**IGF 2024**

**Policy Network on Meaningful Access**

**First working draft report**

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## **Executive Summary**

Developed in the final version of the report

## **List of Acronyms**

To be completed/updated by the final version of the report

AAU Association of African Universities

AFN Ads for News Initiative

AFNOG Africa Network Operators Group

AFTLD Africa Top Level Domains Organisation

APC Association for Progressive Communications

AUC African Union Commission

BTRC Bangladesh Telecommunication Regulatory Commission

CN Community Network

COW Community Owned Wireless

DACD Development Agenda Coordination Division

DNS Domain Name System

DNSSEC DNS Security Extensions

DSO Digital Switch-Over

DTT Digital Terrestrial Television

DTTB Digital Terrestrial Television Broadcasting

EAI Email Address Internationalisation

EMF Electromagnetic Field

GARM The Global Alliance for Responsible Media

GoS Grade of Service

ICANN Internet Corporation for Assigned Names and Numbers

IG Internet Governance

IGF Internet Governance Forum

IIG International Internet Gateway

IMRS ICANN Managed Root Server

IP Intellectual Property

ISOC Internet Society

ISP Internet Service Provider

ITU International Telecommunications Union

NSRC Network Startup Resource Center

NTTN Nationwide Telecommunication Transmission Network

NUPEF Núcleo de Pesquisas, Estudos e Formação

PNMA Policy Network on Meaningful Access

PRIDA Policy and Regulation Initiative for Digital Africa

SIG School of Internet Governance

SME Small and Medium Enterprises

SMS4DC Spectrum Management System for Developing Countries

UA Universal Acceptance

UASG Universal Acceptance Steering Group

UGC User Generated Content

WAN-IFRA World Association of News Publishers

WBU World Broadcasting Unions (ABU,AUB,AIR,ASBU,CBU,EBU,NABA)

WIPO World Intellectual Property Organization

WRC World Radiocommunication Conference

## **Introduction**

### About meaningful access

The concept of **meaningful access** has emerged in response to a growing body of evidence that even when people have connectivity, they might not have fully benefited from it. How one gets connected to the Internet is an equally important challenge to the experience that a person will have once they are online, even more so to the community/country they live in. While access to infrastructure is critical, without this access being inclusive, useful, sustainable and affordable, linked to human capacity development and relevant content that can make it so, the impact connectivity could have will not achieve its positive potential. Many of the access efforts, unfortunately, are only focusing on bringing connections to final users (i.e., consumers), without taking into consideration the potential of the Internet to create, communicate and produce content and services locally and in local languages (i.e., citizens), and what it will take to realise this.

### About the Internet Governance Forum (IGF)

The Internet Governance Forum (IGF)is a global arena, convened by the United Nations’[[1]](#footnote-1), where governments, civil society, the Internet technical community, academia, the private sector, and independent experts exchange information and share best practices around Internet governance and policy issues.[[2]](#footnote-2) It brings together different stakeholder groups as equals, working as a facilitator of a common understanding of the Internet opportunities and threats.

In 2024, the nineteenth annual meeting of the IGF will explore the overarching theme “Building our Multistakeholder Digital Future”. This is a hybrid event hosted by the Kingdom of Saudi Arabia between 15 and 19 December in Riyadh, and online. The PNMA activities can be found under the subtheme “Advancing human rights and inclusion in the digital age”.

### About the Policy Network on Meaningful Access (PNMA)

The Policy Network on Meaningful Access (PNMA) is a type of intersessional activity under IGF created to establish an expert-led framework network on broad Internet governance topics that create spaces for in-depth multistakeholder efforts. It aims to identify best practices and successful solutions applied somewhere in order to formulate impact-driven, concrete, and actionable policy recommendations on how to achieve meaningful and universal Internet access aligned with the Secretary-General's Roadmap for Digital Cooperation and the Sustainable Development Goals. The PNMA foundations are grounded on:

* the IGF mandate at paragraph 72 of Tunis Agenda, for the exchange of information and engagement of stakeholders - in particular from developing countries - as well as capacity development in Internet governance;
* the paragraph 93(e) from the United Nations Secretary-General’s Roadmap for Digital Cooperation as it envisages a strengthened IGF with a view to making it more responsive and relevant to digital issues, and streamline priority areas (global connectivity, digital inclusion, capacity building);
* Our Common Agenda First Commitment (“Leave no one behind”) and Seventh Commitment (“Improve digital cooperation”);
* the Global Digital Compact future engagements.

