IGF 2019
DAY ZERO PROPOSAL

Title: Electricity, Community Networks and Digital Inclusion: The case of the underserved communities and creating a path to change to the status quo

Time: 3hours

Format: Day zero event

organizers/facilitators:
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Background

There is no simple answer to the remaining challenges of connecting those who are not connected, or who are under connected – e.g limited access, lack of digital skills, lack of useful content, lack of affordable power sources. But, some lights on the horizon can bode well, if silo approaches by regulators and Ministries in healthcare, agriculture, education, finance and economic development can be rapidly changed, and new technologies and innovations can be applied to formerly highly intractable challenges. It is a multi-faceted approach of changing how electricity can be more broadly distributed, how community networks can augment and co-exist with existing comms/ISPs providers, and building skills through partnerships with NGOs and others to help to bring the rest of world into the digital age, regardless of whether they are in Africa, the Caribbean, Latin America, Asia-Pacific, MENA, SIDS or in an indigenous community that needs unique support to engage in the digitized world.

Beginning with Access to the Internet:

The concept of community networks dates back to the start of wide spread use of the Internet in the US and Europe, when groups of people set. up ways to share resources or Internet connections across local networks. At heart, community networks rely on the active participation of individuals and local communities, are owned by the community, and operated in a democratic fashion.

Community networks are operationalised through a whole variety of local stakeholders, NGOs, private sector entities, and or public administrations, who are involved in the designing, developing, implementing, maintaining and governing community networks.

While the world slowly closes the access gap with 50% of the world's population now connected, the challenge associated with connecting and enabling the remaining 50% has not diminished. Having taken over 20 years to get this far, the question remains how long it will take to connect the next billions, to fully include the remaining 50%. While many reports and studies note the benefit of connected communities to support development and meeting the UN SDGs; yet there remain significant gaps in national level governmental public policies, especially in regulatory and legislative frameworks that support last mile and rural connectivity. This is often compounded by inadequate core infrastructure such as rural power sources, tower infrastructure and backhaul, with a commercial operators' focus on the more lucrative urban rather than rural connectivity.

But, Internet access is not feasible without affordable, reliable and sustainable energy sources.

The interplay of affordable, reliable, and sustainable Internet and energy for all to achieving the SDGs:

Internet, ICTs and affordable energy are at the heart of development, complements investments in human capital, and makes possible the business activity, innovations, and new industries that are the engines of jobs and growth for entire economies. This session focuses on the strong dependency of access to the Internet, and to a digitized world on reliable and affordable power sources and the Internet governance issues that need to be addressed.

Advancing energy/electricity availability: In fiscal 2018, the World Bank helped countries adopt emerging approaches to electricity service delivery and deploy technological innovations that have substantially increased the number of households with service in a short amount of time. In Ethiopia, for example, a new $375 million program supports both on-grid and off-grid efforts, with a focus on connecting schools and clinics. In Rwanda, similar approaches have brought electricity to 1.2 million people, 80 percent of clinics, and 90 percent of schools. In Bangladesh, long-term efforts supported by the World Bank have brought electricity to 18.5 million people through the deployment of a world-record 1.4 million solar home systems, creating 70,000 jobs in the process. The World Bank portfolio in energy access particularly off-grid programs is growing fast, with $500 million added in fiscal 2018

to an existing portfolio of $1.3 billion. Also growing is the portfolio of clean energy projects, particularly solar. Many of these projects are being delivered through innovative financial solutions. In Argentina, an additional $250 million IBRD guarantee will facilitate private investment to help the country to meet its goal of 20 percent renewable energy by 2025. In India, a partnership with the State Bank of India delivered 575 megawatts in solar systems for homes and small businesses in just six months.

The World Bank is working to delivering energy services in some of the most difficult and remote environments in the world. In Mexico, the Bank is financing solar "farms" to deliver electricity to the 3 percent of the country still without power mostly indigenous people in remote, isolated areas. In the Republic of Yemen, the World Bank is working with an existing network of microfinance institutions to deliver off-grid solar systems to rural and peri-urban areas. Another project is improving the efficiency of electricity distribution systems and piloting solar services in Gaza.

Wherever electricity reaches, Internet solutions gets deployed one way or the other. Every attempt should be made by stakeholders, suppliers, and policy makers to promote and adopt strategies to bring reliable power sources more quickly into the more rural areas.

Community networks offer a further path to Inclusion of those not yet connected, or struggling to understand the online world. Community networks are typically far more than just building connectivity; they often both deploy computers and online devices; but also coach and teach people how to login, navigate the operating system, browse the Internet and produce documents and spreadsheets all basic skills unless one is truly unfamiliar with the online world. Community networks are also about leveraging the power of the Internet and access to the world wide web's information sources to bring social and economic change to the community. Digital inclusion contributes to the socioeconomic development of the society as a whole; it can also. help to reduce the division between the rural and urban populations.

Community networks are interdependent with power sources as well as facing other barriers --such as infrastructure, network coverage, affordability, digital skills, education, awareness, content, and an enabling environment. -- e.g. a friendly regulatory environment is essential. By simply focusing on expanding access to broadband in itself, countries will not be able to fully. address the access and digital inclusion gap.

