

Consultation response form

Please complete this form in full and return to cloudreport@ofcom.org.uk

Consultation title	Cloud services market study, Interim report
Full name	[X]
Contact phone number	[X]
Representing (delete as appropriate)	Self (former employee of UKCloud in compulsory liquidation)
Organisation name	
Email address	[X]

Confidentiality

We ask for your contact details along with your response so that we can engage with you on this consultation. For further information about how Ofcom handles your personal information and your corresponding rights, see [Ofcom's General Privacy Statement](#).

Your details: We will keep your contact number and email address confidential. Is there anything else you want to keep confidential? Delete as appropriate.	Please keep my name confidential. Part of the response as indicated
Your response: Please indicate how much of your response you want to keep confidential. Delete as appropriate.	Part of the response as indicated
For confidential responses, can Ofcom publish a reference to the contents of your response?	Yes

Your response

Question	Your response
<p>Question 4.1 Do you agree with our assessment of how customers buy cloud infrastructure services and how cloud providers seek to acquire customers?</p>	<p><i>Is this response confidential? Y</i></p> <p>[X]</p>
<p>Question 4.2: Do you agree with our characterisation of the market outcomes in supply of cloud infrastructure services?</p>	<p><i>Is this response confidential? – N</i></p> <p><i>This looks to be about right although the picture would be a little different in the public sector vertical where direct sales from AWS to end customers account for at least 60%¹ of the market. This figure does not take into account sales made through third party VARS and ISVs. I assume the figures quoted by Ofcom include all UK sales and therefore do take third party sales into account.</i></p>
<p>Question 5.1: Do you agree with our analysis of potential barriers to switching and multi-cloud? As part of this:</p> <p>a) Please provide your views on the extent to which, and in what ways, egress fees are a barrier to switching and multi-cloud. Please also provide your views on the extent to which egress fees currently charged relate to the incremental cost of providing egress.</p> <p>b) Please provide your views on whether specific business practices of cloud providers, particularly the hyperscalers, exacerbate technical barriers to switching and multi-cloud.</p> <p>c) Please provide your views on how committed spend discounts are set and the impact these discounts have on the incentives of customers to multi-cloud.</p>	<p><i>Is this response confidential? – Y</i></p> <p>[X]</p>
<p>Question 5.2: Do you agree with our analysis of potential barriers to entry and expansion?</p>	<p><i>Is this response confidential? – N</i></p> <p><i>I am in broad agreement with Ofcom’s excellent analysis of barriers to entry. Based on UKCloud’s own experience, it would be helpful to be more explicit about the difficulties non-hyperscale market players face in securing the investment needed to mitigate some of the</i></p>

¹ CCS published figures. Page 2 G-Cloud, click on hosting, search on Amazon (entities EMEA SARL, Inc, UK).

identified barriers. Its hard to attract investors if you are perceived to be competing against AWS and Microsoft.

The wider issue here is that cloud computing has become synonymous with hyperscale. This is a groupthink that is perpetuated by the UK government. Its effectively stating that if you can't be like hyperscale don't bother coming to the ball.

Whilst the [NIST definition of public cloud](#) is simple but wide ranging (if its open for public use, its public cloud) this is not what public cloud is perceived to be by the majority of cloud consumers.

Whilst there is little in the way of academic research to support this, it is very evident within the market that UKCloud operated (the UK public sector) as borne out by the GDS ["public cloud first"](#) policy:

"Major cloud infrastructure or platform vendors understand security concerns are important to their customers. Because of this, they have invested heavily in implementing secure products and produced guidance on how to use their cloud services securely. You should apply your vendor's cloud security best practices and ask them for guidance on how to provide the best data protection for your users.

There are some legal requirements you need to consider when adopting cloud services, like the Data Protection Act and the EU Data Protection Directive. In general, large cloud service vendors have experience with these requirements, and have standard contractual terms that can help you meet your responsibilities"

UKCloud went into Compulsory Liquidation in October 2022. Its UK competitors were quick to [spot the opportunity](#) and [offer their own services as an alternative](#). Nonetheless the Special Managers sought proposals relating to the migration of UKCloud customer workloads from AWS, Microsoft and Google and no others.

