



## **Contribution from the Association for Progressive Communications to the IGF intersessional work on Policy Options for Connecting and Enabling the Next Billion(s) – Phase IV**

### **Call for Public Inputs**

**29 September 2018**

The Association for Progressive Communications (APC) welcomes the initiative by the IGF's Multistakeholder Advisory Group (MAG) to further develop the IGF's intersessional work on "Policy Options for Connecting and Enabling the Next Billion(s)".

APC is a member-driven organisation with 58 organisational members and 34 individual members active in 74 countries, mostly from developing countries. Our mission is to empower and support organisations, social movements and individuals in and through the use of information and communication technologies (ICTs) to build strategic communities and initiatives for the purpose of making meaningful contributions to equitable human development, social justice, participatory political processes and environmental sustainability.

We appreciate the opportunity to share our perspectives on some of the key aspects oriented to building an enabling environment for access to the internet. Focusing on examples of how access supports achievement of the Sustainable Development Goals (SDGs) underscores the importance of ensuring that increased access to infrastructure is coupled with efforts to address political, economic, social and cultural barriers that prevent people from fully using the potential of the internet. In this respect APC views costly, restricted or filtered internet access as not real access. Real access should provide an affordable and unconstrained service supported by net neutrality principles and free of censorship, surveillance, harassment, and any other form of violation of human rights. In the course of APC's work researching and supporting local access solutions, a wide variety of initiatives that help to address these needs have been identified. Thirteen of the most relevant examples are summarised below. Further examples are available in APC's online newsletter<sup>1</sup> on this topic.

1. **SDG 9: Zapotec innovation in a Mexican village: Building an autonomous mobile network, Mexico** <https://www.onlinelibrary.wiley.com/doi/10.1111/1467-8322.12446>

Citizens of Zapotec village in the Mexican state of Oaxaca have successfully created an autonomous mobile phone network. Using open-source software and with technical assistance from an NGO (non-governmental organization), the people of

<sup>1</sup><https://www.apc.org/en/news/community-networks-and-local-access-monthly-newsletter-number-10>

Talea de Castro obtained antennae, a base station and software that enabled them to build a fully functional mobile network with global reach. The network is the village's latest innovation in a centuries-long process in which creative problem-solving is integrated with indigenous patterns of mutual aid, reciprocal labour and cooperativism.

2. **SDG 7: Colnodo, implements TVWS technology with a gender focus in community projects; Colombia**

<https://www.apc.org/en/node/34871/>

The NGO Colnodo's Community Networks as a Social Programme project, a winner of a 2018 grant from Regional Fund for Digital Innovation in Latin America and the Caribbean, is designing and working on different models for the sustainability and appropriation of the network using a gender focus. It represents the opportunity to work with other organisations, communities and stakeholders in the area of community networks. This allows the project to exchange experiences and engage in a dialogue with a view to making public policy proposals that favour the implementation of community networks, the aim being to close the gap in internet access at the country level. The project has increased connectivity in rural area in the municipality of Maní, in the Casnare department in eastern Colombia, and managed to bring the community challenges to the agenda of the Colombian Bureau of Internet Governance.

3. **SDG 9: Internet Village Motoman Project in rural Cambodia: bridging the digital divide, Cambodia** <https://www.emeraldinsight.com/doi/abs/10.1108/ITP-07-2016-0157>

The "Internet Village Motoman Project" identifies usage motivations and unintended effects of the community wireless networks, and examines the issues and challenges in the acceptance of a new technology in a less-developed country. Project findings also contribute to the literature on how practical internet engineering can bridge the digital divide. Fulfilling the needs identified in the research and understanding unintended effects of the system will contribute to the successful implementation of new internet projects in other rural areas.

4. **SDG 9: "The Land of Zero Connect", India** <https://www.youtube.com/watch?v=fq27X8CJLTM>

Zero Connect is part of the Digital Empowerment Foundation's Wireless for Communities (W4C) project, in partnership with the Internet Society (ISOC), and supported by Agariya Heetrakshak Manch. It brings broadband internet connectivity to the far-flung areas of the Little Rann of Kutch in Gujarat, and gives a digital voice to the socially and economically marginalised Agariya salt farming community. This video illustrates the reality of this situation and the work being done by DEF there.