Relevance to the theme

Most countries in Africa and other part of the developing world have gone through a series of technological revolutions which has transformed access to communication on the continent in the last two decades. However, as demand for Internet and electricity grows, access penetration is slowing. There is a growing body of evidence that suggest current connectivity strategies will fail to connect everyone, poor rural communities in particular. Those of us with access to the Internet accept the increasing social and economic benefits of access as normal, often without considering how the unconnected are increasingly disempowered as a result. This need not be the case. A new wave of technological and organisational innovation offers an alternative vision of access that could empower everyone. Small-scale commercial and community network operators can address access gaps if they are empowered by effective regulation and investment.

The workshop will present a challenge for policy-makers and regulators where value continues to accrue to those with affordable access to communication infrastructure while the unconnected fall further and further behind by simply staying in the same place. Those who most desperately need support are cut off or excluded from access to opportunity, to social and health safety nets, to education, to information that can improve lives and to platforms to demand change. It is ironic, or perhaps tragic, that the voice of the unconnected are not heard on this issue for the very reason that they are unconnected.

Relevance to Internet Governance

The value of being connected to a communication network is steadily rising. And yet, half of the world population remains unconnected to the Internet. Existing network operators are showing signs of having reached their limits in terms of connected the unserved. In recent times, affordable access to communication is of such value as a social and economic enabler that we need strategies that can embrace everyone. In order to have a meaningful conversation about options to reach the unconnected, we need better information on current telecommunications network development.

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of access as normal, often without considering how the unconnected are increasingly disempowered as a result. This need not be the case. Renewed adoption of the new technological and organisational innovation offers an alternative vision of access that could empower everyone. Small-scale commercial and community network operators can address access gaps if they are empowered by effective regulation and investment.

Main objectives – This Day Zero event will focus on advancing change:

As one example, the Africa We Want envisions Africa as a continent on equal footing with the rest of the world, as an information society, an integrated e-economy where every government, business and citizen has access to reliable and affordable internet, electricity and ICT services by increasing broadband penetration and providing venture capital to young entrepreneurs and innovators. Other developing regions have similar aspirations.

There is a need for a multi-stakeholders prospective to continue this discussion, bringing stakeholders together towards finding solutions to address the most critical challenges, engaging the existing and emerging opportunities for addressing community networks gaps of the underserve and the unconnected, while stirring the developing countries towards marshalling a stakeholders' intervention for a sustainable action within the framework of the overarching theme of this year's forum.

There is widespread recognition of the opportunities and potential benefits of expanding access to the Internet, as recognized by the Sustainable Development Goal (SDG) targets. Yet, around four billion people still lack access to it. Community networks, communications infrastructure deployed and operated by citizens to meet their own communication needs, are being increasingly proposed as a solution to connect the unconnected. However, in Africa, where the proportion of unconnected is among the highest globally, little is known about the role community networks are playing.

And, of course, community networks are reliant on access to affordable electricity sources that can reach the most remote village, as well as serve those in urban areas.

Expected outcomes

The session will start the discussions on creating a road map process to better understand what needs to be done in the short and long terms. There are several expected outcomes:

1. Identify opportunities and lessons learned that would support the developing countries alignment of clean energy sources that support both urban and rural and remote users

2. Identify the most critical gaps hindering the adoption and deployment of community networks in the developing countries.

3. Identify opportunities for governments to align national broadband and connectivity priorities programs with key community network infrastructure

4. Identify key issues on funding, resources and capacity at the national level.

5. Identify key data gaps hindering the penetration of Internet to the underserved communities in the developing countries

Intervention methodology

Agenda format

The Day Zero event will be structured around two core segments with specific policy questions that examine the respective topic, plus a concluding wrap-up session:

- Session introduction, Orientation to Session Format, Key Note and Presentation:

- Segment 1: electricity and community network gaps within the underserved communities

- Segment 2:- Digital Inclusion and strengthening the ecosystems to address these gaps

- Q&A, In-room and remote audience

- Conclusion and wrap-up

While the invitational list is preliminary, the goal is to be very inclusive to both those who are addressing the challenges and those who can contribute to the needed change:

- Invitations to Experts from NGOs, business, IGOs, technical community and academics

The organizing team proposes to invite 40 such participants, leaving space for 20-30 individuals who self-select to participate. The invited participants will include:

- Community network operators

- Regulators from at least 3-5 developing countries/or their designated staff

- IGOs, such as ITU, UNCTAD, UNDP, World Bank

- Funding entities, such as development banks

- UN-DESA

- Businesses that are engaged in funding initiatives –e.g. Mastercard Foundation; Google, Facebook, Microsoft, GSMA, etc.

- NGOs with existing focus on these issues

- Internet Community: ISOC/ICANN/RIRs

- Commentors from the UN HLP on Digital Cooperation

- Entities with special focus such as Mozilla; and others that are studying change in the digital world from the academic practitioners in related areas

This is not an exclusive list of invited participants, and the session is open and inclusive to all interested in collaborating toward advancing progress. The organizers will establish a mechanism to sign up and reserve a participant slot, as space may be limited based on IGF Secretariat decisions regarding space allocation.