

September 11, 2016

By Electronic Portal

Council Working Group on Internet
International Telecommunications Union
Place des Nations, CH-1211
Geneva 20, Switzerland
<http://www.itu.int/en/council/cwg-internet>

**Re: Building an Enabling Environment
For Access to the Internet, CL-16/34**

Dear Sir or Madam:

EchoStar Satellite Operating Corporation and Hughes Network Systems, LLC (Hughes) (collectively EchoStar) respectfully submit these comments in response to the International Telecommunication Union (ITU) Council Working Group on Internet's ("CWG") consultation on Building an Enabling Environment for Access to the Internet.¹ As the ITU has recognized, it is important for regulatory agencies and service providers to build an environment that enables access to the Internet.² A favorable regulatory framework will enable access to broadband to the world's citizens. As discussed below, any approach that is adopted must ensure that all technologies are available to meet the important goal of delivering access to the internet to all the world's citizens.

As the CWG considers how best to build an enabling environment for access to the Internet, it is critical that it adopt regulations based on the following core principles which are fundamental to improving global Internet access:

1. Technology neutrality
2. Creation of a competitive telecommunications market
3. A light touch to regulation
4. Fair and non-discriminatory access to scarce resources, including spectrum
5. Relying on best practices to ensure network security

BACKGROUND:

EchoStar is a leader in the technology sector. With a fleet of 25 satellites operating in the fixed, mobile and broadcasting satellite service, EchoStar is the fourth largest commercial geostationary satellite operator in the world. Hughes, a wholly owned subsidiary of EchoStar Corporation is the largest satellite ISP in the world and successfully provides high speed satellite Internet service in the global marketplace. In North America, Hughes operates a high speed broadband satellite network where it provides services to over 1,000,000 consumers. In addition, this past summer, Hughes introduced

¹ Available at - "<http://www.itu.int/en/council/cwg-internet/Pages/open-consultations.aspx>"

² Available at - <https://sustainabledevelopment.un.org/index.php?page=view&type=30022&nr=231&menu=3170>

broadband satellite service in Brazil. Hughes has majorly invested in OneWeb, a company that is building a high throughput low latency non-geostationary satellite constellation.

Satellite communications play a critical role in providing internet services across the globe, including in the most rural and remote areas. Accordingly, as discussed below, it is critical that policy-makers create an environment to ensure access to the internet including services provide by a wide-variety of technologies, including satellite.

DISCUSSION:

In order to create a regulatory environment that best enables access to the internet across the globe, it is critical that government adopt and adhere to certain core regulatory principles. These principles include: 1) technology neutrality; 2) creating a competitive marketplace; 3) adopting a light touch to regulation; 4) enabling fair and non-discriminatory access to scarce resources, including spectrum; and 5) relying on best practices to ensure network security. By establishing a regime that relies on these principles, governments will be most successful in creating an environment that ensures quality, cost-effective, secure access to the internet, even in the most rural and remote areas of the world.

Technology Neutrality

Regulators and policy makers must approach the regulation of the information and communications technologies (ICT) sector in a manner that does not advantage any particular technology. Regulators should make decisions that are driven by socio- economic impact and public interest imperatives, as opposed to technological preferences. Technology neutrality means that regulators should implement regulations that do not favor one technology over another. By relying on a technology neutral approach to regulation, regulators can advance policies that support innovation, practicality and efficiency.

Technology neutrality is an important policy objective because it promotes a rich array of interconnected competing and complementary networks, ensuring the adoption and deployment of appropriate technologies, depending on location, applications and other factors. Neutrality also promotes technology competition to improve existing technologies and develop new ones, including technologies not yet imagined. Finally, as history has demonstrated, any policy that attempts to mandate deployment of a particular broadband access technology by a particular class of service providers is counter-productive because it may cause inefficient use of that technology and inhibit technological innovation and the development and adoption of less efficient technologies for the purpose.

Regulators across the world have found success in creating access to communications services on a competitive basis by adopting a technology neutral regulatory regime. For example, the FCC noted that its goal is to remain "technology agnostic" so that it doesn't promote or discourage the deployment of any broadband technologies over others. In Australia, for example, spectrum licenses are tradable and technology neutral. Spectrum licenses authorize the use of spectrum and licensees are free to use any device and technology within their spectrum, provided that such devices comply with the conditions of the licenses and the advisory guidelines established for the corresponding bands. To avoid interference, the Australian Communications Authority (ACA) creates a document called "interference

management framework” for each auction in which it sets forth the rules for spectrum use.³ Hence, the implementation of technology neutrality in the regulatory framework is extremely necessary. It gives a healthy boost to competition and innovation, thereby ensuring access to the internet becomes more cost-effective.

