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Via Electronic Submission

Body of European Regulators for Electronic Communications
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RE: Draft BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules

Dear Members of the Body of European Regulators for Electronic Communications:

New America's Open Technology Institute ("OTI") submits these comments in support of the Telecoms Single Market Regulation and the draft guidelines published by the Body of European Regulators for Electronic Communications ("BEREC") on June 6, 2016.

As a longstanding advocate of net neutrality, OTI is dedicated to ensuring that the Internet remains a robust, open platform for free expression and innovation. We support the regulation's goal to "guarantee the continued functioning of the internet ecosystem as an engine of innovation."[1] Accordingly, we have been deeply involved in the creation, legal defense, and implementation of the strongest net neutrality rules in United States history, as codified in the 2015 Open Internet Order.[2] The millions of European citizens and businesses that rely on the Open Internet deserve net neutrality protections that are, at a minimum, as strong as the American regime.

BEREC's draft guidance is a step in the right direction. The document affirms basic obligations to transparency, non-discrimination, and end-user rights that are necessary for any successful net neutrality framework. BEREC should resist

[1] BEREC, Draft BEREC Guidelines on the Implementation by National Regulators of European Net Neutrality Rules (June 2, 2016), at Recital 1 ("BEREC Net Neutrality Guidelines").
[2] *In re Protecting and Promoting the Open Internet*, Report and Order on Remand, 30 FCC Rcd 5601 (2015).

industry calls to weaken the guidance and should consider strengthening it in several key respects. Our data-driven research demonstrates that Internet Service Providers ("ISPs") can act as gatekeepers of the Internet with the ability to stifle competition and control the user experience—behaviors that violate the foundational principles of openness and non-discrimination that have guided the Internet since its inception. Given this threat, we urge BEREC to remain vigilant in adopting final guidance that produces strong protections that are applied uniformly throughout the European Union.

In these comments, we offer support for BEREC's efforts, suggestions for strengthening the final guidance, and empirical evidence from the development of the U.S. net neutrality regime in the context of (1) interconnection, (2) zero-rating, (3) transparency, and (4) economic impact.

I. INTERCONNECTION

The draft guidelines make clear that interconnection practices may be considered in evaluating an ISP's compliance with Article 3(1), which protects the end user's right to access content on non-discriminatory terms.[3] We applaud BEREC for recognizing that an effective net neutrality regime must encompass the entirety of the service provided to consumers; it cannot be limited to last-mile networks. Traffic exchange points are a vital part of the entire service. They are also vulnerable parts of the Internet's architecture that ISPs can manipulate to extract access tolls. OTI's research has found that interconnection abuse is a real and present threat to the Internet's health, which is why BEREC should strengthen its guidance in this area.

In the United States, the absence of strong interconnection oversight significantly harmed consumers and innovation for a period of multiple years. In 2010, the U.S. government enacted weak net neutrality rules that only applied to last-mile networks.[4] This left a loophole that shifted discriminatory conduct to the traffic exchange points that connect last-mile ISPs to the rest of the Internet. Measurement Lab, a research consortium that includes OTI, found evidence of massive congestion at many interconnection points in 2013 and 2014.[5] As a result, millions of Americans experienced persistently degraded online connections for weeks and sometimes months. OTI's analysis of the data found congestion patterns that suggested a handful of large ISPs had strategically manipulated their interconnection points to extract access fees from the transit

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[3] BEREC Net Neutrality Guidelines at Art. 3(1).
[4] *In re Preserving the Open Internet*, WC Docket No. 07-52, GN Docket No. 09-191, Report and Order, 25 FCC Rcd. 17905, 17965 ¶ 112 (2010).
[5] Measurement Lab (M-Lab), *ISP Interconnection and its Impact on Consumer Internet Performance* (Oct. 28, 2014), https://www.measurementlab.net/publications/isp-interconnection-impact.pdf.

networks and edge providers that needed access to the ISPs' customers.[6] The millions of Americans who experienced prolonged service degradation were merely collateral damage to a business dispute. This egregious episode of widespread consumer harm across the nation's four largest ISPs prompted the U.S. government to close the interconnection loophole when, in 2015, the Federal Communications Commission ("FCC") asserted jurisdiction over interconnection practices for the first time. [7]

