

Mr Fergal Farragher, Director Network and Communications Group Ofcom Riverside House 2a Southwark Bridge Road London SE1 9HA

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Dear Mr Farragher

# Ofcom's cloud services market study interim report

I am writing in response to Ofcom's recently published report on the interim findings of its cloud services market study. I wanted to take this opportunity to provide an overview of techUK's position on the following issues raised in the interim report, which we believe merit further analysis and stakeholder engagement as Ofcom continues its work.

This letter sets out feedback on:

- Market context
- Barriers to switching and use of multi-cloud
- · Cost of cloud services
- Interoperability and portability
- Scope of future work

### Market context

The interim report looks at public cloud in isolation from the broader market for compute, data storage and networking. However, as Ofcom notes in the report, less than 50% of IT spending is on public cloud., and cloud providers are also competing with on-premises and hybrid cloud solutions, dedicated private hosting, and other as-a-service infrastructure.

While public cloud has an important role to play in the infrastructure needs of many organisations, it is unlikely that all IT spending will shift to public cloud. It is worth considering this broader context when assessing the options available to customers and the extent to which competition for IT resources is constrained. As noted below, this broader context is also relevant when considering interoperability and data and application portability.

### Barriers to switching and use of multi-cloud

techUK supports an open and competitive market that supports switching and the use of multiple providers.

One of the core strengths of cloud computing is the flexibility it offers to customers by shifting the procurement paradigm from capital expenditure to operational expenditure and enabling more agile business practices. This has had a transformational impact on the market for compute, data storage and networking, and been a catalyst for innovation and economic growth.

The presence of artificial lock-in effects would be an undesirable characteristic in any market and in this context could undermine the agility and flexibility of cloud services. A customer's ability to choose cloud offerings on a case-by-case basis depending on the needs of individual workloads will drive cloud adoption and the pace and success of digital transformation.

It is vital that any regulatory intervention being proposed does not restrict innovation by cloud providers or their customers and reinforces the ability to utilise best-in-class technologies without commercial or technological barriers limiting choice of vendor(s).

#### Cost of cloud services

techUK supports open and transparent billing practices and we welcome the effort made by members to support cloud customers in understanding and optimising these costs.

Managing cloud spending and navigating the transition from capex to opex can be complex, and some customers of public cloud providers may experience "bill shock" after an initial cloud migration. However, both cloud providers and third parties offer products and services for monitoring cloud spending and the FinOps discipline helps businesses optimise cloud costs and maximise the value of cloud investments. These are market-led solutions that can mitigate some of the challenges surrounding billing highlighted in the interim report.

Regarding committed spend discounts, these can be positive for customers and an effective means to lower the cost of a single-vendor cloud strategy. These agreements are also a way for cloud providers to offset the risk involved in infrastructure investments. The shift from capex to opex gives customers a high degree of flexibility and allows for elastic provisioning of IT resources. This can be good for customers but shifting to a "pay-as-you-go" model also increases the risk associated with capital expenditure by cloud providers. Committed spend discounts give cloud providers confidence in making ongoing investments in service quality, capacity, and innovation, all of which benefit customers.

However, as noted above, it can be difficult for customers to accurately forecast future spend in an opex environment, potentially leading some customers to become overcommitted and creating additional incentives for adopting a single-vendor strategy which may not be appropriate or best serve organisational requirements. Therefore, techUK urges Ofcom to carefully consider the potential negative impact on ongoing investment by cloud providers of any intervention in this area, in addition to the consequences of any incentive structures created by these discounts.

Regarding "egress fees", we believe these should be transparent and cost-oriented, reflecting the costs incurred by the cloud provider for the data transfer service. We would like to see further clarification and detail on the proposed definition of egress fees as this term can be broad and encompass a range of technical processes. It would be helpful for Ofcom to develop a more focused set of definitions specific to any switching and portability considerations. It will also be important for Ofcom to consider the potential impact of any proposed interventions on pricing, differentiation of services, and investment in network infrastructure.

However, more broadly, we agree that barriers to data portability can undermine the flexibility and agility that are the core benefits of cloud services and that this can have a cumulative effect as customers scale within public cloud and take on significant storage commitments.

## Interoperability and portability

techUK welcomes the discussion on interoperability, and portability and we see these as central to maximising the value of cloud computing and digital technology more broadly.

Interoperability and portability can make it easier for customers to switch providers, benefit from multi-cloud strategies, or integrate other technologies like hybrid cloud and edge computing. This is a key area of interest for techUK members, and much effort is devoted to these issues across the tech sector.

We agree that a market that is working well for customers will support interoperability and facilitate the portability of applications and data, not just between public cloud providers but across a diverse range of infrastructure including hybrid cloud and edge computing.

It is worth noting that progress has been made in this area since cloud computing first entered the market, and the development of containerisation and the increasing sophistication of cloud-native technologies has improved the flexibility of public cloud in recent years, although interoperability challenges remain and it should be easier for customers to move workloads between clouds or to adopt hybrid or multi-cloud distributed architectures.

techUK has long been supportive of open-source technologies and the use of open standards across the industry, and organisations like the Cloud Native Computing Foundation are working to support the development of vendor-neutral technologies with the support of all major cloud providers.

Product differentiation can be a positive force for competition and good for customers when it results from innovation or new technologies entering the market. Large-scale harmonisation of functionalities on a cross-vendor basis could produce nearly identical services and limit the possibility for customers to choose cloud and data services that match their needs. There is also a risk that undue intervention in this area could constrain innovation and ultimately lead to worse outcomes for customers.

However, we agree that interoperability and portability should remain core principles of innovation in cloud computing and that mitigating such barriers will create an environment in which customers can choose the best combination of services for their unique needs.

techUK will continue to follow this discussion closely and engage with members to consider how an industry-led effort to accelerate progress in this area might address some of the concerns raised in the interim report.

### Scope of future work

An area where further clarification and detail is requested is Ofcom's decision to include all platform-as-a-service (PaaS) and infrastructure-as-a-service (IaaS) within a broad category of "cloud infrastructure services". This grouping has raised some questions about what this could mean for third-party PaaS providers offering services not directly tied to the underlying infrastructure. It would be helpful for Ofcom to clarify the reasoning for grouping IaaS and PaaS and conduct a detailed assessment of the risk of interventions being broader in scope than intended if this definition is carried forward to future work by the CMA.

Thank you for the opportunity to contribute to Ofcom's study of the cloud services market. We hope that the information in this letter is useful and if you have any further questions on the issues raised above or would like to engage further with our members, please do not hesitate to get in touch.

We look forward to working with you on this important issue in the coming months.

Yours sincerely,

Sue Daley
Director of Tech and Innovation at techUK