

Callum Voge April 13th, 2022 European Government Affairs and Advocacy Manager

Internet Society submission on the *Draft Update to the BEREC Guidelines on the Implementation of the Open Internet Regulation*

INTRODUCTION

The Internet Society welcomes BEREC's efforts to strengthen protections for the open Internet by updating guidelines in response to recent European Court of Justice rulings and appreciate the opportunity to provide feedback in response to the open public consultation. Through this submission, we urge BEREC to consider the critical properties that have underpinned the Internet's success, contributing not only to the *open* Internet but also the *globally connected, secure, and trustworthy* Internet. Enabling the full potential of the Internet maximizes its utility as resource for good, fuelling innovation and empowering end-users in the exercise of their rights.

The <u>Internet Society</u> is a global non-profit organisation founded in 1992 by some of the Internet's early pioneers. Our global community is made up of thousands of energetic, enthusiastic, and committed individuals, organisations, and volunteers. We believe the Internet is a force for good and we are working towards an Internet that benefits everyone. With 110 active Chapters across six continents, of which 28 are in Europe, and more than 80.000 individual users supporting our activities, the Internet Society is a relevant stakeholder, and a reliable civil society interlocutor for Internet governance issues.

Recent European Court of Justice rulings provided a legal position on zero tariff packages, finding these arrangements incompatible with obligations to treat traffic equally. The Draft Update to the BEREC Guidelines on the Implementation of the Open Internet has noted this outcome and now seeks to update guidelines to better safeguard the equal and non-discriminatory treatment of traffic in the provision of Internet access services and better protect end-user rights. The Draft Update tackles this issue using an application-agnostic and technology neutral approach that minimizes the barriers to using certain applications or 'categories of traffic'. The Draft Update additionally seeks to protect against Internet



fragmentation brought about by potentially conflicting regulatory measures in individual EU member states. The Internet Society is supportive of BEREC's ambition to foster the open Internet.

With this submission, the Internet Society emphasizes the importance of supporting not only the *open* Internet but also the *globally connected, secure,* and *trustworthy* Internet to empower end-users as they use this global resource to its full potential and exercise their rights. In the following section we outline *a set of five critical properties that we believe to be integral to the Internet.* These five critical properties identify features that have historically and consistently accompanied the Internet since the time of its creation and continue to support its dynamic growth.

PROPERTIES

The design of the Internet is encapsulated in a set of technical choices that were made 30 years ago. While the conversation today has been overshadowed by the services offered on the Internet and the companies offering it, it is relevant to revisit these *primordial* choices that have transcended time. At the Internet Society, we have identified five core properties that *underpin and uphold* the foundation of the Internet as we know it, and most significantly fuel the benefits that it creates.

The Internet's strength lies in the adaptability and relevance of its original architecture, which relies on the properties of being accessible, interoperable, decentralized, interconnected through common identifiers, and being technology neutral. By reflecting these five critical properties in the Draft Update, BEREC will ensure the continued functioning of the Internet ecosystem and further its goals of fostering its role as an engine of innovation and realization of end-user rights.

1. Accessible

An accessible Internet, by virtue of its common protocol, is essential for its health as well as for the future of societies and economies. Every hardware connection presents itself, eventually, as a packet-switched interface while each node provides a common, open, network layer protocol. We call this the *Internet Protocol*. It makes the Internet one of the few global resources available to individuals with a low barrier of entry. It is crucial to preserve these facets to allow networks to extend globally and ensure the Internet as a network continues to grow.

BEREC support for an accessible Internet with minimal barriers fosters a self-sustaining ecosystem as individuals connect across member states. This approach produces compounding benefits as geographically remote regions become better connected,



strengthening economic linkages across Europe, and empowering more individuals to actualize their end-user rights.

2. Interoperable

Interoperability is a key characteristic of the Internet as it allows it to grow organically, leading to innovation and new applications. Technological building blocks are assembled in a layered fashion, working together to provide services to applications and end-users. Each building block delivers a specific function such as supporting different network types, ensuring reliable transport, enabling security, or providing name resolution. Anyone can innovate at any point—and Internet users contribute and voluntarily adopt changes most beneficial to the system without the need to re-engineer the entire network.