Officially starting its activities in June 2021, the Policy Network has successfully built a network of partners - its Multistakeholder Working Group (MWG) - ; arranged connections with ongoing relevant discussions and actions in other fora; and built a repository of good practices. As decided during its foundation, the MWG – composed by representatives of groups and communities concerned by the Meaningful Access – “agreed to explore concrete actions the members of the PNMA could support so that [our] main outcome is not only a set of recommendations”[[3]](#footnote-3).

In 2022, the PNMA’s analytical focus was on the community’s agreed three overarching thematic workstreams: Connectivity (Infrastructure & Business Models), Digital Inclusion through citizen approach (accessibility & multilingualism: local services and contents in local languages based on local needs and resources) and Capacity Development (technical skills training). During that year’s intersessional activities, the policy network actively contributed within and outside IGF communities to identify a certain number of good practices and policy solutions, and retain them as 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. The [PNMA 2022 Output Report](https://www.intgovforum.org/en/filedepot_download/255/24314) features a collation of selected cases for each of the focus areas. Additionally, one section of the document is devoted to recommendations around meaningful access and its expansion.

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](https://intgovforum.org/en/content/pnma-repository), 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. Throughout online monthly deliberations and the outcomes of the plenary discussion held in Kyoto, the community shared examples of how we are working towards better local content and languages online, improved meaningful connectivity, and the use of non-Latin alphabets, amongst other areas. Additionally, the policy network encouraged conversations about the intersessional work and ways of collaboration and advocacy with other IGF areas (e.g., Dynamic Coalitions and National and Regional Initiatives), the Leadership Panel, and institutional partners. Amongst these, cooperation has been renewed with IGOs such as the Internet Corporation for Assigned Names and Numbers (ICANN); the International Federal of Library Associations (IFLA); the International Telecommunications Union (ITU), and the World Intellectual Property Organization (WIPO). The [PNMA 2023 Output Report](https://www.intgovforum.org/en/filedepot_download/277/26685) reflects the collaborative work and the group's list of recommended actions on meaningful access.

**In 2024, the PNMA aims 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 will have to take into account the upcoming Global Digital Compact, the deliberations from NETMundial+10, and the WSIS+20 and IGF+20 processes.

## **The** **2024 PNMA Process**

### Goals

1. Expand the policy network’s advocacy regarding all the achievements and solutions identified through its activities into the future Digital Compact Initiative, and effectively contribute to the roadmap that went through the Summit of the Future on September 22 and 23rd, 2024 and the WSIS+20 and IGF+20 processes - this could be made building on the useful suggestions included in the NETMundial+10 final document;
2. Work upon the key issues and deliberations collated by the PNMA community during the 2023 PNMA Session Plenary, bringing them to the attention of the IGF Secretariat and of the Leadership Panel;
3. Actively promote the good practices that have been identified by the Policy Network across all stakeholder groups and through the Digital Cooperation initiative, with the assistance of the Leadership Panel and the IGF Secretariat;
	1. *Sub-goal:* focus the PNMA work on project implementation lessons and policy/regulatory conditions via a multisectoral approach and under the lens of intersectionality, scalability, and localisation.
	2. *Sub-goal:* establish a permanent call for selection of good practices to be added to the PNMA Repository, with frequent updates on implementation status.
4. Strengthen partnerships with intergovernmental organizations (IGOs) that are already part of the network (ICANN, ITU, WIPO, WBU, IFLA, etc), and welcome the involvement of new stakeholders that are relevant and active in the field of Meaningful Access;
5. By expanding the reach of the policy network, open a permanent dialogue between the PNMA community and regional and global actors (such as the EU, the AU or the OAS and other regional bodies), in order to promote regional initiatives and encourage projects’ replication and scaling;
	1. *Sub-*goal: work as a direct link to the regional bodies that could play a key role in replication efforts (e.g., involve the African Union in practices from said continent).
	2. *Sub-goal:* monitor implementation and promotion of collaborative efforts with local actors, with a special attention to amplifying the voices of least advantaged groups in the public debate on meaningful access (Youth, NRIs, Women, LGBTQIA+, Indigenous, People with Disabilities, Displaced Persons).
6. Propose public deliberation rounds and/or webinars on selected cases (for instance, on examples of policies promoting Meaningful Access) with participation of IGOs and regional bodies, in order to advocate for their collaboration on implementing or replicating presented solutions.

