APC submission to WTPF-21 Preparatory Process Online Consultation

Mobilizing New Solutions for Connectivity and Community Networks

Introduction

The Association for Progressive Communications (APC) welcomes the opportunity to offer opinions related to the questions in the Third Draft of the Report by the ITU Secretary-General for the Sixth World Telecommunication/Information and Communication Technology Policy Forum 2021 (WTPF-21). In particular, we welcome WTPF-2021's emphasis on the potential contribution of ICTs to the 17 Sustainable Development Goals. ICTs have enormous potential to strengthen social, political, cultural, economic and human development. In developing solutions and policy frameworks for the WTPF-21 thematic areas, it is critical that sustainable development - economic justice, social inclusion and environmental protection - be part of the considerations, with appropriate questions on the contribution or risks each of the proposed outcomes might have on these factors.

APC is an international network of civil society organisations founded in 1990 dedicated to empowering and supporting people working for peace, human rights, development and protection of the environment, through the strategic use of information and communication technologies (ICTs). We work to build a world in which all people have easy, equal and affordable access to the creative potential of ICTs to improve their lives and create more

democratic and egalitarian societies. APC has been a sector member of the ITU-D and R sectors since 2014.

Summary

Commitments for meaningful internet access[1] and digital inclusion need to be reinforced before the benefits of new and emerging technologies can be fully realised. To achieve this, innovative complementary solutions, beyond those listed as the example subthemes given in Decision 611 (Council 2019), are necessary. We welcome the addition to the third draft of the theme "**Mobilizing New Solutions for Connectivity".** However, explicitly including questions in this subtheme regarding Community Networks (CN) should also be prioritised. The manner in which CN combines existing technology with new and innovative technology and methods, marks it as a major possible contribution to bringing the internet infrastructure to the half of the world that is still excluded from digital society. APC believes that an outcome on enabling policies must not overlook CN's contribution to the SDG solution path. Community Networks are an epitome of 'new solutions for connectivity' that need policy enablement.

Discussion

In an increasingly interconnected world, it is easy to forget that many people, especially women, disadvantaged minorities, and people living in the rural areas of low-income economies, lack even the most basic connectivity. People facing multiple and intersecting forms of exclusion and discrimination face compounded challenges to meaningful access to the internet.

While there are benefits and contributions to human development brought by the internet and while the Internet has shown its criticality in the times of COVID-19, only half of the world's population has internet access.[2] Disparities in access continue to deepen inequalities between people and societies.The chance is currently low for timely new access to internet services to these populations unless new policy strategies are adopted. In most countries, especially those in which original copper-based telephone infrastructure was not well established, access to the internet is primarily via more costly mobile wireless networks, while broadband coverage is becoming ubiquitous in many urban areas. Yet the GSMA estimated that in low- and middle-income countries, people in rural areas were 40% less likely to use mobile internet than those in urban areas. In Sub-Saharan Africa, this gap is as high as 58%[3]. Connecting sparsely

[1] "Meaningful internet access" should be construed as pervasive, affordable connection (of sufficient quality and speed) to the internet in a manner that enables individuals to benefit from internet use, including to participate in the public sphere, exercise human rights, access and create relevant content, engage with people and information for development and well-being, etc.; irrespective of the means of such access (i.e. whether via a mobile or other device; whether through private ownership of a device or using a public access facility like a library) widens the divide for those who are left out of consideration.. See: www.intgovforum.org/multilingual/index.php?q=filedepot_download/3406/437

[2] ITU News. (6 December 2018). *New ITU statistics show more than half the world is now using the Internet*. ITU News. https://news.itu.int/itu-statistics-leaving-no-one-offline

[3] Bahia, K., & Suardi, S. (2019). *The State of Mobile Internet Connectivity 2019*. GSMA.

populated remote areas has proven a challenge for this model, largely because it is capital intensive and offers much lower returns on investment. Compared to competing in wealthier urban areas with other mobile network operators' new 5G offerings, mobile network operators do not prioritise investing in more sparsely populated, remote, and poorer urban areas. As a result, these areas are left underserved, which is now reflected in the global slowdown of growth in internet access across the world. This trend for 5G reflects the historically slow pace in growth of coverage from 2G, 3G and 4G networks worldwide.[4] The trends indicate that, although current connectivity strategies have been relatively successful in connecting half of the world's population, the marked decline in the rate at which the digital divide is closing, indicates that approaches based solely on mobile networks are not sufficient for those living in more difficult-to-reach areas.