By supporting an open architecture of the Internet, BEREC will ensure that new, common services, fit for a digitalised society, are built, and integrated seamlessly, positioning Europe as a global innovator.

3. Decentralized

The essence of the Internet is that of a network of networks that choose to be connected to one another. All these networks, nearly 70.000 currently, run a common protocol (Border Gateway Protocol) that allows for the exchange of routing information. While interconnected, each network remains autonomous when making decisions on issues such as routing traffic and there is no central authority dictating the network's needs or requirements.

This decentralized and distributed routing system is key to the global reach of the Internet, its optimized connectivity, and the overall resilience of the network. A collection of independent decisions allows the Internet to be agile, as networks are tailored to local parameters of price, connection, bandwidth, reliability and more. The absence of this property and the enforcement of a centralized or regional routing model, hamper the ability of users to choose the best connectivity for their needs. It would create scalability problems, bring economic disadvantages, and inevitably deteriorate the performance of the Internet.

By upholding the decentralization of the Internet, BEREC will strengthen its resilience and adaptability, allowing for Europe's diverse populations to optimize networks according to local needs and requirements.



4. Interconnected through common Identifiers

The vastness of the Internet is made easier to navigate because we have common global identifiers which serve the role of holding the Internet together. Two examples are the Internet Protocol (IP) addresses and the Domain Name System (DNS). All data flowing between a user's computer and the applications being utilised is held in an IP packet that includes an address indicating where it is going. These IP addresses allow any two systems on the Internet to find each other, without ambiguity.

The DNS, on the other hand, creates a map between names and IP addresses which links them both, so users can navigate the network using only domain names. Without these global identifiers we would need to construct special gateways, install translators, and create mapping tables to retain the same level of connectivity, diminishing the overall utility of the Internet. The consistent addressability that these identifiers provide, exemplify how vital identifiers can be in delivering a reliable service to every Internet user.

BEREC states that one of its intended goals is to protect against Internet fragmentation by preventing conflicting rules from member states. BEREC's explicit support for global identifiers would protect against fragmentation and ensure that the European public is not excluded from the global social and economic opportunities facilitated by the Internet.

5. Technology Neutral

The Internet was designed as a general-purpose network, neutral to the technology built upon it. This feature has fuelled the popularity of the Internet, as it can be used for a seemingly endless number of innovations, from email to media streaming to artificial intelligence. This propensity for innovation is a result of the decision to create an Internet infrastructure that is *agnostic* to the content flowing through it. One type of content is not favoured over another resulting in an egalitarian base for everything, from communication to commerce. This feature ensures adaptability to meet the requirements of an everevolving digital environment. It lets innovators pursue their ideas, enabling fast movement forward without the need for significant changes to the network. The Internet, full of potential and possibilities, is promised through this property.

BEREC support of a technology neutral Internet equips European businesses and individuals to innovate and pursue new applications that will enhance lives around the world. Indeed, BEREC has emphasized the benefits of an agnostic approach and, by aligning with the ECJ rulings, is making efforts to ensure that certain types of content are not favoured over another.



CONCLUSION:

In this submission, we have focused on the critical properties underpinning the Internet. These are foundational and necessary values that will further the realization of BEREC goals to foster Internet-driven innovation and end-user rights. Other properties including privacy, data confidentiality, and data integrity also contribute to a secure and trusted online environment. However, our focus reflects our belief that any additional properties rely on the foundation of a consistent and continuous Internet that embodies the core properties described in this document.

Alternative models that do not uphold these core properties are being promoted across other regions in the world, creating a global challenge to the Internet and its ability to uphold the open Internet that BEREC supports. It is integral that European institutions, including BEREC, protect the model of the Internet that has served our societies well and generated exponential growth and benefits to society.

We, thus, recommend that BEREC recognise the Internet's original architecture and support not just the open Internet but also the globally connected, secure, and trustworthy Internet. BEREC can best do this by supporting an Internet that is: accessible, interoperable, decentralized, interconnected through common identifiers, and technologically neutral. By doing so BEREC will foster a more secure European digital infrastructure as well as support dynamic digital growth across Europe's diverse economies.

Callum Voge

European Government Affairs and Advocacy Manager

voge@isoc.org