### Priorities

The above referred goals demonstrate there is much to push forward in the realm of meaningful access. As an incremental work, the PNMA’s current efforts will add up to the activities developed during 2023 and 2022 and will provide the foundation for follow-ups and reviews in the following year.

* **Priority 1:** in close communication with the **Leadership Panel**, **bring all the achievements and solutions identified through the PNMA activities into the future Digital Compact Initiative**, and effectively contribute to the roadmap leading to the Summit of the Future 2024 and the WSIS+20 and IGF+20 processes. The contribution will **actively promote good practices**, to be presented on a multisectoral approach following the three focus areas for PNMA analysis and under the lens of intersectionality, scalability, and localisation - with attention to lessons drawn from **project implementation lessons and policy/regulatory conditions** that enabled said achievements. Additionally, the benchmarks and good practices will **continue to be monitored for implementation and scaling**, in their region of origin and, eventually, in other regions inspired by the same process. The first step –at the beginning of the 2024 work plan – could consist in making a critical analysis of what exists about Meaningful Access in the current draft documents of all above-mentioned processes. A following step could be, e.g., to analyse the need to improve the current wordings of these drafts in view of the future debates that shall take place at the UNGA in 2025 about WSIS and IGF +20.
* **Priority 2: Amplify the voices of those groups that are less heard** in the public debate on meaningful access (e.g., Women, Youth, NRIs, LGBTQIA+, Indigenous, People with Disabilities, Minority Languages Communities) by actively listening to them and having these groups lead on what are their challenges and viable solutions to be developed. Encourage their involvement in the current PNMA Process, starting from the considerations emerged during year 2023, about the relevance of gender gap for Meaningful Access. For 2024, particular attention needs to be paid to the emerging applications of A.I. that could improve the access experience for groups traditionally marginalized.
* **Priority 3:** Under the guidance and assistance of the IGF Secretariat, open a **permanent dialogue between the PNMA community and institutional regional and global partners** (such as the EU, the AU, and the OAS), in order to involve them directly in the PNMA activities and to encourage regional projects’ replication and adaptation in other countries, with active participation of local actors.

### Focus areas

Building upon the last processes, the 2024 PNMA will keep focusing in the following themes:

● Connectivity (infrastructure and business models, analysed within the framework of the Roadmap for Digital Cooperation)

● Digital Inclusion (accessibility and multilingualism), with special attention to local contents in local languages, helping the digital transition of existing experiences

● Capacity Development (technical skills training)

### Methodology

As stated in the IGF 2021 messages, the PNMA efforts are not directed at “producing a unique definition, but [aim] to identify, map and understand the properties that those in the field identified as key”[[4]](#footnote-4) to meaningful access. Starting from the previous database of stories and case studies collected throughout the last year, the PNMA MWG can shed light on the reasons why known, effective policy solutions currently lack scaling and/or localisation in their implementation. The policy network aims to analyse the above mentioned focus areas by asking the following questions, which will lead the achievement of 2024 goals and priorities:

* What has been done so far? Analyse gaps in policy
* What are the main challenges for project scaling? Document loopholes via public debate/consultation
* What are the common features which allow a project to be localised?
* What are the social elements that support meaningful access?
* Is there any tested, multistakeholder business model that can be replicated into one or all of the analysed focus areas?
* How to promote and improve good access and connectivity, so Internet use could produce positive social and economic impact?
* How to promote and improve the quality of connectivity to support civic engagement and e-government experiences and services ?
* How could multistakeholder partnerships be strengthened?
* Is there a gap in networking, implementation, or continuity?
* Is there any relevant case of A.I. application that has contributed to increase the meaningful access experience in some areas or for certain categories? Are these experiences replicable elsewhere and scalable?