The draft guidance takes important steps to ensure that interconnection is not neglected in European net neutrality rules, but it could be strengthened. BEREC should clarify that interconnection authority also extends to Article 3(3), which prohibits unreasonable network traffic management measures. How an ISP manages its interconnection ports is a core part of network management. BEREC establishes a strong framework in Article 3(3) that would be useful in analyzing interconnection-related harms. The draft guidance stipulates that reasonable network management must be proportionate, transparent, and not based on commercial considerations "but on objectively different technical quality of service requirements of specific categories of traffic." This framework could also be used to evaluate reasonable interconnection practices. Interconnection disputes like those recently experienced in the U.S. would rightly fail this test. The transparency component of this test is especially relevant to interconnection analysis; interconnection agreements are often opaque and usually confidential, making it difficult for national regulatory authorities ("NRAs") to monitor for potential abuse.

Article 3(3) also stipulates that "recurrent and more long-lasting network congestion which is neither exceptional nor temporary should not benefit from that exception but should rather be tackled through expansion of network capacity." This stipulation is well-suited to interconnection analysis, where port augmentation is usually the most reasonable and neutral response to congestion at the point of last-mile interconnection. Port expansion should be a routine cost of doing business that ISPs proactively manage and anticipate—not something that is used to gain leverage in negotiations with an interconnecting party. Additionally, this stipulation appropriately targets the *duration* of the congestion as evidence of unreasonable conduct. Prolonged congestion is an obvious threat to the health of the Internet and it is an acute concern at interconnection points.

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[6] *Beyond Frustrated: The Sweeping Consumer Harms as a Result of ISP Disputes*, New America's Open Technology Institute (Nov. 2014), https://na-production.s3.amazonaws.com/documents/Beyond_Frustrated.pdf

[7] *In re Protecting and Promoting the Open Internet*, Report and Order on Remand, 30 FCC Rcd 5601 (2015).

In light of the aforementioned harms, BEREC should ensure that these Article 3(3) stipulations are clearly applied to interconnection practices and not just last-mile network management.

II. ZERO-RATING

The draft guidelines discuss an increasingly prevalent practice called zero-rating, in which an ISP exempts an application or class of applications from any data caps to which customers may be subject. The discussion indicates that BEREC is rightly concerned that zero-rating schemes could harm end-user rights.[8] Zero-rating has the potential to manipulate network traffic and constrain end-user choice in a manner that is functionally very similar to paid prioritization schemes that create fast and slow lanes for online traffic.[9]

OTI has published research that affirms BEREC's broad concern about zero-rating and examines how usage-based pricing negatively influences consumer behavior by creating an environment of artificial scarcity. Our report found that "data caps, especially on wireline networks, are hardly a necessity, and instead appear to be primarily motivated by a desire to further increase revenues from existing subscribers and protect legacy services (such as cable television) from competing Internet services. There is little technical rationale for data caps, especially since congestion occurs in moments of peak demand, while data caps discourage usage at all times, even during off hours, when the network has plenty of capacity."[10] In the United States, usage-based pricing has a particularly concentrated impact on low-income consumers, who are more likely to purchase usage-based plans that limit their access to the Internet.[11] Furthermore, even the most vigilant consumer can struggle to monitor data usage. Data consumption tools are often inadequate, inaccurate, or difficult to use, leading to suboptimal purchasing decisions such as buying too much or too little data.[12] Data caps also discourage customers from downloading important security updates, increasing

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[8] BEREC Net Neutrality Guidelines at ¶ 39.
[9] Barbara van Schewick, "T-Mobile's BingeOn Violates Key Net Neutrality Principles," The Center for Internet and Society (Jan. 29, 2016), https://cyberlaw.stanford.edu/downloads/vanSchewick-2016-Binge-On-Report.pdf; Barbara van Schewick, "Network Neutrality and Zero-Rating," The Center for Internet and Society (Feb. 19, 2015), https://cyberlaw.stanford.edu/files/publication/files/vanSchewick2015NetworkNeutralityandZerorating.pdf.
[10] See Danielle Kehl and Patrick Lucey, *Artificial Scarcity: How Data Caps Harm Consumers and Innovation*, New America's Open Technology Institute (Jun. 2015) ("Artificial Scarcity"), https://na-production.s3.amazonaws.com/documents/DataCaps_Layout_Final.pdf.
[11] U.S. Gov't Accountability Office, GAO-15-108, *FCC Should Track the Application of Fixed Internet Usage-Based Pricing and Help Improve Consumer Education*, Report to the Ranking Member, Subcommittee on Communications and Technology, Committee on Energy and Commerce, House of Representatives (Nov. 2014).
[12] See Artificial Scarcity at 9.