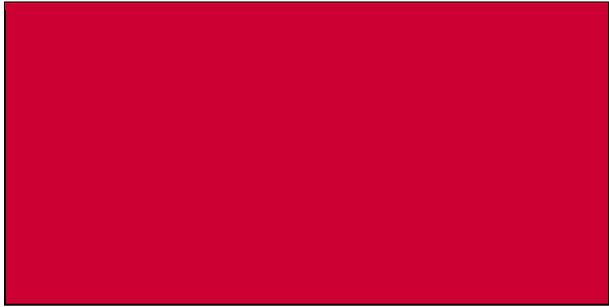
Sadly, government does not value its own cloud hosting industry or recognise its benefits: true

	<p><i>data sovereignty where sensitive data is not subject to any foreign jurisdiction, security tailored to customer need (rather than adjusting national security policies to enable hyperscale use in the UK public sector), better customer support (UKCloud was achieving the best NPS scores in the business), the wider economic benefits in terms of growing local economies and playing fair with the exchequer and, above all, improved national resilience.</i></p> <p><i>Government has chosen to put almost all of its eggs into the AWS basket – presumably thinking that AWS is too big to fail. This is not Jeff Bezos’s view.</i></p>
<p>Question 5.3: Do you agree with our analysis of the hyperscalers’ relationship with ISVs? As part of this, please provide your views on whether our analysis of the hyperscalers relationship with ISVs applies to both larger and smaller ISVs.</p>	<p><i>Is this response confidential? – N</i></p> <p><i>UKCloud was a cloud provider and not an ISV and did not provide a marketplace in the sense that Ofcom describes for its partners. As such I cannot answer the specifics of Ofcom’s question but can confirm that Ofcom’s analysis aligns with my understanding of hyperscale marketplaces.</i></p>
<p>Question 6.1 Do you agree with our assessment of how well competition is working in cloud infrastructure and what are the potential implications of a lack of competition?</p>	<p><i>Is this response confidential? – N</i></p> <p><i>Ofcom’s assessment of how competition is working in the cloud infrastructure market is thorough and commendable.</i></p> <p><i>My personal view, based on my experience as the former commercial director for UKCloud, is that from the perspective of the smaller cloud providers (I do not consider either Oracle or IBM as smaller cloud providers) that competition is non-existent in the market. This is especially the case for the UK public sector vertical, which has created policies that drive all of its cloud business to hyperscale, irrespective of a) procurement and competition regulation and b) the economic advantages of using smaller cloud providers and the benefits of their often unique capabilities.</i></p> <p><i>The implications for lack of competition in the market are far reaching and profound. One side of the coin is the so-called virtuous circle of data gravity. The other side of the coin is the vicious circle of customer lock-in, sub-optimal solutions, with customers disempowered by a lack of any form of negotiating leverage.</i></p>

	<p>David Heinemeier Hansson, creator of Ruby on Rails and founder of a number of successful SaaS companies, recently blogged about the five values guiding his exit from cloud. Outrageous pricing is one factor:</p> <p>“we're paying as much to rent the donkey every few months as it would cost to buy it. When that's the case, you should own the donkey!”</p> <p>But Heinemeier also touches on hyperscale concentration which is, of course, an issue for consumers. Equally we need to be concerned about this concentration from a societal perspective given there are serious implications for national resilience should a hyperscale cloud provider be subject to a significant outage or cyber-attack.</p> <p>Given its market share, AWS has been described as “the internet’s biggest single point of failure” The UK as a whole has been sleep-walking into a dependency on just two cloud providers. The UK government’s own dependency centres on just one cloud provider.</p> <p>In 2019 Angela Merkel launched a plan to address growing concerns about Europe’s reliance on US clouds, by establishing Gaia-X, a European cloud. In a stark and topical analogy, the German MP Benjamin Strasser said:</p> <p>“Its like with access to gas - if we make our entire energy supply reliant on a few nations in the world who get to control access, we’re becoming politically dependent...its no different when it comes to data and data services”.</p> <p>Strasser’s warning about gas is now playing out before our eyes. One of the most pressing issues regarding the lack of competition in the cloud infrastructure market is the continued concentration on US hyperscale providers which will ultimately compromise the UK’s resilience, security and independence.</p>
<p>Question 8.1 Do you agree that egress fees are an area of potential intervention? How might such an intervention be approached?</p>	<p><i>Is this response confidential? – N</i></p> <p><i>I am in broad agreement with Ofcom’s proposals to regulate data egress fees and</i></p>

