IGF 2024 Policy Network on Meaningful Access
Plenary Report
Tuesday 17 December, 09:00 - 10:15 (UTC+3)
Plenary Hall, King Abdulaziz International Conference Center (KAICC)
Riyadh, Kingdom of Saudi Arabia

Session title: Eight possible ways to conciliate "access" with "meaningful"

1. Line-Up:

Chairs of the PNMA (onsite moderation): Hon Alhagie Mbow (MAG Member) and Giacomo Mazzone (independent)
Remote moderation: Ms. Judith Hellerstein (DCAD) and Mr. Roberto Zambrana (ISOC)
Special Guest [remote]: Mr. Vint Cerf - Leadership Panel
Video participation: Mr. Oscar León, CITEL, Organization of American States (OAS)
Speakers:

- [remote] Ms. Syeda Shafaq Karim, Director (Wireless Licensing), Pakistan Telecom Authority
- Prof. Mohamed-Slim Alouini, Al-Khwarizmi Distinguished Professor of Electrical and Computer Engineering; UNESCO Chair in Education to Connect the Unconnected at the King Abdullah University of Science and Technology (KAUST), Saudi Arabia
- Mr. Martin Schaaper, Senior ICT Analyst, ICT Data and Analytics Division, International Telecommunication Union (ITU)
- Mr. Talant Sultanov, Chair and Co-Founder, Kyrgyz Internet Society (ISOC Kyrgyz Chapter); Policy Advocacy Advisor, Global Digital Inclusion Partnership (GDIP)
- Mr. Bobby Bedi, Content Flow Studios FZ LLC
- Mrs. Lina Viltrakienė, Ambassador-at-large for Economic and Digital Diplomacy, Ministry of the Foreign Affairs of Lithuania

PNMA Focal Point: Daphnee Prates Iglesias, UN IGF Consultant for Meaningful Access

2. About the session / key policy questions

The concept of meaningful access has emerged in response to the growing body of evidence that even when people have connectivity, they might not have been fully benefiting from the Internet. How one gets connected to the Internet and to which contents and services one can access is an equally important challenge to the experience that a person will have once they are online, even more so to the community/country in which they live.

Since 2022, the PNMA has been working on three overarching thematic workstreams: Connectivity (Infrastructure & Business Models), Digital Inclusion through a citizen-centric approach (accessibility & multilingualism: local services and contents in local languages based on local needs and resources) and Capacity Development (technical skills training). The policy network has actively contributed within and outside IGF communities to identify a certain number of good practices and policy solutions, and retain them as possible models to be exported or applied to other regions of the world. Stakeholders from different groups joined this enterprise: government, international organisations, academia, private actors, non-profits and local or language-based communities.

During 2023, the PNMA expanded its analysis of said experiences with implementation and problem-solving of the issues previously raised. By building a PNMA Repository of Good Practices, the network was able to assess reasons on why practices have or have not expanded, why digital divides persist, and which structural issues repeat themselves in different scenarios. The PNMA 2023 Output Report reflects the collaborative work and the group's list of recommended actions on meaningful access.

During 2024, the PNMA has contributed to assist and advocate for the implementation of policy solutions for the key issues previously raised, while monitoring ongoing experiences and welcoming new practices. The continuous multistakeholder public debate on the above mentioned focus areas takes into account the Global Digital Compact (that has adopted the concept of meaningful access in its final text and recommendations), the deliberations from NETMundial+10, and the WSIS+20 and IGF+20 processes.

The PNMA Plenary Session 2024 aimed to present to the IGF´s online and onsite audience in Riyadh eight different cases of meaningful access, with a focus on two aspects: examples of meaningful access success stories - within the Arab region - and the role of meaningful access in the proper setup, use, and reporting of crisis response mechanisms (e.g., alert and emergency systems connected to natural disasters).

IGF 2024 sub-theme: Advancing human rights and inclusion in the digital age

3. Opening Remarks

Hon. Alhagie Mbow welcomed attendees, emphasising the significance of addressing not only internet access but also ensuring its meaningfulness. This involves safety, affordability, satisfaction, and productive engagement in the digital ecosystem. Giacomo Mazzone explained how the main session would work: each speaker will have sufficient time to explain about their success cases before the plenary can move on to a discussion.