The PNMA community plays a significant role in highlighting these initiatives and bringing attention to creative solutions derived from marginalised groups – hence the remarks compiled during the 2023 PNMA Plenary Session are so important. Moreover, a close relationship within and outside the IGF is crucial to ensure that the policy network’s activities amplify the reach of successful experiences.

### Planned outputs

Based on the methodology, a few outputs are expected at the end of the 2024 process; these are listed below as end results from the selected priorities.

* ***[All priorities and discussions, including 2024 IGF PNMA Plenary Session in Riyadh]*** An informative output report that explores the Policy Network’s activities in depth and connects it with IGF 2024’s efforts on **“Building our Multistakeholder Digital Future”**. The production of a collaborative manuscript includes the following activities, not exclusively:
	+ A follow-up survey with the selected 2023 cases, monitoring their implementation/scaling along the year
	+ Follow-up and review of the key policy issues raised in the 2023 output report
	+ A report section on intersessional work with Youth IGF, DCs, and/or NRIs
	+ Engage with the activities connected to the 19th IGF Theme “Advancing human rights and inclusion in the digital age”; out of the [four main themes](https://intgovforum.org/en/content/igf-2024) selected for this edition, meaningful access is one of the main tools to develop this advancement.
* ***[Priority 1, supported by output report]*** Input to the GDC compass: first step (already done) contributing to the preparation of the Summit of the Future 2024 ~~(in the first months of activity)~~; later in the PNMA process, follow-ups of the Summit of the Future and the preparation of WSIS and IGF +20 debate.
* ***[All priorities]*** Update and expand the online and public repository for good practices, by opening a permanent round of applications for consideration
* ***[All priorities]*** Outreach and engagement activities for promotion of the PNMA agenda
* ***[Priorities 1 and 2]*** Monitor updates regarding the key issues and considerations raised by the PNMA community during the 2023 Process
* ***[Priorities 2 and 3]*** Promote public debates/webinars on shared experiences and challenges to access, featuring implementation actors and regional institutions that play a leading role in enabling successful experiences and policies for meaningful access.
* ***[Priority 3]*** Strengthen the networks and encourage new connections for advancing meaningful connectivity

The achievement of each output is discussed in this report’s final considerations.

## **The Public Debate on Meaningful Access**

[as an intro, comments on the debates and discussions around the PNMA process will be presented]

Before delving into the 2024 journey, this section explores some of the compiled knowledge on the incremental discussions held by the PNMA. To start, there is a reference list of the most relevant literature on meaningful access, collated between 2024 and the current year. We also investigate references on meaningful access on the adopted text for the Global Digital Compact. Finally, we present the key issues and considerations around meaningful access raised at the PNMA Plenary Session in 2023, and how has the policy network responded to them throughout the 2024 process.

### Literature on Meaningful Access: a 2021-2024 list endorsed by the PNMA

[to be collated from community discussions and members references until early December]

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| TITLE | AUTHOR/ORGANIZATION | PUBLICATIONYEAR | ONLINE AT | MAIN FOCUS AREA |
| A Policy Guide: Towards Meaningful Connectivity | A4AI - Alliance for Affordable Internet | 2021 | <https://a4ai.org/wp-content/uploads/2021/10/Policy-Guide-Towards-Meaningful-Connectivity.pdf>  | Connectivity / Digital Inclusion |
| ….. |  |  |  |  |
| ….. |  |  |  |  |

###

### The Global Digital Compact: Mentions to Meaningful Access

[to be added]

From the Pact of the Future ,

approved on September 22 at the UN

III. Science, technology and innovation and digital cooperation

49. Science, technology and innovation have the potential to accelerate the

realization of the aspirations of the United Nations across all three pillars of its

work. We will only realize this potential through international cooperation to

harness the benefits and take bold, ambitious and decisive steps to bridge the

growing divide within and between developed and developing countries and

accelerate progress on the 2030 Agenda. Billions of people, especially in

developing countries, do not have meaningful access to critical life-changing

technologies. If we are to make good on our promise to leave no one behind,

sharing science, technology and innovation is essential. Innovations and

scientific breakthrough that can make our planet more sustainable and our countries more prosperous and resilient should be affordable and accessible to

all.

….

54.