5. **SDG 8: Innovative Licensing Approaches: Enabling Access in Hard-to-Reach places throughout Collaborative Partnerships, Georgia**

<https://www.internetsociety.org/blog/2018/05/innovative-licensing-approaches-enabling-access-in-hard-to-reach-places-through-collaborative-partnerships/>

A community network project in the Republic of Georgia, in the remote mountains of the Tusheti region. The story outlines the importance of connectivity to economic growth and not only for the determination of people to make sure that the internet is available in one of the remotest places in the world, but also for their strong belief in the benefits that connecting to the internet could bring to the people of Tusheti.

[Tourism is a beacon of hope for local businesses, and the internet is very important](#)

[for that.](#)

6. **SDG 9: How the Lenca are Restoring the Past to Build Their Future, Honduras** <https://www.internetsociety.org/blog/2018/04/lenca-people-restoring-past-build-future/>  
The story of Lenca people of Azacualpa, an indigenous community of Yamaranguila in Intibucá, Honduras who decided to start their relationship with technology by creating Radio Azacualpa, a radio station run by women in June 2017. The project was supported by Cultural Survival's Community Media Grants Project. The goal was to achieve recognition of rights as women and to achieve equality, showed through the radio tagline "*La voz de las Mujeres*" (the voice of women).
7. **SDG 8&9 Empowering local communities to build, maintain and expand their community networks, Greece** <https://blog.apnic.net/2018/04/20/empowering-local-communities-to-build-maintain-and-expand-their-community-network/>  
The story of Sarantaporo, a small village located in central Greece that did not have internet connectivity until 2010. Being a remote, isolated village with low population density, Greek telcos did not consider Sarantaporo worth the investment to deploy modern telecommunications infrastructure. Likewise, the government (due to its economic situation) was unable to provide internet connectivity, even though Greek citizens are required to use online services such as the official state-run digital platform to submit their tax returns. The Sarantaporo.gr team set a goal to provide internet connectivity to the local community by deploying a local infrastructure as a commons. This was the beginning of the [Sarantaporo.gr](#) Wireless Community Network (CN) via the infrastructure built of two layers: the backbone and the access. The backbone interconnects 11 villages, three farms and one camp with the University of Applied Sciences (TEI) of Thessaly. Each village has its own access layer of between 10 and 20 hotspots. The equipment is accommodated in locals' houses.
8. **SDG 3: Internet saves lives in Qunu Clinic, South Africa** <https://it-online.co.za/2018/04/06/internet-saves-lives-in-qunu-clinic/>  
A cloud computing platform with affordable internet connectivity is helping save lives in the rural Eastern Cape thanks to a new app developed by Phulukisa Health Solutions. Now medical staff at the Qunu Clinic near Mthatha are able to provide quality healthcare to a greater number of patients, in a more affordable manner. The app enables primary healthcare workers to remotely manage patients by electronically capturing the medical information of patients and storing these medical records in the cloud. These metrics feed into an algorithm which alerts the health workers of abnormalities and enable them to more quickly and accurately triage and escalate serious health conditions. The use of the cloud also significantly reduces patients' waiting time at Qunu Clinic as their files are always accessible, and no time will be lost searching for physical files, or gathering information that has been lost.
9. **SDG 8&9; Bringing the internet to Idjwi Island, Congo** [https://medium.com/@euan\\_69962/bringing-the-internet-to-idjwi-island-eastern-democratic-republic-of-congo-e5e1f1b40cd5](https://medium.com/@euan_69962/bringing-the-internet-to-idjwi-island-eastern-democratic-republic-of-congo-e5e1f1b40cd5)  
In 2015 the non-profit organisation, [Ensemble Pour La Difference](#), a social business incubator built a sustainable, community WiFi network on Idjwi island, Lake Kivu in the Democratic Republic of the Congo (DRC). The goal was to help Congolese owned businesses to design & innovate while assisting Congolese people independently employ and raise the living standards of their own communities. The success of the project required the team to carefully connect mountain-top to