4. Summary of issues discussed

The Plenary started with Mr. **Vint Cerf**'s remarks that "access that isn't useful can't be meaningful." He concentrated his statement on the importance of proper measurement of said access - considering security, utility, affordability, and accessibility - and on the good work that the PNMA has been doing on the topic. In particular, he stressed the point of affordability and the need of specific policies to ease the access to the Internet to the poorest. As a yearly process, the policy network can timely follow discussions and respond to quick changes in technology. As Chair of the Leadership Panel, Vint Cerf stated that a message to the UN Secretary-General on the permanence of IGF, regarding the upcoming WSIS, is being prepared: "Our work is not done. Our work continues to be extremely important, and I believe that we should persist, beyond the WSIS+20 timeline".

After this timely introduction, each speaker brought forward their case in this order:

Speaker 1: Prof. Mohamed-Slim Alouini, Al-Khwarizmi Distinguished Professor of Electrical and Computer Engineering; UNESCO Chair in Education to Connect the Unconnected at the King Abdullah University of Science and Technology (KAUST), Saudi Arabia

- Case: [Airborne 5G communications](#)
- This is one of the two cases issued from the Arab region presented in the session.
- The idea is to develop technologies that can be easier to deploy from an accessibility and affordability perspective to bring more people online. One of the technologies the Professor is pursuing is a network to bring connectivity from the sky.
- 6G is expected to be deployed in the early 2030s, but there is a need to act now in order to mitigate the Digital Divide.
- One of the main costs of connectivity is spectrum fees - this is what makes it sustainable from a business perspective. It works well in highly dense, populated environments and in areas with very good income. This can make connectivity not affordable in low income neighbourhoods or rural areas.
- The case in question was the setup of connectivity to a low-income neighbourhood (a worker camp). It was a project co-founded by KAUST and Meta, and executed in collaboration with the Saudi Commission of Communication Space Technologies. The experience that was supposed to be temporary was so successful that it is still going on and is now expected to be replicated in other parts of the country.
- There are other places in KSA that can benefit from this kind of communication; its employment is also linked to resilience: "investing in this technology would allow us to deploy this network on demand" when subject to natural disasters.
- The speaker highlighted the economic potential of universal digital inclusion, explaining its correlation with GDP growth and innovation. Suggested strengthening public-private partnerships, pointing to the presented case as a benchmark, besides stressing that collaboration across sectors is critical for scaling infrastructure and addressing affordability issues.

NB: an in-depth description of this case can be found in the [2024 PNMA yearly output report](#) (see case C01 - Connectivity).

Speaker 2: Ms. Syeda Shafaq Karim, Director (Wireless Licensing), Pakistan Telecom Authority

- Case: Pakistan's [Digital Gender Inclusion Strategy](#)
- Focused on the gender digital divide, citing systemic barriers preventing women from fully participating in the digital world.
- The digital gender gap in Pakistan was 20% in 2018, which is reduced to 2% in 2024. However, mobile ownership rate is only 38% by women.
- The initiative came as a public plan to bridge the Digital Divide and formulate specific actionable items, Agenda mainstreaming, and liaison with public and private partners to implement joint projects. "We decided to liaison with Partner organisations to implement joint projects in the gender divide."
- A few of the partners are telecom operators (e.g., PTCL, China Mobile, Telenor), ITU, UNESCO.

- The strategy's key goals are affordability, improving digital skills, creating awareness, safety and security, and providing access to gender disaggregated data. As collaboration with various stakeholders is key, the strategy also touches upon women rights, education, access, content and target to meet for reducing the gender gap.
- It is a 3-year action plan. Hence, the speaker advocated for localised community-driven initiatives to teach digital literacy, particularly targeting women, youth, and elderly individuals. The shared success stories from Pakistan proved how tailored programs improved women's participation in digital spaces.

NB: an in-depth description of this case can be found in the 2024 PNMA yearly output report (see case DI01 - Digital Inclusion). The slides of this presentation are available in the PNMA Repository.

Speaker 3: Mr. Martin Schaaper, Senior ICT Analyst, ICT Data and Analytics Division, International Telecommunication Union (ITU)
- Case: Universal and Meaningful Connectivity yearly update
- ITU defines universal and meaningful connectivity as the possibility for everyone to enjoy a safe, satisfying, enriching productive online experience at an affordable cost. "Meaningful is not just what you do with it, but that you can use it whenever you want to for a reasonable price."
- The institution is concentrated in providing data, as this is very important for policymaking. The speaker proceeded to showcase statistics released in the previous month, about people online per continent (e.g., Middle East - 70%; Africa - 38%). He highlighted regional disparities in connectivity, with developing countries lagging behind significantly.
- On affordability, mobile is affordable in most of the world with a cost of less than 2% of someone's monthly income; however, broadband can be totally unaffordable in some regions, reaching up to 13% of an individual's monthly income.
- The UMC publications also bring data on different usage gaps, internet traffic and other important matters. The ITU has a 3-year EUR3 million funding from the EU to work for measurable and meaningful connectivity globally. Their four streams and achievable outputs are in the areas of:
  - advocacy work, for increased awareness of the whole concept;
  - data collection and dissemination;
  - capacity building to enhance the statistical capacity and also the awareness to measure UMC;
  - research that should lead to better policies to UMC achievement.
- The project produces a report every year for the next three years. So the next report will probably be out in the second or third quarter of 2025, accompanied by regional and thematic analyses.
- The speaker stressed the need to redefine internet access beyond basic connectivity to include reliability, quality, and affordability. He called for better data collection frameworks to identify gaps and design evidence-based interventions.