the proportion of people using outdated software—a major cause of data breaches.[13]

Accordingly, NRAs should carefully scrutinize the data caps that underlie all zero-rating plans. Data caps on wireline networks are particularly egregious and should be subject to a critical review. BEREC should also consider strengthening the guidance to clarify that zero-rating plans involving a monetary transaction in exchange for preferred treatment violate the Telecoms Single Market Regulation. As currently drafted, the guidance gives NRAs too much discretion in evaluating zero-rating plans; different EU members could conceivably reach very different conclusions about the same zero-rating plan offered by the same ISP. The harms of such fragmentation are well-understood and a desire to avoid fragmentation is clearly manifest throughout the draft guidance. The common net neutrality framework that the European Parliament and BEREC seek to establish should extend to zero-rating. A clearer, unified zero-rating rule would create more certainty for businesses and foster innovation.

III. TRANSPARENCY

The importance of strong transparency guidance in this context is difficult to overstate. ISPs are notoriously opaque in their disclosures about price, network management, and interconnecting agreements. But without this information it will be difficult, if not impossible, for NRAs to monitor compliance with the net neutrality rules. Moreover, transparency mitigates the information asymmetry between ISPs and consumers, thereby lowering switching costs and encouraging competition. BEREC has affirmed the importance of transparency in the net neutrality context, arguing in 2011 that it is "a key pre-condition to the end users' ability to choose the quality of the service that best fits their needs" while noting that "transparency alone is probably insufficient to achieve net neutrality."[14] The draft guidance requires ISPs to provide consumers with contracts that clearly explain their network management practices, the advertised speed, and remedies available if the service fails to meet that speed. We support these best practices and encourage BEREC to retain these stipulations in the final guidance.
We also support the requirement that ISPs publicly disclose "speed values … specified and published in such a manner that they can be verified and used to determine any discrepancy between the actual performance and what has been agreed in contract." However, this requirement is best supported by a mechanism

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[13] See Marshini Chetty, Richard Banks, A.J. Bernheim Brush, Jonathan Donner, and Rebecca Grinter, "'You're Capped!' Understanding the Effects of Bandwidth Caps on Broadband Use in the Home," Microsoft Research (May 2012), http://research.microsoft.com/apps/pubs/default.aspx?id=162079; Sean Michael Kerner, "RSA 2013: Outdated Software Biggest Internet Security Threat," eSecurity Planet (Feb. 28, 2013), http://www.esecurityplanet.com/network-security/rsa-2013-outdated-software-biggest-internet-security-threat.html.

[14] BEREC, Guidelines on Transparency in the scope of Net Neutrality: Best practices and recommended approaches (Dec. 2011), at 3.

for independently measuring ISP speeds. Such a mechanism would hold ISPs accountable and empower consumers, but successful broadband measurement can be challenging. OTI recently published a report on broadband measurement that identified the following best practices:

- Data should be collected using a consistent and reproducible methodology;
- Measurement methodology should accurately reflect the experience of the end user and uphold standards of transparency and openness by providing precise specifications for measurement and analysis;
- Measurement should capture performance over interconnection points and at peak hours;
- Methodology should be open and transparent, allowing for third-party oversight and verification; and
- Methodology should support open source software and public data sets.[15]

We encourage BEREC to incorporate these best practices into any broadband measurement guidance it may issue in the current proceeding or a future publication.

BEREC may also wish to consider OTI's recent "broadband truth-in-labeling" proposal. Last year, the FCC adopted a standardized format that ISPs could use to provide basic information about their services to prospective customers.[16] This format was the result of a collective multistakeholder process that was predicated on a 2009 proposal from OTI. Much of that information mirrors what is in BEREC's draft guidance, but presented in a format that resembles the U.S. food nutrition labels that are familiar to American consumers. When the FCC adopted the label, it clarified that ISPs that use the label will be granted safe harbor from the transparency component of the 2015 Open Internet Order.[17] BEREC may find a similar label useful for its recommendation that ISP information be "easily accessible and identifiable for what it is … concise and comprehensive [and] meaningful to end-users; i.e. relevant, unambiguous and presented in a useful manner."[18] Although EU and U.S. food nutrition labels differ in content, they are similar in design and may be a useful starting point for European broadband disclosures.

