensive understanding of the competitive landscape.

Regulate anti-competitive incentives: Develop balanced regulations or guidelines to prevent or limit the use of commercial incentives offered by the largest providers that create unfair lock-in or discourage customers from switching providers. This could include limitations on the value and duration of free credits, potentially restricting them to basic workloads that are easily portable across different cloud platforms, coupled with prohibition of credits for those cloud providers, requirements for clear disclosure of the terms and conditions of incentives, or restrictions on the use of proprietary technologies that create vendor lock-in. Smaller or emerging providers, however, should retain the flexibility to use these incentives to compete effectively.

Limit the use of free training as a commercial incentive: The CMA could restrict or regulate the provision of free training by cloud providers, particularly to public sector organisations, to prevent it from being used as an unfair competitive advantage. While there has been an increase in free-to-access training, this is predominantly targeted at end users. For partners, however, the barriers are significantly higher, with training often tied to substantial budgets needed to meet certification criteria. This further disadvantages challenger providers, limiting their ability to compete effectively. As noted in the Technical Barriers section above, the OCC supports the development and adoption of training programmes that are balanced between provider-specific and cloud-agnostic, ensuring that individuals are offered a broader range of skills and are not locked into a particular ecosystem.

6. Public sector procurement

Concern: It is unclear if the CMA has been looking at the impact of public sector cloud procurement practices on competition. The OCC holds the firm view that existing policies and framework agreements such as "Public Cloud First", Cloud Compute 2 and G-Cloud favour dominant providers and limit opportunities for challenger cloud providers. This not only stifles competition but also potentially hinders innovation and value for taxpayers.

Furthermore, the habitual use of the "direct award" procedure under G-Cloud, where AWS has already enjoyed revenues of over £1bn makes it very unclear how value for money has been tested and by default creates an anti-competitive and totally foreclosed market for challenger cloud providers.

Recommendations:

Review and reform procurement frameworks: The CMA should work with the Crown Commercial Service (CCS) and other relevant bodies to review and reform public sector procurement frameworks to ensure they are fair, transparent, and promote competition and discourage or prohibit the direct award procedure. This should include a thorough assessment of frameworks like G-Cloud and Cloud Compute, including the conditions of tender, and the identification of any provisions that may unfairly favour dominant providers.

Remove barriers to entry for challenger cloud providers: Smaller cloud providers often face significant challenges in competing for public sector contracts due to a lack of competitive process in the public sector's primary route to the cloud market – G-Cloud, or complex bidding processes, stringent past performance requirements, and evaluation criteria that favour larger incumbents. To level the playing field, procurement frameworks should be simplified to reduce administrative burdens, enabling smaller providers to compete based on specific and often unique expertise. Evaluation criteria should be objective, focusing on technical capability, scalability, and security rather than reputation, brand recognition or in some cases blatantly favouring the dominant providers. Access to procurement frameworks and dynamic purchasing systems (DPS) should be made more accessible for smaller providers by lowering entry thresholds and offering tailored guidance.

Promote "cloud-neutral" procurement: Encourage the adoption of "cloud-neutral" procurement policies that prioritise open standards and interoperability, allowing public sector organisations to choose the best cloud solutions for their needs. This will help avoid vendor lock-in and promote a more diverse and competitive cloud ecosystem. OCC members have firsthand experience with the challenges posed by non-neutral procurement practices. For example, Centerprise had to lobby the Crown Commercial Service (CCS) to revise the wording in a recent ITT for cloud services that had initially excluded UK cloud providers.

Conclusion

The OCC commends the CMA and Ofcom for their efforts in highlighting the critical issues surrounding competition in the cloud market. These initial steps have been instrumental in drawing attention to anti-competitive practices that threaten innovation, economic growth, and resilience. The growing scrutiny from

global regulators – including in the US, Denmark, Spain, the Netherlands, France, and Sweden – underscores the urgency and importance of addressing these challenges on an international scale.

We strongly believe that decisive action is now required to tackle the anti-competitive practices identified in the CMA's investigation. By implementing robust remedies, the CMA can set a global standard for fostering fair competition, empowering challenger providers, and ensuring that customers benefit from greater choice, innovation, and value.

The increasing dominance of just two cloud providers has created a harmful monoculture – one that stifles diversity, weakens competition, and undermines the ecosystem needed to support the UK's digital infrastructure. Monocultures, by their nature, are unhealthy and unsustainable, especially in markets that should serve as the backbone of a robust digital economy.

The argument put forward by one major provider – that its competitors appear to have sufficient margins to compete profitably – does not diminish the anti-competitive nature of the practices under scrutiny. Even if the CMA concludes that larger competitors can still participate, it must also recognise that the same conditions effectively foreclose the market for the majority of OCC members, who lack and are unlikely to ever acquire the resources needed to compete under the current dynamics.

By implementing comprehensive and enforceable remedies, the CMA can establish a level playing field that allows cloud providers of all sizes to compete fairly. Such measures will promote market diversity, encourage innovation, and deliver better outcomes for cloud users.

While not within the remit of this investigation, the OCC recommends that all government policies relating to the public sector's use of cloud computing be subject to rigorous and expert competition assessments. These assessments should consider the potential impact of policies on market dynamics, including factors such as economic value to the UK, support for the UK tech industry, the fairness of government procurement practices, and the extent to which these policies have been influenced by the dominant cloud provider beneficiaries.

Finally, the CMA has a unique opportunity to future-proof the cloud services market against the far-reaching impacts of this monoculture, particularly in critical adjacent markets such as AI, which presents both immediate opportunities and challenges. Taking action now will ensure a healthier, more competitive, and resilient cloud ecosystem for years to come.