NB: an in-depth description of this case can be found in the 2024 PNMA yearly output report (see Case 1 of Section 6 - Collaboration streams beyond the IGF: Intersectional Works). The slides of this presentation are available in the PNMA Repository.

Speaker 4: Mr. Oscar León, CITEL, Organization of American States (OAS)

- Case: Global Best Practices to empower underserved areas in Latin America and the Caribbean [video message]
- Inequalities in LAC are exacerbated by outdated and inefficient regulatory policies, limiting the economic, social and development of the region. This includes issues such as high Internet cost, lack of political interests, low digital skills, and deficient infrastructure.
- A digital transformation is needed. The initiative to support telecommunications policy reforms has bridged the Digital Divide in Latin America and Caribbean, guided by 21 impactful guidelines and strategic roadmaps to ensure implementation. The guidelines serve as a blueprint for progress measurement, encompassing diagnostics, development and evaluation of solutions.
- By optimizing universal service points, fostering public private partnerships in regulation logistics, CITEL enhanced access to the Internet and essential services. Connecting the disconnected areas has provided technical support to focus on the implementation of affected public policies and regulatory reforms.
- The activities were possible via a multisectoral approach among governments, private companies, NGOs and local communities. For instance, developing sustainable business models and creating flexible public policies that attract investment in telecommunications is one example of an applicable solution.
- The project has required governmental commitments to modernise the country's legal framework and invest properly in infrastructure that drives inclusive and sustainable digital transformation.

NB: an in-depth description of this case can be found in the 2024 PNMA yearly output report (see Case CD04 - Capacity Development).

Speaker 5: Mr. Talant Sultanov, Chair and Co-Founder, Kyrgyz Internet Society (ISOC Kyrgyz Chapter); Policy Advocacy Advisor, Global Digital Inclusion Partnership (GDIP)
- Case: Low-Cost Weather Stations in Kyrgyzstan's Challenging Terrain
- This case is one example of how the Internet could help the population providing alert and emergency systems connected to natural disasters
- The project, in fact, provides access to weather tools, climate monitoring tools, and data for rural communities in Central Asia, using IoT, sensors, and other technologies. The monitoring started to prevent natural disasters and water shortage, together with ISOC Foundation, ICPT, and ISOC Kyrgyz Chapter.
- The technology developed for this terrain can be installed in flat areas, to monitor soil temperature and moisture; it can be used in the water as well, and in the mountains to monitor glaciers and mountain lakes.
- The same instrument and antennas used for the weather stations can also be used to provide internet connection to remote areas, operating similarly to a community network.

- Some people are using the same technology already in Finland, for animal monitoring.
- Next steps are using the data collected by the weather stations and applying machine learning.

Speaker 6: Mrs. Lina Viltrakienė, Ambassador-at-large for Economic and Digital Diplomacy, Ministry of the Foreign Affairs of Lithuania
- Case: No One Left Behind - Digital literacy for the elderly people
- Speaking of the Lithuanian experience, the government had to allocate resources specifically to ensure digital inclusion of the elderly people. An investment of EUR 2 million was recently made to improve digital skills of socially vulnerable groups, particularly elderly people and residents living in remote areas.
- The government's targets for 2030 are:
    - 80% of adults equipped to perform everyday digital tasks;
    - 100 key public services being provided online.
- A multistakeholder approach involving different parts of the government and also private sector and civil society was launched in 2023: "No One Left Behind" focuses on digital inclusion of senior citizens, reached via their communities.
- It is being executed via a public-private partnership involving more than 140 collaborators, including state authorities, private sector, municipalities, media, and others.
- The main results of the project after its first year of existence are:
    - Seminars were held at 18 Third Age Universities;
    - Remote seminars reaching rural areas through digital platforms (Senior Worlds or Zoom).
    - Partnerships with 33 municipalities, providing facilities to the elderly people.
    - Trained 3,500 seniors and 1,500 schoolchildren on different issues, including cyber threats and fraud prevention.
    - Built people's confidence in the digital world.
- The project expansion is planned for next year, including training for other vulnerable groups, such as jobless and socially isolated people.
- The speaker's most significant remark was that "it is very important for all the projects, for all the stakeholders involved in bridging the gaps, to be close to those with whom you are working. So be as close as possible, be it libraries in the case of Lithuania. Be it postal offices, in the case of Kenya, where we have a project (...) providing training and skills to elderly people there."