There are inequalities beyond coverage regions. For instance, in Africa, the percentage of internet users is still only 22.2%, and the data shows that the rate at which the number of internet users is growing is decreasing considerably every year. For a continent such as Africa, where 780 million people are still not connected, a future in which all people enjoy the benefits of affordable connectivity seems an unlikely prospect. Africa is not alone, however, and this pattern is also visible in the slowing growth in internet uptake elsewhere.[5]

A key factor is affordability. Even where coverage exists, the cost of mobile broadband is one of the main barriers to meaningful access. The Broadband Commission for Digital Development set up by the International Telecommunication Union (ITU) and UNESCO has set a target for affordability at 2% of monthly gross national income per capita for entry-level broadband services[6] – that is for example, for a minimum of 500 MB for prepaid handset-based subscriptions[7] to prepaid mobile broadband. Although many countries meet this target on average[8] and there is a positive trend in that prices are slowly falling,[9] differences across income groups show that the overall target is far from being met. In Africa, the poorest 20% of the population, approximately 200 million people, would have to spend, on average, 20% of their per capita income for 500 MB of data. This number is 10% in Latin America and the

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https://www.gsma.com/mobilefordevelopment/wp-content/uploads/2019/07/GSMA-State-of-Mobile-Internet-Connectivity-Report-2019.pdf

[4] UN (Retrieved 14 June, 2020), *Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation,* https://unstats.un.org/sdgs/report/2019/goal-09

[5] ITU. (2019, 22 September). *Global internet growth stalls and focus shifts to 'meaningful universal connectivity' to drive global development.* ITU. https://www.itu.int/en/mediacentre/Pages/2019-PR16.aspx

[6] Broadband Commission for Digital Development. (2018). *2025 Targets: "Connecting the Other Half"*. https://broadbandcommission.org/Documents/publications/wef2018.pdf

[7] www.itu.int/en/ITU-D/Statistics/Pages/definitions/pricemethodology.aspx

[8] ITU. (2018). *Measuring the Information Society Report 2018 – Volume 1*. https://www.itu.int/en/ITU-D/Statistics/Documents/publications/misr2018/MISR-2018-Vol-1-E.pdf

[9] Web Foundation. (2019, 1 October). *Mobile data prices fall across low and middle income countries.* https://webfoundation.org/2019/10/mobile-data-prices-fall-across-low-and-middle-income-countries/?mc_cid=ba1bfdab1d&mc_eid=9b68ffa709

Caribbean and 6% in Asia-Pacific countries.[10] In the least developed countries (LDCs), the poorest 20%, of the population require 41% of their monthly disposable income for 1 GB of data [11] Furthermore, 1 GB of data is a very low bar as it is only sufficient for a couple of hours of educational videos, for example, and would be insufficient for remote education and work, one of the main differentiators among people in this time of COVID-19. By contrast, the average household data usage in the United States was in the order of 190 GB per month in 2016[12] and has grown to between 271 GB and 390 GB depending on cable connectivity use for bundled subscribers.[13]

While a WTPF-21 focus on 5G, as suggested by Decision 611, is reasonable for developed urban areas with greater population density, and wealthier population, other technologies and approaches are required for rural development as well as for the poorer residents of urban areas. Hence we welcome the addition to the third draft the theme on "**Mobilizing New Solutions for Connectivity"**

One of the more promising areas for exploration and for the expansion of access has been the development of Community Networks. These networks combine existing technology, with both new and innovative technology and strategies for further distributing network infrastructure in a community driven manner. Community Networks foster local economic development, affordable access and wider capacity development, all of which contribute to achieving the SDGs with the mobilization of *new and emerging telecommunications/ICTs* . Effective development in each of these new and emerging areas, however, requires a review of existing policies and brings a need for new and innovative public policy.

In this regard, we welcome that the the third draft includes:

> To bridge these gaps, innovations in technology, business plans and funding models are being developed and explored by providers, governments, academia, and civil society actors. These include but are not limited to: low-cost solar-powered mobile radios that can open up rural areas to new connectivity options; new, high-capacity satellite services systems that can offer lower cost internet access to remote locations; and business models that deliberately work **to provide services to local communities and involve them** in bringing down barriers to technology use.