	<p><i>agree data egress fees should be “at cost” or to prevent data egress charging altogether. The risk with either approach would be that it creates a perverse incentive where the hyperscaler would impose other barriers to exit.</i></p> <p><i>One way to mitigate egress fees would be to regulate for upfront transparency in a providers pricing – in other-words, a costed exit plan based on typical usage forecasts should be compulsory before a customer onboards any data onto the cloud infrastructure – even for free trials.</i></p>
<p>Question 8.2: Do you agree that interoperability and portability are areas of potential intervention? How might such an intervention be approached?</p>	<p><i>Is this response confidential? – N</i></p> <p><i>I am in broad agreement with Ofcom’s proposals although I do not agree that extensive transparency requirements “would put an unnecessary burden on hyperscalers”. We have to recognise the dangers in the current direction of travel in the market and should not be afraid to take action that is in the national interest.</i></p> <p><i>In addition, cloud buyers need to be educated. Ofcom has already identified that some buyers have a high level of cloud literacy, but many don’t. The government should be producing guidance for cloud buyers that enables them to navigate the pitfalls of technical lock-in.</i></p>
<p>Question 8.3: Do you agree that committed spend discounts are an area of potential intervention? How might such an intervention be approached?</p>	<p><i>Is this response confidential? – N</i></p> <p><i>I agree that committed spend discounts are an area of potential intervention but also appreciate that there could be unintended consequences that Ofcom has already identified.</i></p> <p><i>However, committed spend discounts are anti-competitive and an effective mechanism for lock-in when it comes to the cloud infrastructure market.</i></p> <p><i>Ofcom might want to consider making privately negotiated committed spend discounts reportable to Ofcom once a certain commitment threshold has been reached to enable Ofcom to determine whether an intervention is needed on a case-by-case basis.</i></p>

	<p><i>Ofcom could also consider putting in place legal mechanisms to prevent cloud providers from demanding higher spend commitments in return for discounts at the point of contract renewal.</i></p> <p><i>In other words, if a customer has benefited from an e.g 18% discount for e.g £5m spend over e.g 3 years there should be a legal obligation for this discount to be carried over into any future contract.</i></p>
<p>Question 8.4: Do you agree that transparency of billing is an area of potential intervention? How might such an intervention be approached?</p>	<p><i>Is this response confidential? – N</i></p> <p><i>Yes, I agree that billing transparency is an area of potential intervention.</i></p> <p><i>Imposing a standard approach to pricing would ultimately be helpful but difficult to achieve as the standard would have to be based on something and whichever cloud providers pricing model was closest to the something would be given competitive advantage.</i></p> <p><i>Two measures might help to mitigate the difficulties here – prohibiting price bundling and compelling the cloud providers to enable potential and actual customers to access cost modelling tools before and throughout the duration of any engagement.</i></p>
<p>Question 8.5: What, if any, potential unintended consequences do you anticipate might be associated with the interventions set out above, and how might they interact with each other if implemented?</p>	<p><i>Is this response confidential? – N</i></p> <p><i>Given that the timescales in terms of a potential CMA referral, potential regulation (and associated consultation/lobbying on the part of the cloud providers) will by nature be lengthy, hyperscalers could be incentivised to offer greater discounts to customers now in return for term commitments that by-passed the regulation for a comfortable period. Where feasible, Ofcom should consider making regulation retrospective.</i></p> <p><i>In addition to Ofcom’s proposed interventions, I would urge Ofcom to explore how the process of choosing a cloud provider is made more competitive and transparent than it is now and, for the public sector, the direct award procurement procedure is withdrawn for the purchase of cloud infrastructure services.</i></p>



Above all, I hope that Ofcom and others in government are able to see the bigger picture in terms of national resilience and national capability and recognise that cloud merits a national strategy in its own right. A National Cloud Strategy that puts supplier diversity, competition and responsible regulation at its heart.

Please complete this form in full and return to cloudreport@ofcom.org.uk