NB: an in-depth description of this case can be found in the 2024 PNMA yearly output report (see Case DI03 - Digital Inclusion).

Speaker 7: Mr. Bobby Bedi, Content Flow Studios FZ LLC
- Case: Meaningful access to local communities via media
- This is the second of the two cases issued from the Arab region presented in the session, illustrating how it is possible to produce local fiction content in local languages within the Arab region using the new possibilities offered by the Internet (both for production, as well

as for distribution). Content Flow Studios, even if based in India, has found fertile ground and markets in Saudi Arabia and is developing cooperation across the region.
- The speaker concentrated his intervention on the role of entertainment and cultural content in local languages in driving internet adoption, particularly in underserved regions.
- The speaker discussed that the Internet is an open forum where people can tell their stories. They engage, entertain themselves, engage with the environment, and educate themselves about the world around them. Hence, it is important to advocate for integrated, culturally relevant and locally created digital content in national strategies to foster engagement. That makes access meaningful in many ways.
- Urged policymakers to recognize the importance of entertainment as a gateway to digital literacy and productivity.

5. Open discussion and Q&A

Both online and onsite participants engaged in a vibrant exchange, led by the two remote moderators (Judith Hellerstein and Roberto Zambrana), raising critical questions on funding, cybersecurity, and stakeholder accountability:
- Concerns about cybersecurity risks associated with expanded digital inclusion were discussed.
- The importance of involving youth, elderly, and marginalised voices in policymaking was highlighted.
- A participant shared insights on a cost-effective community network model implemented successfully in their area. Yet, they pose the question of which approach is better to deploy universal service funds: a commercial or a social strategy to connect the unconnected?
- There was a suggestion from the floor to include intellectual property in the global UMC measurement, as intellectual property also needs to be protected in the digital world.

6. Common Key Challenges and Proposed Solutions

Following such timely remarks, it is worth noting common key challenges identified in all presented cases:
- Persistent digital divide in gender, geography, age, and socioeconomic status;
- Inadequate data to assess and monitor the progress of digital inclusion efforts;
- Lack of affordable and reliable infrastructure in remote and rural areas.

Similarities in strategies and solutions were also observed amongst the featured cases. Each speaker highlighted the importance of having localised, targeted data that allows multistakeholder models to flourish, aiming at a collaborative implementation. This ensures proper measurement of meaningful connectivity, as well as an effective identification of underserved populations - launching tailored, culturally-relevant programs to them.

7. Key Takeaways

The Plenary Session ended with the agreement that meaningful access needs a holistic approach to its success. It also requires affordability, reliability and relevance for users. Building a digital transformation strategy needs to include the target groups as well, making the Internet a welcoming place to them; localised content in local languages plays an essential role in promoting meaningful Internet adoption.
The Policy Network on Meaningful Access' key takeaways are:

- Meaningful access is a concept and practice rapidly expanding across all regions; as recognised by the approved Global Digital Compact back in September, 2024, this is the right way to ensure connectivity through the provision of content in local languages, and establishing services that actually improve the community's livelihoods.
- A "whole of society approach" while dealing with meaningful access is essential: connectivity, digital inclusion, and capacity development goals may only be achieved by multistakeholder cross-collaboration and multidisciplinary operating lenses.
- Reliable measurement tools are needed: after many years of discussing policy loopholes, it is now clear that reliable tools to frequently measure where the issues persist are still in demand, as well as to assess policy effectiveness. Alternative solutions for such measures, beyond direct regulation, can be explored in order to avoid unnecessary burdens.
- Access is not possible without affordability: the price of access (of services, devices, and infrastructure) persists as one of the main barriers to connectivity. This needs to be urgently addressed if we really want the other half of humanity to join the Internet.
- Good practices' acknowledgment: the success cases raised by the PNMA during its operation years – collated both in its Repository and presented at the Annual Meetings – shall be proactively promoted by the IGF and the Leadership Panel, throughout regions and institutions, so their impact is amplified.

8. Calls to Action

- Strengthen data collection efforts to measure and guide meaningful connectivity policies.
- Implement targeted digital literacy programs to empower underrepresented groups.
- Foster collaborative partnerships between stakeholders to address infrastructure and affordability challenges.