

## IGF 2018 Messages - Digital Inclusion & Accessibility

### Overarching messages

- The Internet is really a powerful tool for inclusion -- probably the most useful tool. On the other hand, the Internet itself, if not utilised in the right direction, will easily lead to digital exclusion. Even with availability of access, a lack of trust in the Internet will deepen the existing digital divides in various forms.
- It has taken more than 20 years to connect close to 50% of the world's population -- can we afford another 20 years to ensure digital inclusion for the remaining 50%? The UN Secretary-General has emphasized that “the imperative to leave no one behind is just as relevant in the digital world” -- so what is the role of IGF community as a whole, and respective stakeholder group roles, as we edge toward target implementation and deliveries of the 2030 Agenda for Sustainable Development and to ensure human rights are respected for all?
- Global statistics tell us that the average cost of Internet access continues to fall and over 70% of the world’s population are now living within range of mobile networks. However, despite increased awareness and development efforts, multiple forms of digital divides remain - from access and connectivity, to capacity divides and gender divides. But there is a growing consensus on the need for more diverse policy perspectives on the root causes and consequences of digital inclusion. A cross-sectoral, interdisciplinary and integrated approach is essential to the fabric of the multistakeholder process -- to consider digital inclusion root causes and the inclusive design and deployment of new technologies, and to identify, understand, and address new and cross-generational issues.

### Access & connectivity

- Internet access is a key component in thriving innovations. This is about more than access and connection and being an enabling tool -- it is an empowering tool, not just in gaining decent work and employment but also for social inclusion. Equally important to support Internet access is also to ensure that people have a meaningful access that can impact their lives for the better. It is, therefore, important to focus on not just technical aspects but also human [or social] aspects of connectivity.
- Challenges in access and connectivity remain and take different forms in various environments -- a lack of conducive regulatory environments and legislative frameworks that support last mile and rural connectivity, and new technologies in general; inadequate enabling infrastructure (including rural power and backhaul); and some commercial operators focusing on lucrative urban rather than rural connectivity, among others. High access costs due to geographies is also an issue, especially for landlocked developing countries (LLDCs) and small island and developing States (SIDS).
- 5G, starting with its cost-effective features, is envisioned to be a cornerstone infrastructure for digital economy and inclusion. Questions remain on its time-to-market and other enabling factors. On a similar note, mobile connectivity, IoTs and AI are among some new assistive technologies that display strong evidenced success and yet untapped potential to address efficiently the basic needs of the underserved, meeting SDG targets and indicators on electricity, water, education, healthcare and transport, among others.
- In enabling Internet access, in addition to feasibility, both affordability and sustainability should be kept in mind. In some lower income or developing countries, people might not feel the need

to pay for Internet access (as a priority above other, more essential, services), or simply be unable to access the Internet in a meaningful and consistent way due to system inadequacies or a lack of infrastructure. Some simple but innovative examples of ways to address these issues are relevant and replicable. Feasibility is only one aspect of addressing Internet accessibility.

- Governments have a key role in facilitating the adoption of new technologies like 5G, IoTs, AI for the improvement of its population's accessibility and connectivity. Such technologies are expected to expand rapidly and improve connectivity and inclusivity for the benefit of consumers, innovators and business. Governments should therefore consider its role in allocating sufficient spectrum for mobile connectivity, especially at low bands and exploring network and spectrum sharing in rural areas.
- Accessibility should be all-encompassing. There was a strong support for the view that IGF also has to live up to its commitment to the United Nations Convention on the Rights of Persons with Disabilities (CRPD). A number of accessibility problems were pointed out by DCAD (DC on Accessibility and Disability) members, including but not limited to: remote participation, website (schedule format, online registration), and physical accessibility.

### Digital inclusion of vulnerable groups

- Digital inclusion can also lead to exclusion. For instance, the introduction of digital literacy programmes will not benefit those who are currently unconnected.
- A reminder on the prevalent global demographic trend of urbanization and smart cities is that cities should exist to serve the needs of society and all people, not the other way around. As an integral part of the population, the needs of persons with disabilities, older persons and other vulnerable groups should be part of thoughtful and integrated into the designs of cities. Likewise, urban slum conditions that need to be tackled with various policy measures, should include the use of relevant technologies. This could be done through incorporating tried and trusted criteria such as World Wide Web Consortium standards and Universal Design. New and innovative people-centric approaches are also encouraged.
- **Persons with disabilities** - More often than not, a connected person has substantial advantages over a disconnected person. For people with disabilities, this societal division is often wider when access to internet and ICTs is unavailable or unaffordable, and where many Internet based applications and tools are not designed to meet the needs of those with a disability. The needs of persons with disabilities are not sufficiently reflected in the Internet development and design of technologies -- and this calls for a radical change in embracing this aspect as well as conditions for other vulnerable groups. For instance, artificial intelligence (AI) technologies can assist people with disabilities and other marginalized groups to access technology and establish or improve their professional, educational and human connections.
- **Refugees and migrants** - Digital inclusion is also particularly important for refugees, as the Internet serves as a critical medium for access to information and connecting to loved ones. In addition, technologies such as blockchains and AI have also been increasingly deployed in an effective manner to empower and deliver basic services to refugees and migrants.
- **Indigenous people** - People living in indigenous reservations lack basic access to services like electricity and therefore to the Internet. As such reservations also occur within higher developed countries, it is important to adopt suitable regional or local approaches to ensure digital inclusion.

