Egress fees, submission to Ofcom call for inputs on cloud services market study

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Introduction

We welcome the opportunity to submit views to Ofcom through the call for inputs (CFI) on the cloud services market study. Whilst the market study is a broad exercise, we feel that it provides an opportunity to explore one particularly problematic issue in cloud markets that merits the attention of regulators. The below sets out our experience with the use of egress fees. Egress fees are charged by cloud providers when customers want to switch between different cloud providers or move into a multi- or hybrid cloud environment. Egress fees present a practice of vendor lock-in which we strongly feel can be, and should be, abolished.

We were pleased to read in the CFI that Ofcom has identified egress fees as one of the core issues that the study will focus on. We invite Ofcom to let us know if it would welcome a more detailed discussion with us, to go through this material and help it with its considerations.

Background: about Cloudflare

Cloudflare is a leading cybersecurity, performance, and reliability company on a mission to help build a better Internet. Cloudflare uses its 270+ data centers in more than 100 countries to screen traffic for cybersecurity risks and to cache content at the network edge to improve website performance. Examples of our services include protection against Distributed Denial of Service (DDoS) attacks, protection against malicious bots and crawlers attempting to scrape or alter the content of websites, a Content Delivery Network (CDN) service, as well as DNS (Domain Name System) services to enhance reliability of our customers' networks and Internet properties. Our Zero Trust platform and products enable our customers to add a layer of security across their organizations, helping them to achieve further resilience.

Abolishing egress fees to facilitate cloud switching in Europe

At Cloudflare, we believe customers should be able to choose the best cloud services for their needs. The ability to transfer data between providers in a cost effective way, essentially switching cloud providers, is critical to making this a reality. Often, however, users are charged for every transfer of data out of a cloud provider (so-called "egress fees"), regardless of the actual cost of bandwidth used. Cloudflare sees users paying these fees even when transfers of data are to a network to which the cloud provider is directly connected (settlement-free peered) over a private network interface (PNI), meaning there are no meaningful incremental costs to the cloud provider. These high fees can make transferring data out of a cloud service, whether to switch services completely or to use applications or services stored in a different cloud service, in a private cloud or on-premise, a financial hurdle, especially for small companies.

As you are certainly aware, the European Commission’s proposal for the EU Data Act, in its chapter on switching between data processing services, sets out provisions to support businesses looking to switch between cloud providers and outlines interoperability standards to enable lower

cost access and transfer of data between providers. Cloudflare welcomes this type of provision, which will enable customers to choose their cloud providers based on the services they need, rather than a desire to avoid switching costs. We believe this is a critical element in ensuring customer satisfaction and improving efficiency in the use of products to enable a large global and well-connected (multi) cloud network.

The elimination of (disproportionate) switching fees, in particular egress fees, as well as the improvement to interoperability requirements, enable simple flows of data that foster a multi-cloud system. This approach of using multiple cloud providers reduces reliance of businesses on a single provider. It also expands opportunities for hybrid clouds, meaning that some data would remain under the direct control of an organization, either in a private cloud or stored on premise.

Industry action to deal with egress fees: the Bandwidth Alliance

To contribute to the broader mission of helping to enable more multi-cloud and hybrid cloud models for our customers, Cloudflare launched the Bandwidth Alliance[1] in 2019 where we brought together a group of cloud service providers who agreed to eliminate or significantly discount the egress fees charged by the outgoing cloud provider, for their shared customers, reflecting the local and insignificant cost of the exchange of traffic between those providers.

Technically, it works like this: Cloudflare's network is connected globally through transit providers, Internet exchanges and private interconnections, allowing us to easily connect to Bandwidth Alliance partners and to move traffic between them at little to no cost. Most cloud providers that deliver traffic to users via Cloudflare share a presence with Cloudflare in the same data centers around the world. Traffic is transferred locally through a peering connection, minimizing infrastructure costs and transit charges. Our Bandwidth Alliance partners have agreed to pass on these cost savings to our joint customers by waiving or reducing data transfer charges. We have estimated savings of more than $50 million per year for our customers with the Bandwidth Alliance[2].

Another advantage of Coudflare's Bandwidth Alliance is helping to overcome vendor lock-in[3], which - as the Commission has pointed out in its Impact Assessment for the EU Data Act - limits consumers' ability to switch services or to use multiple cloud solutions, by eliminating or significantly discounting the egress fees charged by the outgoing cloud provider. In addition to the Dutch, French and Japanese cloud market studies already referenced by Ofcom, the U.S. House of Representatives Subcommittee on Antitrust, Commercial and Administrative Law in their 2020 investigation on competition in digital markets[4] identified the existence of prohibitively high egress

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[1] https://www.cloudflare.com/bandwidth-alliance/

[2] Introducing the Bandwidth Alliance: sharing the benefits of interconnected networks, Cloudflare Blog https://blog.cloudflare.com/bandwidth-alliance/

[3] https://www.cloudflare.com/en-gb/learning/cloud/what-is-vendor-lock-in/

[4] https://judiciary.house.gov/uploadedfiles/competition_in_digital_markets.pdf - For example on page 118: *"Subcommittee staff has identified several common techniques infrastructure providers use to initially lock-in customers, including contract terms, free tier offerings, and egress fees."*

fee costs charged by certain cloud service providers. Cloudflare has also done its own analysis on on disproportionately high egress fees being charged by some cloud providers, and the apparent vendor lock-in effects it could create[5].

Cloudflare already helps organizations avoid becoming overly dependent on a single cloud provider, which is another problem in terms of vendor reliance, according to the European Commission's analysis[6]. Due to our unique infrastructure-agnostic architecture, we can provide our services to different or combined types of cloud providers without any compromise in performance, reliability and security. Enhancing interoperability to a multi-cloud system approach allows our customers to become more competitive, commercially viable, and foster enhanced technologies[7].

Conclusion

Whilst our efforts, including with fellow industry players through the Bandwidth Alliance, to abolish egress fees have already supported cloud switching and avoiding unnecessary costs to end-customers as cloud markets develop, we feel more can and should be done, including through legislation.

In this context, we welcome the gradual withdrawal of switching charges in the proposed EU Data Act (Art. 25), and encourage the UK to consider a similar regulation that puts an end to unjustified egress fees.

[5] AWS's egregious egress, Cloudflare Blog - https://blog.cloudflare.com/aws-egregious-egress/
[6] Impact Assessment Report EU Commission, 2022, p. 55
[7] Impact Assessment Report EU Commission, 2022