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[10] Numbers calculated using GNI per capita and income distribution by quintile from the World Bank, as well as 500 MB data pricing from ITU database.
[11] Numbers calculated using GNI per capita and income distribution by quintile from the World Bank, as well as 500 MB data pricing from A4AI database.
[12] Engebretson, J. (2016, 26 September),. *iGR: Average Monthly Broadband Usage is 190 Gigabytes Monthly Per Household*, Telecompetitor. https://www.telecompetitor.com/igr-average-monthly-broadband-usage-is-190-gigabytes-monthly-per-household
[13] Open Vault Quarterly Advisories (Q2 2019), *Broadband usage patterns provide clues to imminent cord-cutting*, http://openvault.com/broadband-usage-patterns-provide-clues-to-imminent-cord-cutting/

Still, and although, the “involve them” in the last sentence seems to refer to community networks, it is rather vague and could limit that involvement to rather passive ways of monitoring and maintenance, far from the more active role communities have demonstrated they can play in providing themselves with connectivity where the market fails[14]. Hence, we recommend rewriting the last sentence in 2.8.6.3 as follows:

> “*and business models that deliberately enable local communities to be involved in providing services and bringing down barriers to technology use*”

We recommend exploring communities’ active involvement in “mobilizing new solutions for connectivity”, in a similar way that the upcoming CWG-Internet public consultation is doing by asking the following questions[15]:

> *“What are the challenges and opportunities mobilizing new solutions 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?*
>
> *“How can small/community/non-profit operators help in promoting the increase of Internet connectivity?”*

In addition, there are many specific areas in which ITU policy development could enable the creation of people-centered Community Networks with their ability to satisfy SDGs that cannot be completely met by the current broadband efforts. In a recent study paper, the ITU recommended, among other things, to “*Ease regulatory requirements for community network operators”*[16]. Therefore, in “mobilizing new solutions for connectivity”, the role of policies and regulations to enable these solutions is critical and should be explored further. In the particular case of community networks regulatory barriers have been identified[17], being the lack of an enabling licensing framework as well as spectrum management practices that prevent rural

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[14] APC, *Bottom-up Connectivity Strategies: Community-led small-scale telecommunication infrastructure networks in the global South*, https://www.apc.org/en/pubs/bottom-connectivity-strategies-community-led-small-scale-telecommunication-infrastructure

[15] ITU (Retrieved 14 June, 2020), *CWG-Internet: Online Open Consultation (September 2020*), https://www.itu.int/en/council/cwg-internet/Pages/consultation-sep2020.aspx

[16] ITU, (21 May, 2020), *ITU launches new study paper on broadband and connectivity solutions for rural and remote areas*, https://news.itu.int/itu-launches-new-study-paper-on-broadband-and-connectivity-solutions-for-rural-and-remote-areas/

[17] Belli, Luca, (209), *Building Community network Policies: A Collaborative Governance towards Enabling Frameworks.*; 2019 Outcome of the Dynamic Coalition on Community Connectivity (DC3) of the United Nations Internet Governance Forum (IGF) https://www.intgovforum.org/multilingual/index.php?q=filedepot_download/4391/1901

development, are among the most salient[18]. Exploring these challenges further should be also considered when analysing this sub-theme.

Conclusion

WTPF-21 is well situated as a forum for initiating work on policies that bring together all of these innovative policies and regulations, and should be considered in the WTPF-21 discussion. COVID-19 has shown that resilience of local and national telecommunications infrastructure is a critical part of sustainable development. Ensuring that no one is left behind in fulfilling the goals of the SDGs requires new solutions for connectivity, such as community networks. We recommend WPTF-21 look deeper than has been done in the third draft.

Contact details

First/Last Name: Verónica Ferrari (veronica@apc.org), Carlos Rey-Moreno (carlos@apc.org), Avri Doria (avri@apc.org)
Title: Global Policy Advocacy
Country: Global NGO
Organization you are representing: Association for Progressive Communications (APC)

[18] Song, S, Rey-Moreno, C., Jensen, M.,ISOC (2019) *Innovations in Spectrum Management* https://www.internetsociety.org/resources/doc/2019/innovations-in-spectrum-management/