### Community networks

- Lessons drawn from over 100 case studies show that deliberate efforts are needed to bring together two communities at large: the practitioners who work on projects at the grassroots level, and the development policy and investor community, which has expertise in improving social outcomes through policy, regulation and financing.
- The establishment of community networks has emerged as a concrete alternative to address the challenge of connecting the unconnected. Successful community networks rely on the active participation of local communities in the design, development, and management of network infrastructure as a common public resource. Community networks give rise to new infrastructures, new governance models, new business opportunities, and facilitate the free flow of information and knowledge, filling the lacunae left by the traditional Internet access-provision paradigm. Moreover, they offer a promising strategy allowing individuals to build connectivity.

Policy and regulation could facilitate the development of last mile and rural connectivity initiatives.

- One useful and tested output coming out of the IGF's Dynamic Coalition on Community Connectivity is [The Community Network Manual](#). The Manual provides useful guidance on how to build, organise, and deploy community networks through toolkits, guidelines, and instructions.
- At times, community networks face problems in finding a regulatory framework which could be adapted to the needs - often because such frameworks have never been considered by policy makers (most likely due to a lack of awareness that the need exists). Regulators may, however, be receptive developing frameworks when they gain awareness - including through dialogue with people - of these needs.
- Technological development increasingly provides new opportunities for libraries as cloud computing and the possibility to host digital content in safe servers while libraries in developing countries would only need an internet connection and computers. Community anchor institutions enable meaningful access and support economic empowerment. Libraries act as strategic players in forging partnerships and furthering Internet accessing goal.

## Net Neutrality

- The value of Internet access lies in the content itself and the ability to share content (notwithstanding harmful contents disinformation and misinformation). Neutral networks will allow equitable exchanges over the Internet.
- Detecting violations in net neutrality is usually not an easy task. It is always challenged by new emerging technologies (e.g. 5G and slicing) and new practices such as zero-rating.
- The empirical research producing the [Zero Rating Map](#) can be an invaluable resource to inform policymakers, regulators and other stakeholders on the evolving trends. One example of the use of this map was that it has been included in the [French Telecoms Regulator \(ARCEP\) report on the State of the Internet](#).
- Precisely for these challenges, the IGF ecosystem could do more to (i) articulate precisely what is net neutrality and the consideration of regulation; (ii) develop crowdsourcing models for feedback and buy-ins; (iii) encourage research and development on the measurement of net discrimination. Modalities should also be extended to detecting discrimination practices in devices or platforms that limit freedom of user choices and fair business competition.
- Measuring net neutrality is also difficult because it depends on who is measuring and what is being measured. Notwithstanding that such measures could be biased, it is encouraged to share innovative or common practices that could emerge as best practices and possibly as eventual norms. The entire ecosystem should be supported by an enabling environment with awareness that variations in time and space are also affecting measures. Crowdsourcing can be an option to verify net neutrality, allowing users to collectively provide input when they are confronted with discrimination posed by non-neutral networks.

## Online education and digital capacity development

- Digital skills training programs complement traditional connectivity and improve economic outcomes for vulnerable communities. These include not only content development for users, but also technical know-how on ensuring sustainability of networks and community training for equipment maintenance, especially in underdeveloped communities.
- In some countries, the fear of adoption of technology is related to the fear of losing jobs. As this weakens economic development and growth, the gains of automation and Internet development should be redistributed fairly to both innovators and legacy skills. Retraining workers and adapting public policies (in areas such as industry or workplace relations policy) offer possible solutions for this.
- Digital literacy is important - but digital inclusion is about more than digital literacy. It goes beyond browsing the Internet and using computer applications, to understanding and leveraging the power of the Internet to bring social and economic change to the community -- to bring decent work and employment, social inclusion and a means to bridging the gaps between rural and urban populations.
- Without digital literacy training we can build all the networks we want but will not accomplish the goals we seek.

- Even though the need for capacity building is stressed in various policy circles, supply and demand expectations do not always match. In this regard, the multistakeholder nature of Internet governance does not always match involvement of all stakeholder groups in capacity development programmes.

Given the prevailing trends, it is likely that a number of countries will not be able to achieve the Sustainable Development Goal Target 9c -- to provide universal and affordable access to the Internet -- by 2020 (notwithstanding that digital inclusion is more than the core of accessibility). Gaps in today's digital inclusion will not be bridged by simply focusing on expanding broadband access. An inclusive society can only be realised if policymakers and stakeholders are aware of the root problems and are committed to solving them. Improved data systems, engagement and multistakeholder partnerships are needed, together with appropriate legal frameworks that are in line with relevant international conventions and recommendations that assert full digital inclusion.

*\*For any questions or comments regarding the IGF 2018 Messages, please write to [igf@un.org](mailto:igf@un.org).*

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