(c) Ensure that those in vulnerable situations benefit from and fully and

meaningfully participate in the development and application of science,

technology and innovation;

55.

(a) Address barriers to full, equal and meaningful access to and

participation and leadership in science, technology and innovation for all

women and girls, including through improving education, employment and

research opportunities for women and girls in areas such as science,

technology, innovation, mathematics and engineering;

From the Global Digital Compact

Approved on September 22, 2024

Commitments and actions

9. We commit to pursue meaningful and measurable actions to achieve our

objectives.

Objective 1. Close all digital divides and accelerate progress across the

Sustainable Development Goals

Connectivity

10. We acknowledge the pivotal role of universal and meaningful

connectivity and affordable access in unlocking the full potential of digital and

emerging technologies. We commit to connect all persons to the Internet. We

recognize that this will require strong partnerships and increased financial

investments in developing countries from Governments and other

stakeholders, in particular the private sector. We affirm the important role of

the International Telecommunication Union in advancing universal and

meaningful connectivity and invite it to further continue its efforts. We

recognize that innovative solutions can help deliver high -speed connectivity

to, inter alia, underserved, remote and rural areas.

……..

11. We commit, by 2030, to:

(a) Develop and strengthen targets, indicators and metrics for universal

meaningful and affordable connectivity, building on existing work, and

integrate these into international, regional and national development

strategies (SDG 9);

(b) … We will aim for entry -level broadband subscription costs that are accessible to the widest section of the population (SDGs 1 and 9);

(c) Invest in and deploy resilient digital infrastructure, including

satellites and local network initiatives, that provide safe and secure network

coverage to all areas, including rural, remote and “hard -to-reach” areas, and

promote equitable access to satellite orbits, taking into account the needs of

developing countries. We will aim for universal access at affordable rates and

at sufficient speeds as well as reliability to enable meaningful use of the

Internet (SDGs 9 and 11);

….

Digital literacy, skills and capacities

12. To fully harness the benefits of digital connectivity, we must ensure that

people can meaningfully and securely use the Internet and safely navigate the

digital space. We recognize the importance of digital skills and lifelong access

to digital learning opportunities, taking into account the specific social,

cultural and linguistic needs of each society and persons of all ages and

backgrounds. We recognize the need to scale up international cooperation

and financing for digital capacity development in developing countries and to

support the development of local content and content relevant to local

realities online and retain talent.

….

Objective 2. Expand inclusion in and benefits from the digital economy for

all

18. We recognize that equitable and affordable access to digital

technologies can unlock the potential of the digital economy for every society.

We recognize digital access to encompass opportunities for the acquisition

and development of knowledge, research and capacity as well as technology

transfers on mutually agreed terms.

……..

21. We commit by, 2030, to:

….

(g) Encourage North-South, South-South and triangular cooperation,

including among universities, research institutes and the private sector to

accelerate digital knowledge development and access to research capacity

(SDG 17);

### Revisiting the 2023 PNMA Key Messages and Considerations

At the 2023 PNMA [Plenary Session](https://www.intgovforum.org/en/content/igf-2023-policy-network-on-meaningful-access-meaningful-access-to-include-and-connect), which marks the end of the year’s deliberation cycle, many remarks were brought forward by the policy network on topics related to connectivity, digital inclusion, and capacity development. They reflect the community’s discussions, case analyses, and refer to issues for consideration and action via the IGF Secretariat. It was established that the PNMA community would base its follow-up activities taking into account those statements.

The issues below were revisited in 2024 and assessed as follows:

### On Connectivity

[to be added by the appropriate internal working group members]

### On Digital Inclusion

[to be added by the appropriate internal working group members]

### On Capacity Development

[to be added by the appropriate internal working group members]

###

###

###

## **2024 PNMA Focus Areas: An Incremental Work**

### The 2024 PNMA process cannot be understood without references to its previous years of operation, as showcased in the previous section of this report. Alongside monthly discussions, the policy network duly operated in the search of new practices that can be replicated elsewhere from their original application. Efforts were equally concerned with understanding the development of previously known activities, verifying which successes and challenges they faced along the way.

