Arqiva Submission: Ofcom – Cloud services market study Call for inputs

Arqiva welcomes the opportunity to contribute to Ofcom's cloud services market study call for inputs.

Arqiva supports Ofcom undertaking this market study and its overarching objectives of ensuring the UK cloud services market works in the interests of consumers now and into the future. As Ofcom correctly identifies, cloud services are increasingly important across industries, including in the production and delivery of communications and media services. Cloud services have unlocked significant opportunities and value by enabling access to computing resources on a highly scalable and elastic basis.

Arqiva operates at the heart of the broadcasting industry and and is a growing user of cloud services for its own operation, as well as for a range of services we deliver to distribute and manage content at scale and in a simple, cost-effective way. These services include:

- Arqade, a global, cloud-based channel and live event interchange where content is easily syndicated by rightsholders and channel owners, and broadcasters and TV platform operators can rapidly discover, review and request content.

- Arqplex, which provides secure and reliable content aggregation, encoding, multiplexing and packaging for content distribution.

Looking ahead, cloud-based services have an important and growing role to play in the delivery of content that informs, entertains, and builds community connection across the UK. It is therefore timely for Ofcom to initiate this market study, and build a deeper understanding of the market dynamics and behaviours in this area. It will be important for Ofcom to continue to monitor developments in the cloud service market as it matures to ensure it operates effectively and that innovative cloud-based services continue to be developed and delivered.

One of the topics we support Ofcom in examining further is the operation of the market in relation to the ability of business customers to transfer data and switch between providers if needed, including in the instance of disaster recovery to ensure business continuity. This includes considering the costs and timeframes for doing so, and ensuring that barriers are not put in place which prevent this or make it prohibitively expensive. It is important that data transfer between services is enabled and that the costs of doing so do not become punitive.

This is especially the case for a business such as Arqiva, which is a critical national infrastructure provider. It is essential to enable data backups, potentially across cloud services providers, to enhance the resilience of communications and media services, and mitigate the risks of disruption to services to end consumers. While Ofcom has outlined that resiliency issues are beyond the scope of this market study, we nonetheless consider it important that risks to resiliency are factored in when considering the potential impacts of market features and behaviours, to ensure that priority issues are correctly identified and addressed as needed.

Arqiva also recommends that Ofcom monitor developments across other aspects of the IP delivery infrastructure value chain to help ensure that they are functioning effectively and enabling fair competition. Many areas of this delivery chain are developing rapidly and may be subject to access or competition issues over time so are worthy of ongoing monitoring. This may include, for example, considering the

operation of the CDN market and ability of competing providers to gain access to telecom exchanges and the terms of any access.

Below, we elaborate on these issues in responses to questions 4.1 and 4.6 of the call for inputs paper.

We would welcome further engagement with Ofcom as this market study is progressed.

Question 4.1: Do you agree with the scope of the market study?

Cloud services have enabled a wide-range of services with benefits across industries. In paragraph 3.45 of the call for inputs paper, Ofcom highlights the increasing use of cloud services in the broadcasting industry. Arqiva operates at the heart of this industry and offers a range of cloud-based services to enable broadcasters to distribute and manage their content at scale in a simple and cost-effective way. Cloud services, for various players in the broadcast and media markets, are now key to simplifying content encoding and packaging, exchange, and distribution, and providing industry with the capacity to scale up or down computing resources more flexibly in line with their needs.

We believe that it will be important for Ofcom to monitor developments in the cloud service market as it matures, to ensure that the market operates well for business customers and supports innovation in services. As stated above, we believe that Ofcom should also monitor the wider IP delivery value chain to ensure that this operates effectively.

Question 4.7: Do you agree with our proposed approach for considering the dynamics in cloud infrastructure services competition, and what do you think are the most important issues to examine?

It will be important to ensure that business customers have the capacity and flexibility to adapt their use of different cloud-based services in line with their needs and ambitions over time.

In this regard, we support the regulator's proposal to explore any business practices that could pose challenges to business customers adapting their cloud services as needed. In paragraph 4.33 of the call for inputs paper, Ofcom identifies two possible issues to explore: "whether barriers to moving data between cloud providers make it difficult for customers to switch or multi-source, or strengthen network effects. For example, egress fees, where cloud providers charge customers for extracting their data from their environments" and "whether a lack of interoperability between the hyperscalers' cloud services and those of others represents a significant barriers to switching". This could be particularly important in a disaster recovery scenario where providers look to ensure that they have alternative methods of delivery in place. The market needs to function in a manner which permits this on reasonable terms. This is of vital importance for services relating to critical national infrastrucrure. We support the regulator exploring this issue and the functioning of this part of the market over time.

Ofcom has explicitly removed resiliency issues from the scope of this proposed market study. However, market factors or behaviours that could undermine resiliency would be highly consequential. Risks to the resiliency of these services means risks to the ongoing, reliable delivery of essential services including the delivery of trusted news and information to UK audiences. We therefore consider that it will be key for Ofcom to factor in these risks when considering which potential market factors or behaviours are most critical to address. It will be essential that businesses are able to backup their cloud based services across suppliers to mitigate the risks of any potential disruption of those services.

About Arqiva

Arqiva is a communications infrastructure and media services company at the heart of the broadcast and utilities sectors in the UK. Arqiva is the only national provider of terrestrial television and radio broadcasting, with a history tracing back to 1922 when it broadcast the world's first national radio service. We are enabling the transformation of media distribution in the digital age, and offer a range of cloudbased solutions for content platforms, including live channels and video-on-demand. This includes Arqade, a global channel and live event interchange, and Arqplex, our fully managed headend-as-aservice for video service providers.