**CWG – Internet – Open Consultation - International Intern​et-Related Public Policy Issues on Expanding Internet Connectivity**

**Background**

Viasat is pleased to submit the following response to the consultation of the ITU Council Working Group on International Internet-related Public Policy Issues (CWG-Internet)

Viasat is a leading global provider of satellite and terrestrial broadband communications solutions and is the operator of a large fleet of Ka-band[[1]](#footnote-1) spacecraft. Today, Viasat services connect over 150 million devices per year on airplanes, more than 1,700,000 people through its residential service, and reaches approximately 5,000,000 more through programs designed to connect the unconnected. Viasat also connects millions through its innovative Community Internet program, which is designed to provide high-quality, affordable connectivity to the unconnected. Viasat has five geosynchronous satellites operating today, operates three additional satellites in partnership with the governments of Australia and Brazil, and has three additional Ka-band spacecraft, ViaSat-3 class satellites, under construction for the Americas, EMEA, and Asia-Pacific.

Viasat believes in fearless innovation and is finding better ways to deliver connections with the capacity to change the world. Viasat is developing the global communications network to power high-quality, secure, affordable, fast connections to impact people’s lives anywhere they are – on the ground, in the air, or at sea.

**CWG-Internet invites all stakeholders to submit contributions on international​​ Internet-related public policy issues relating to expanding Internet connectivity, focusing on the following questions:**

1. **What are the challenges and opportunities for expanding Internet connectivity, particularly to remote and under-served areas? What are the roles of governments and non-government actors in overcoming these challenges?**

**The Opportunities**

1. Broadband connectivity is widely recognized as a critical enabler of efforts to achieve the United Nation’s 2030 Agenda for Sustainable Development and the associated 17 Sustainable Development Goals. Moreover, it is a fundamental pillar to bridging the digital divide which impacts economic growth and curtails the developmental benefits that connectivity could provide to many millions. For example, the World Bank concludes that a 10% increase in broadband penetration rates would lead to a 1.38% increase in GDP in developing economies.
2. Elsewhere the opportunities are massive; broadband is increasingly intertwined with the daily functions of modern life, which in turn implies that as we rally to connect remote and under-served areas, an increasing number of the 3.5 billion currently unconnected individuals – will be able to actively participate in the digital economy, and benefit from broadband-powered applications, including smart agriculture, healthcare, and education.
3. Increased broadband connectivity to unserved and under-served areas enables a significant reduction in the inclusivity gap. Time is of the essence here: a delay in bringing the second half of the world’s population online risks having those vulnerable people falling further behind as the connected reap the benefits of the economic and social impacts of being online.

**The Challenges**

1. The lack of an enabling regulatory environment that attracts investment is the primary challenge to expanding broadband to remote and under-served areas. For example, costly barriers to entry for private sector entities trying to bridge the digital divide, like local gateway requirements, expensive and redundant cybersecurity rules that are outside of international best practices, or expensive taxes on imported telecom equipment all raise costs for entering a market and reduce the impact that the private sector can have in eliminating the digital divide.
2. Administrative burdens and lengthy permitting and licencing processes curtail the ease of doing business to the deterrent of end users. While spectrum uncertainty reduces investors confidence, delaying efforts to connect the unconnected.
3. Finally, the limited adoption of a tech neutral approach to broadband deployment leaves out innovative technologies (such as satellite-powered broadband or HAPS systems). This is apparent in the terms for Universal Service Funds and other connectivity programs which favour traditional terrestrial communications over more cost-effective and efficient technologies.

**The Solutions**

1. By combining resources, local knowledge, and technical expertise, public-private partnerships (PPP) as aligned with Sustainable Development Goal 17 enable access to world-class services at the lowest cost point, and accelerate the pace of broadband deployment to the benefit of remote and under-served communities. PPP’s also signal a government’s commitment to engaging the private sector and reflects a government’s confidence and recognition of the positive impact corporations can achieve.

Noting the size of government projects and funding, PPPs are critical as they allow governments to pool and mutualize investments across sectors and leverage best practices to increase the return on ICT investments while providing the end-citizen with an integrated portfolio of digital services that considers specific SDG needs. This is reflected in the International Telecommunication Union’s (ITU) Smart Villages Initiative, which Viasat invites CWG-Internet and administrations to note.

1. For example, in Brazil and under the auspices of the GESAC (Governo Eletrónico – Serviço de Atendimento ao Cidadão; E-Government – Citizen Services) Program, Viasat works with Telebras and the Brazilian Ministry of Science, Technology, Innovation and Communication (MCTIC) in a unique arrangement, which sees Viasat deploy and operate the ground segment for a government owned satellite operated by Telebras.