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[15] Emily Hong & Sarah Morris, *Getting Up to Speed: Best Practices for Measuring Broadband Performance*, New America's Open Technology Institute (June 2016), https://na-production.s3.amazonaws.com/documents/MeasuringBroadband.pdf.
[16] Emily Hong, Laura Moy, and Isabelle Styslinger, *Broadband Truth-in-Labeling*, New America's Open Technology Institute (Jul. 2015), https://static.newamerica.org/attachments/4508-broadband-truth-in-labeling-2/Broadband%20Truth-in-Labeling%202015.c9ecf56cc29149488ad3263779be60b0.pdf.
[17] "FCC Unveils Consumer Broadband Labels to Provide Greater Transparency to Consumers," News Release (Apr. 4, 2016), https://apps.fcc.gov/edocs_public/attachmatch/DOC-338708A1.pdf.
[18] BEREC Net Neutrality Guidelines at ¶ 132.

IV. ECONOMIC IMPACT

BEREC should be highly skeptical of claims that its draft guidance will harm investment in broadband infrastructure. A group of 20 telecom companies published a document earlier this month claiming that BEREC's draft guidance will harm investment in 5G technology. This "5G manifesto" echoes industry assertions made just before the FCC adopted strong net neutrality rules in 2015. The biggest U.S. telecom companies made doomsday predictions that net neutrality would "abruptly stall the virtuous circle of investment and innovation"[19] and have a "profoundly negative impact on capital investment."[20] None of this happened. A year after adoption of the rules, network investment was up, profits were on the rise, and those same telecom companies were boasting of ambitious growth projections.[21] As Free Press' Derek Turner explained, "investment levels and the general fiscal health of the broadband industry are determined by a variety of factors, with regulation generally very low on that list."[22]

In reality, the U.S. regulations created market certainty for online businesses that needed the assurance of net neutrality protections to continue investing. Before the U.S. regulations were enacted, the prospect of weak regulations reportedly had a chilling effect on online startup investment.[23] Without strong net neutrality, the entry barriers for Internet-based startups could become insurmountably high—and therefore too risky for investors. Europe's burgeoning tech sector would benefit from the market certainty that strong net neutrality rules provide.

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The principles of openness and nondiscrimination have guided the Internet's growth since its creation, enabling it to become one of the world's greatest platforms for free expression and innovation. It is time to codify these foundational principles into laws that protect the Internet for future generations.

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[19] Comments of AT&T Services, Inc., GN Docket No. 14-28, GN Docket No. 10-127, at 4 (July 15, 2014).
[20] Comments of Comcast, GN Docket No. 14-28, GN Docket No. 10-127, at 46 (July 15, 2014).
[21] *See, e.g*. Comments of Free Press, GN Docket No. 14-28, GN Docket No. 10-127 (March 30, 2016); Katie Cox, "Did Net Neutrality Kill Broadband Investment Like Comcast, AT&T, Verizon Said It Would?," The Consumerist (Feb. 9, 2016).
[22] Comments of Free Press, GN Docket No. 14-28, GN Docket No. 10-127, at 2 (March 30, 2016).
[23] See, e.g., Barbara Van Schewick, "The Case for Rebooting the Network- Neutrality Debate," The Atlantic (May 6, 2014) ("The uncertainty over access fees is already starting to have a chilling effect on innovation and investment. Entrepreneurs have told me that they are reconsidering their plans and that investors are more hesitant to invest in applications, content, or services that may become subject to access fees.").

BEREC, the European Parliament, and the Council of the European Union have done tremendous work in developing a common legal framework for European net neutrality, and we urge you and your colleagues to remain vigilant as the guidance for national regulatory authorities is finalized. We appreciate the opportunity to participate in this process and look forward to supporting your continuing efforts to preserve net neutrality.

Respectfully Submitted,

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