### Exploring Connectivity

The PNMA's goal around connectivity is to ensure that all people in the world have access to reliable, affordable, and secure internet. The PNMA works to promote the development of infrastructure and services, and to advocate for policies that help people connect to an internet that is useful and empowering. The PNMA also works to ensure that all people in the world have access to the digital tools and resources they need to participate in the digital economy.

* + 1. Evaluation of selected new best practices

|  |  |  |
| --- | --- | --- |
| **Case 1** | CNSP License |  |
| **Location** | Kenya |  |
| **Time Frame** | 2020 -2021 |  |
| **Funding:** | The program was developed with support from the United Kingdom's Digital Access Programme (DAP) |  |
| **Responsible institutions / partners / people:** | The Communications Authority of Kenya, Association for Progressive Communications and Kenya ICT Action Network |  |
| **What is the problem?** | · Many rural and underserved urban areas in Kenya have historically faced a lack of reliable internet access. These regions are perceived as commercially unviable for major telecommunications companies, leaving communities limited to no connectivity solutions. · Prior to the introduction of the CNSP license, there were no exemptions for non-profit organizations under the existing licensing framework, which imposed high fees and stringent requirements that made it difficult for community-based initiatives to operate legally.· The need for local community ownership and governance in the design and operation of networks is crucial for ensuring that services are tailored to meet the community's specific needs, fostering a sense of ownership and responsibility among users.  |  |
| **Which were the actions taken to address the problem(s)?** | · The Communications Authority of Kenya (CA) created a Licensing and Shared Spectrum Framework for Community Networks in collaboration with the Association for Progressive Communications (APC) and the Kenya ICT Action Network with input from various stakeholders· The framework emphasized community involvement, requiring that community networks be fully controlled by non-profit entities. This was designed to ensure local governance and operationalization of the networks· The CNSP license includes a low application fee of Ksh 1,000 and an annual operating fee of Ksh 5,000, making it financially accessible compared to other licensing options. Additionally, CNSPs are exempt from contributions to the Universal Service Fund (USF), further reducing costs· The framework allows for fee waivers on non-protected access to lightly-licensed and license-exempt frequency bands, facilitating easier access to necessary spectrum for community networks· The CNSP license integrates community networks into the national regulatory framework, allowing existing networks operating outside this ambit to formalize their operations  |  |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | Impact· 15 registered Community Network Service Providers (CNSPs) in Kenya, reflecting the growing interest and engagement in community-driven internet solutions.· The formation of association for community networks which aims to provide a platform for collaboration, knowledge sharing, and advocacy for community network operators. · The draft Universal Service Fund (USF) strategy from the Communications Authority of Kenya (CA) indicates a commitment to funding community networks as part of its broader goals. The draft USF strategy proposes the establishment of 100 community networks in unserved and underserved areas over the next five years. This initiative aims to enhance connectivity and ensure that local communities have access to essential telecommunications services Lessons Learnt· Setting low application and operational fees for the CNSP license has made it financially viable for community-based organizations to participate. This approach has demonstrated that reducing regulatory barriers can significantly enhance participation from underserved areas· The creation of a specific licensing category for community networks within the Unified Licensing Framework has shown the importance of tailoring regulatory frameworks to accommodate unique operational models, such as those of non-profit entities· Aligning the CNSP initiative with broader national strategies, such as the Universal Service Fund (USF), enhances the potential for funding and support. · Governments can benefit from the on-the-ground insights that CSOs provide, allowing for more effective policy-making that addresses the specific needs of communities.  |  |

* + 1. Monitoring of the implementation of best practices experiences identified in 2023 and in previous years

This subsection aims to showcase the development, successes and challenges faced by the good practices identified in previous reports. The focal point of each case was directly contacted to provide information via a standard form as seen below.