This provides Telebras a share of the revenue stemming from commercialization and enables Viasat to provide a range of other services, including the establishment of a network of over 10,000 Brazilian government sites, which have connected 2 million plus school children in 2019 alone.

1. Elsewhere, Viasat’s Community Internet Program, involves a large areas Wi-FI network for which satellite broadband provides the backhaul. Additional equipment such as a router, tablet terminal, and local cache to store useful content such as e-government forums or educational videos can be added to enhance value and ease of use. This setup is ideal for small or remote communities where investments in traditional terrestrial-based fixed or wireless infrastructure may not be viable. As of 2019, and in collaboration with the Mexican government, Viasat has enabled access for over one million users, with plans for tens of thousands additional sites in the next two years.

The communities addressed by Viasat’s Community Internet Program tend to be cash-based, meaning that a prepaid model was important to meet consumer demands which also ensuring commercial viability. Consumer in Mexico may a nominal fee/hour of unlimited data, which is purchased at a point of sale, typically in a general store where they are accustomed to purchasing goods. The store owner becomes the reseller and local point of contact, often time providing first-level technical support.

This model creates a new class of commercial service that can extend broadband telecommunications to millions of users on a commercially viable basis while meeting the UN Broadband Commission’s goal of having broadband access cost around 2% of income, allowing governments to better focus their universal service investments to smaller set of communities, where the needs are greatest. While deploying a cell tower to a community might carry a cost as high as $200,000, Community Wi-Fi deployments can be done for less than 1% of that. In Mexico, Viasat can install and make a site operational for just $1,500. This radically alters the business models and return on investment, so that these communities can be sustainably addressed.

1. Reaching the half of the world without broadband in time to attain the Sustainable Development Goals, requires rapid deployment of multiple broadband solutions, and countries should pursue regulatory approaches that enable all broadband technologies. Experimentation and competition in broadband access markets should be encouraged to drive investment and innovation. These forces will not just help connect those already online but will incentivize improvements in services and reductions in cost for those already connected.
2. Policymakers should consider updating existing regulatory approaches to create more flexibility for innovative delivery platforms. They should also ensure that sufficient spectrum resources are available for multiple different technologies to develop and deliver services, and provide long-term stability to spectrum allocations, which help justify the massive investments that satellite network design, deployment, and operation require.
3. Ensuring harmonization with international markets and standards also enables countries to gain advantages including more rapid investment and economies of scale in equipment.
4. **Are there particular challenges facing land-locked countries in securing affordable Internet access? What can be done to overcome these challenges?**
5. The challenges facing land-locked counties in securing affordable Internet access are reflected in Resolution 16 (Rev. Buenos Aires 2017), Resolution 30 (Rev. Busan, 2014) of the Plenipotentiary Conference, and United Nations resolutions concerning programs for least developed countries (LDCs), small island developing states (SIDS), landlocked developing countries (LLDC), and countries with economies in transition.
6. Detailed economic impact of broadband in LDCs, LLDCs and SIDS and extensive studies on challenges and opportunities facing land-locked countries were conducted by the Telecommunication Development Bureau (BDT) of the ITU in collaboration with the United Nations Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and the Small Island Developing States (UN-OHRLLS).
7. The primary challenges include limitations on access to terrestrial and marine international cable systems owning to geographical conditions.
8. Accordingly, Viasat believes that Satellite-powered broadband has an integral role in connecting LDCs, SIDS and LLDCs.
9. For example, in Jamaica we have begun trialing the Viasat Community Internet program and have committed to brining the program to LLDCs in Africa, the Americas and Asia.
10. **How can small/community/non-profit operators help in promoting the increase of Internet connectivity?**
11. Small/community/non-profit operators have a significant role to play in capacity building initiatives, which in turn help promote and increase Internet connectivity.
12. By engaging in regular dialogue with policy makers and contributing to public consultations – in a an open, multistakeholder fashion, small/community/non-profit operators can contribute to increasing internet connectivity by bringing forward local knowledge, expertise and best practice.
13. Viasat helps promote increase in Internet connectivity through our Viasat Community Internet Program, which relies on local resellers, and creates local jobs (stores owners acting as a point of sale and first stop for technical assistance, as well as in-country technical jobs in support of installation and maintenance of access points).
    * + - 1. This contributes to an emergence of a sustainable, circular economy with more local skills, shops, and economic productivity)

Iv. Finally, small/community/non-profit operators should focus on creating local capacity building programs with direct impact on promoting the increase of Internet connectivity, rather than attempt to finance the capital required for launching a spacecraft and designing the ground component which is financially out of reach for a lot of small communities and nonprofits.

1. Viasat’s satellites operate in the 17.7-20.2 GHz and 27.5-30 GHz portions of the Ka Band, which are internationally harmonized for Fixed Satellite Service use. [↑](#footnote-ref-1)