Enabling Competition

The markets with the highest internet penetration rates today largely have the most competitive markets.⁴ As use of the internet becomes widespread, demand for internet infrastructure surges. Consequently, regulators should adopt a pro-competitive policy to the provision of internet services. With such healthy competition in the commercial broadband marketplace, competition will result in lower prices and improved service, as well as increased innovation. This gives an array of choices to the consumers as well. There is significant evidence that demonstrates that increased competition in the marketplace results in vast public interest benefits including in terms of price, innovation and quality of service.⁵ However, despite this evidence, some markets only enable limited access for foreign satellite operators to land traffic. This type of regulation has the impact of reducing competition in that country, denying consumers the benefits of innovative, cost-effective service and, in some cases, any access to high throughput broadband satellite service. Such restrictions must be lifted if global access to the internet is to be achieved.

A Light Touch to Regulation

As the telecommunications marketplace becomes competitive, the need for heavy-handed regulation is lifted. In these cases, regulators must resist the urge to over regulate. Instead, regulators should continue to promote fair competition and intervene only in cases of market failure. For example, an incumbent monopoly might be protected if it is to be privatized or required to open up to competition, but new entrants should be allowed to operate “unencumbered” and unthreatened by any abuse of dominance. Light touch regulation, should focus more on overseeing license compliance and anti-competitive behavior than on strictly controlling all operational steps undertaken by operators. The impact of said regulation must be made transparent to consumers. This way, consumers can choose the technology and plan that works best for them based on the choices available in the marketplace.

Fair and Non-Discriminatory Access to Scarce Resources

One of the many fundamental tasks of regulators is the management of scarce resources. These scarce resources need to be made available on a fair and non-discriminatory basis to ensure a competitive telecommunications marketplace. These scarce resources include radio frequencies, orbital slots, numbering and access to rights of way, among others. If, for instance, satellite operators do not have the same access to frequencies as terrestrial operators, then users in rural and remote portions of the world may have increasingly limited access to the internet. Accordingly, it is critical that

³ Available at -

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=10&cad=rja&uact=8&ved=0ahUKewiVyLubuc3OAhVELyYKHLNCFMQFghZMAk&url=http%3A%2F%2Fwww.ictregulationtoolkit.org%2Fsectionexport%2Fword%2F6.4&usg=AFQjCNEkC_aRGKA-3_-3b_Vaz9irVmqVw&bvm=bv.129759880,d.eWE

⁴ Available at - <http://reports.weforum.org/global-competitiveness-report-2015-2016/country-highlights/>

⁵ See e.g., <http://www.brie.berkeley.edu/publications/WP102.pdf>; <https://jgea.org/resources/download/1766.pdf>.

governments must ensure that fair and non-discriminatory access to scarce resources is an important part of any regulatory regime.

Best Practices for Network Security

Security, stability and resilience of the Internet is a key objective of almost all stakeholders in the provision of the Internet. Effectiveness in addressing risks and threats to the security and stability of the Internet depends on strong cooperation among different stakeholders. Governments should work with all stakeholders, including industry, to develop best practices in a number of areas. This includes governance, risk assessment and management as well as data security. By working together across industry and government, the most successful plans for cyber security will be developed.

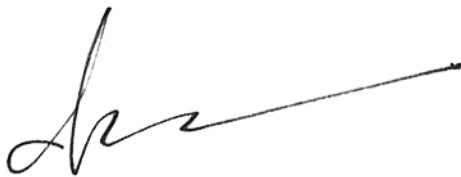
Conclusion:

Accordingly, it is imperative that regulators utilize the following five principles in adopting their regulatory regimes in order to best enable access to the internet. These principles are:

- Technology neutrality
- Creation of a competitive telecommunications market
- A light touch to regulation
- Fair and non-discriminatory access to scarce resources, including spectrum
- Relying on best practices to ensure network security

Reliance on these principles will ensure that broadband internet is available globally to the world's citizens, even in the most hard to reach areas.

Respectfully submitted,



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