mountain-top, mast to mast, down into a public access internet kiosk they constructed at the island's major market town of Bugarula (pop. 10,000). Pamoja Net, now an official non-profit, community owned WiFi service encourages business on the island to contribute to the material and bandwidth costs in return for dedicated connections during working hours. Subsequently, these fees help support free public WiFi on evenings and weekends. The connectivity helps islanders connect their hospitals to the internet, and farmers to communication with fair-trade export organizations, and thus reach a global market.

10. **SDG 7&9: Church provides internet in northern Uganda, connects more than computers, Uganda** <https://www.ncronline.org/news/world/church-provides-internet-northern-uganda-connects-more-computers>

The Catholic Church has become one of the major internet providers in northern Uganda built on people's needs for a reliable, innovative communications network during Joseph Kony's reign of terror in the 2000s. Voice over Internet Protocol was already common in 2007, but in Uganda, the church had to first build internet infrastructure to support it. BOSCO, which stands for "Battery Operated Systems for Community Outreach," is utilizing the church network to provide internet, and as well as computer literacy education. The organization also has 32 Community E-Learning Centers, which teach computer literacy to youth and residents who otherwise would not have computer access.

11. **SDG 9: How a rural community built South Africa's first ISP owned and run by a cooperative - Zenzeleni, South Africa** <https://theconversation.com/how-a-rural-community-built-south-africas-first-isp-owned-and-run-by-a-cooperative-87448>

A remote Mankosi population of 6,000, in South Africa's Eastern Cape province is a community where most homes are not connected to the electricity grid; residents charge their cellphones at a local shop or shebeen, for which they must pay. Both data and airtime for those phones also cost a lot and people spend up to 22% of their income on telecommunications. This is money that could be spent on food, education, transport and other needs. The goal, implemented with support from a research team at the University of the Western Cape, is working with residents to develop a solar powered wireless community network, owned and operated by the rural cooperative. This network installs and maintains telecommunications infrastructure and also sells telecommunications services like voice and data. The Zenzeleni model, is expected to foster economic growth which will benefit people living in and around the village, and enable them to purchase telecommunications, and other goods and services, that they currently cannot afford.

12. **SDG9: How Catalan villages built independent broadband networks, Catalonia** <https://www.ft.com/content/b15e9552-722a-11e7-93ff-99f383b09ff9>

Guifi.net is a community telecoms network bringing internet access to remote Catalan villages. Since the beginning of 2017, almost 250 of the 400 or so properties in Tortellà have signed up for optical fibre connections to the Guifi network. Guifi.net began in 2003 as a community initiative to provide WiFi to residents across the largely rural municipality of Gurb and has been creative in finding cheap ways of connecting buildings with fibre. Municipalities often allow cable in existing ducts, or in

water or sewage pipes, substantially reducing installation costs. From small beginnings in Gurb, Guifi.net has grown into a network linking more than 46,000 premises and 33,700 connection points or nodes. Different elements of the network are owned by a variety of individuals, businesses, municipalities and Guifi.net itself, but the network as a whole is underpinned by contracts that treat it as a common good. "Rural communities readily understand this idea of a common good," says Mr Ramon Roca, a founder of Guifi.net.

**13. SDGs 7, 8, 9 and 17: Regional Regulatory Body (CITEL) has resolved to support community based networks as an effective means to address connectivity issues**

The regional regulatory body for American states, CITEL, has issued a Resolution in August 2018 to which aims to encourage the participation of small, non-profit and community operators as new actors with alternatives for reducing the digital divide in countries that have unserved areas. CITEL is planning to study the experience that member states have had with these operators, in order to identify trends and best practices in the implementation of regulatory elements, public policies, and spectrum planning and allocation needed to facilitate the existence and development of these new actors.

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