Microsoft

Public Consultation on the Draft BEREC Report BoR (23) 214 on the general authorisation and related frameworks for international submarine connectivity

Microsoft Comments

January 2024

Introduction

Microsoft welcomes BEREC's interest in looking at the general authorization and related frameworks for international submarine connectivity with a holistic approach. This exercise comes at a very timely moment, given the increased attention from policymakers, regulators, governments, and defense sector to the importance of submarine connectivity, its security in Europe and across the globe, as well as the starting discussions around the policies that could strengthen security and resilience of this critical part of connectivity infrastructure.

Microsoft would like to thank BEREC for the opportunity to contribute to these discussions and to the development of this report. Microsoft also actively participated and shared its expertise at the BEREC's Workshop on international submarine connectivity in the EU[1].

We have duly noted that in the introduction to its consultation, BEREC includes a reference to the Ministerial Declaration on European Data Gateways[2] , which highlights that Europe's digital sovereignty and global competitiveness depend on **strong and secure internal and external connectivity**, as precondition for the European Union to become "the most attractive, most secure and most dynamic data-agile economy in the world". In the area of submarine cables, we believe that such strong and secure connectivity will be best achieved by a regime that maximally promotes investment in submarine cable infrastructure and flexible deployment of its landing zones. Indeed, redundancy of subsea cable infrastructure is one of the best measures to ensure resilience of communications and offers the best protection against the impact of cable damage incidents[3].

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[1] On 21 September 2023, BEREC held a Workshop on international submarine connectivity in the EU, where different stakeholders shared their views on the current state of play of the international submarine connectivity business in the EU (Link)

[2] Ministerial Declaration: European Data Gateways as a key element of the EU's Digital Decade, March 2021 (Link)

[3] E.g. recent cases of cable damage have not disrupted internet traffic due to existing infrastructure redundancy (Link).

In this regard, we appreciate that BEREC acknowledges that companies like Microsoft have increasingly invested in connectivity infrastructure and in providing additional services related to ECN and ECS markets. This clearly underlines the crucial role that cloud providers, with their digital infrastructure, that also includes networks of submarine cables, play in ensuring robustness, resiliency, security and effectiveness of today's internet.

Hereby Microsoft would like to share more specific comments and observations with regards to the statements and assumptions introduced in the draft report.

The electronic communications regulatory framework

We thank BEREC for outlining its various observations on the electronic communications regulatory framework, including on the definitions concerning different types of ECN and ECS. We tend to agree with BEREC's position that submarine cable systems operated by content and application providers connecting their data centres qualify in general as non-public ECN.[4]

European measures

When it comes to the pan-European harmonization, and specifically the idea of establishing a single point of contact at the European level, we do not believe such a solution is particularly relevant. In practice, subsea cable landings relating to a **submarine cable system seldom concern more than one country** and are therefore inherently country-specific: they require maritime authorizations, sometimes national security review, negotiations with landowners on land, construction crews, etc. Because of these particularities, subsea cable landings are intensive to the site, therefore introducing a single point of contact or a single way of doing things across the EU would not necessarily result in material improvements; on the contrary, it may create an additional layer of bureaucracy, which may prove counterproductive. Overall, Member States and their NRAs currently tend to take a reasonable, investment-friendly approach to cable landing.

The EU-level harmonization of subsea cable oversight does run the risk of increasing burdens for landing cables in some European countries, and that would both dis-serve the interest in encouraging redundancy, as well as removing the flexibility that Member States have, and

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[4] While BEREC observes that the EECC does not provide a clear definition of publicly available ECS, at this stage we see no compelling need for such definition.

should continue to have, in how best to ensure that subsea cable landings satisfy national interests.

However, we agree that in the course of aiming for EU-level harmonization, it would be sensible to explore the creation of new minimum obligations for cooperation among the Member States on physical security of cables, e.g., in close cooperation and coordination with NATO. This could potentially result not only in prevention as well as deterrence of potential adversaries from physically damaging and jeopardizing this critical infrastructure, but also in the reduction of the high cost of implementing comprehensive protection measures.

National measures

We support the report's findings emphasizing the importance of various national measures to promote the development of international submarine connectivity. Overall, we commend Member States who undertake measures of any kind designed to encourage and facilitate subsea cable landings in their country.

When it comes to national security measures, we find it imperative to reinforce protection and security of submarine cable infrastructure. Microsoft seriously approaches security of submarine cable infrastructure and applies continuous development of measures to protect traffic at both the physical and logical layers of the networks. To further increase security and enhancing protection, we believe that coordination – possibly in close cooperation with NATO (also see above-mentioned considerations on the European level) - and consultation with cable owners for the physical protection of facilities is of great importance. Against this background, redundancy is the key to reliability of subsea cable connectivity, so facilitating landing of multiple cables is a very positive approach. As a matter of fact, building new cables enables defensive advantage since they allow countries to provide greater stability in their service provision. Network resilience is also significantly increased if a country has multiple submarine cables connecting it to any given destination, as this builds redundancy and diversity into the network. Overall, both the number of different cables and the duplication ensure diverse and redundant routes, which bolsters network resilience. Microsoft also implements this logic and ensures itself to the greatest extent possible that it has capacity on a multitude of cables in order to enhance reliability of the network. We also ensure that we have redundancies in our network, in the form of multiple pathways and landing points to diversify our network. Over next few years, Microsoft plans to build more capacity into/out of Europe, thus further increasing

capacity and increasing the geographical diversity of landings. Thus, Microsoft ensures it can shift traffic almost instantaneously in the event of a network link disruption or degradation.

Final remarks

We are living in the era of the intelligent cloud and intelligent edge, which is being driven by massive technology shifts and emerging technologies. These technological advances are shaping the next phase of innovation, which in turn requires increased capacity of geographically diverse networks. Microsoft's work plays a critical role in enabling new capacity and experiences that come with it. While Microsoft does not identify any major regulatory blockers to subsea cable landing in Europe, the threat and security landscape is shifting constantly, and it is important to undertake national and pan-European measures to encourage and facilitate subsea cable landings and overall security of subsea cable infrastructure.

We thank BEREC for the opportunity to comment on its draft report and look forward to continuing working with BEREC on these important topics.