IGF 2017 Reporting Template

- **Session Title:** How devices, content & innovative business models shape our digital future: creativity with purpose

- **Date:** Monday December 18, 2017

- **Time:** 11:50 - 13:20

- **Session Organizer:** Sylvia Cadena. Head of Programs / ISIF Asia coordinator, APNIC Foundation. Co-Organizers: Ms., Carolina, CAEIRO, Technical Community, LACNIC Ms., Vymala, Thuron, Technical Community, AFRINIC

- **Chair/Moderator:** Duncan Macintoch, CEO APNIC Foundation

- **Rapporteur/Notetaker**:   Ms., Carolina, CAEIRO, Technical Community, LACNIC

- List of Speakers and their institutional affiliations Nicolas Echaniz (Altermundi), Carlos Rey-Moreno (University of Western Cape), Jennifer Chung (Dot Asia) Shita Laksmi (DiploFoundation), Michael Ginguld (AirJaldi), Steve Song (NSRC) and Jochai Ben-Avie (Mozilla).

- Key Issues raised (1 sentence per issue):

Need for innovations in technology, business models and regulation to connect the unconnected.

Community approaches and sustainable business models need to come together.

No single bullet may solve issues around access. Importance to work with an open and wide community that will bring up different perspectives and open innovations to help find local solutions.

- If there were presentations during the session, please provide a 1-paragraph summary for each presentation:

Nicolas Echaniz and Carlos Rey-Moreno spoke about the LibreRouter, a wireless router developed for and by community networks. This piece of open hardware has several features that seek to address challenges faced by Community Networks including impossibility to modify off-the-shelf routers following a recent FCC ruling, challenges around powering routers, resorting to Mesh Networks as a means to reduce costs, easiness of use so community members can operate the routers, use of router for IoT networks and use for voice communication.

Jennifer Chung spoke of Ajitora.asia, dot Asia's flagship initiative to promote local content in Asia Pacific region in partnership WWF Asia. Ajutora focus in the plight for tigers in the Asian context and to raise awareness about why it is important to protect them and how they can be protected. She also spoke of two recently launched initiatives, TechWomen.asia to increase the number of women involved in STEM Careers in the Asia Pacific region and a Youth Ambassadors program to learn about internet governance.

Shita Laksmi spoke about how the way in which technology and content respond to community needs is constantly shifting. She spoke of some research surveys conducted by HIVOS around the use of technologies by communities and civil society organization and concluded that we must study not only the technology, but also the human factor that comes into play. She emphasized that the shaping of local contents is a continuous process

Michael Ginguld spoke of his experience running AirJald, a 10-year-old Indian ISP that serves over 230,000 clients. In rural areas, connectivity costs are higher than than in urban areas and people are more sparingly distributed which makes servicing these areas a though business exercise. He then went on to highlight a number of recommendations to work and succeed in such contexts including: recruit and train locally, fit the cost to the job –for instance, investing in adequate equipment, source energy locally, pay people well (even the locals), think of how to scale and, make money to ensure you are able to run a sustainable business and stay ahead in innovation.

Steve Song, on the other hand, spoke of business models for last mile connectivity. He explained that when one thinks of connecting the rest of the world, the dominating narrative has been that mobile networks is the answer. But mobile growth is slowing and that current mobile network models are not driving connectivity in rural areas, and so innovation is needed, as seen in the panel, in technology, business models and regulation. He also spoke of a creative tension between community-based and commercial approaches to access with almost two different narratives. He spoke of the importance of bringing together community networks movements and lines of thought about how to build sustainable business models closer together. Lastly, he explained that while technological innovations are essential, the most interesting innovations are human-centred innovations

Jochai Ben-Avie spoke of the work of Mozilla and its commitment to connecting the unconnected. He spoke about the Mozilla Innovation Challenge and provided some high level overview of the type of innovations they identified to provide affordable access. These included: 1. Funding Access: If you don't want to or cannot pay for access, how do you change dynamics to bring connectivity to the unconnected. Examples included advertising models, micro financing, public hot spots, etc. 2. Innovation around building access. Examples, innovative use of TV white space, using innovative technologies that are more cost effective, among other. 3. Innovations around governing access and community models, that is to say, how do you work with a community to build a network. 4. Innovations around teaching access and digital literacy, teaching what is the internet, what is data, what are apps, how does it all work. 5. Using access in ways to help people see incentives to build content and get people to understand why they should be coming online.

- Please describe the Discussions that took place during the workshop session (3 paragraphs):

Discussion centered around how do innovations come about and the role of regulation.

On how innovation comes about, the discussion centered on how there is no single silver bullet that is going to connect the unconnected. Also in thinking how to bring people online, one must reflect upon their purpose to connect. Jochai Ben-Avie recommended to work with an open and wide community that bring up different perspectives, open innovations to help find those local solutions. In the case of the LibreRouter team, they highlighted that in their case, innovation came from interactions with the community, the problems they identified and that then teams of developers jumped in to work on the hardware and software. They highlighted the importance of open innovation or agile innovation, that is to say, building on things that are developed by others as well as improving and building collectively.

In relation to how to spark innovation, Michael Ginguld spoke of the importance to collaborate around something from which everyone benefits. Steve Song explained that one way to kick-start innovation is by having more transparency; as an example, he spoke of how spectrum allocation is not public information in most countries, hindering innovation. Panelists were also asked to say one word about ideal conditions to innovate; they responded openness, multidiscipline, flexibility to accept risk, collaboration, purpose, community and diversity.

On the role of regulation, Steve Song emphasized that in telecommunications, innovators work around regulation developed long ago and thought for state-run telecommunications. Now the ecosystem has changed significantly and for last mile connectivity we need to create a new environment that enables small service providers. Michael Ginguld spoke about how for his small ISP, regulation was seen as a challenge they need to raise to: "As an ISP, challenges force us to innovate. Changes in regulation are not coming any come

soon, so we have to work with what you have." Carlos Rey-Moreno spoke of how changes in regulation around spectrum could impact communities' wellbeing as a lot of income is spent in communications.

- Please describe any Participant suggestions regarding the way forward/ potential next steps /key takeaways (3 paragraphs):

Participants inquired about: copyright reform and how copyrights affect content; compliance with technical standards in community networks, how innovators work around regulation and the importance of having multidisciplinary teams including lawyers and policy-makers, and ideal conditions to innovate.

Gender Reporting

- Estimate the overall number of the participants present at the session: 60

- Estimate the overall number of women present at the session: 22

- To what extent did the session discuss gender equality and/or women's empowerment? N/A

- If the session addressed issues related to gender equality and/or women's empowerment, please provide a brief summary of the discussion: N/A