**2023 selected cases:**

|  |  |
| --- | --- |
| **Case C01:** | **Papua New Guinea’s Digital Strategy** |
| **Presented at the 2023 PNMA Plenary Session:** | **Yes** |
| **Location:** | Papua New Guinea |
| **Funding:** | Government Funding Plus support for several international advisers funded by the Economic Social Infrastructure Program administered by DT Global and funded by the Australian Department of Foreign Aid and Trade |
| **Responsible institutions / partners / people:** | Department of ICT, Secretary Steven Matainaho |
| **What is the problem?** | · How to get people in our rural communities to have the means to access government goods and services through mobile phones without the expense and wasted time of travel and queues?· Currently much of the country does not have connectivity to the Internet and it is very difficult to close the connectivity and digital gap without access. Affordable, accessible, and reliable infrastructure is the foundation to achieve an inclusive digital transformation.· How do we get private sector companies to drive down the price of Internet access, expand coverage to the millions that remain unconnected, and build the inclusive foundation for a robust digital economy?· How does PNG build an inclusive and strong digital economy when most of the nation does not have access to the Internet?· What policies and incentives do we need to encourage operators and other providers to make connectivity affordable, especially those in remote rural areas?· How do we incentivise operators to invest the needed infrastructure in the country?· What actions are needed to build an inclusive community and leave no one behind, with a particular focus on women, indigenous groups and persons with disabilities? These marginalised groups tend to be significantly less likely to own a phone, access the Internet and on-line services, and integrate ICT functions in their daily lives. · How do we overcome the lack of digital readiness and cultural challenges to transform the country into a strong digital economy? The same is true with overcoming entrenched legacy policies and regulatory frameworks which are siloed and do not work in a digital economy.Our Vision is to transform the nation to become a fully modern, prosperous, and integrated digital/information age economy and society. This will mean that all citizens will have the ability to access and utilise advanced, high-quality information and communication technology (ICT) services, devices, applications, and resources. Access to ICT networks, services, and connectivity has little or no value if people are unable to afford or own modern, multipurpose digital devices, which connect to, and use those networks and services. This policy aims to ensure that appropriate and fully functional devices can be made affordable to all who need them, via a combination of programs, partnerships, incentives, and other mechanisms. |
| **Which were the actions taken to address the problem(s)?** | · Developed Several Key Digital Economy Policies.· Passed Digital Transformation Policy 2020· Passed Cybersecurity Policy 2021· Passed Digital Government Legislation 2022· Passed a Digital Government five-year plan and worked to implement the plan to build the needed connectivity infrastructure to implement the plan· Revised UAS Policy 2023, currently in front of the NEC· Developed the First National Broadband Plan to meet Connectivity. Infrastructure, Digital Government and other goals.· Developed Data Governance and Data Protection Policy 2023· Worked to get funding for the ICT sector in the Government’s Medium Term Development Plan. Previously ICT sector was not captured in the Government’s 5-year plan to Department worked and collaborated with National Planning and other Ministries to get the sector included into the Government’s 5-year plans so Digital Government can be funded· Developed a Media Policy to create standards for the media to help eliminate mis-information and dis-information in the media.· Conducted a series of workshops on the new policies in each of the 5 regions of the country to educate the public about digital economy and digital government policies· Brought in IT officers (Digital Transformation Officers) into the capital for several days of training so they can train colleagues in their provinces· Working with the local and regional offices to train and educate them about the new polices.· Worked with our stakeholders to gain their comments and suggestions for improvement on policies. |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | ● Results:● Passed several policies and laws, and working to pass other key digital economy policies that underpin any digital transformation● Trained and made aware many stakeholders, agencies, and others about the new policies and the strategies for going forward.● Worked to involve stakeholders into the policy process while policies are still in draft form so we can gather their input and feedback allowing them to take ownership of the policies which will help their implementation.● Breaking down the transformation process into manageable units, and aligning them with core principles, allows for synergy and scale and binding factor for enabling seamless progress, are effective collaboration and coordination● Many lessons were learned:● Developing a strategic roadmap for addressing and rectifying technological, cultural and policy/regulatory issues is paramount for progress and advancement.● Collaborating and coordinating with other agencies and with all stakeholders, government, private sector, and civil society is key● Take a bird's-eye view of the shifting landscape, understanding the guiding principles of each component, and devising strategies to navigate failures. The small growths that define success, and collaboration and coordination that allow for a shifting culture to seamlessly complement adoption● Breaking down the transformation process into manageable units, and aligning them with core principles, allows for synergy and scale and binding factors for enabling seamless progress, are effective collaboration and coordination.● Remaining Challenges:· How to implement the plan and strategy in a country where readiness and aversion to change is at different levels? Also, when certain agencies are fixated on legacy policies and entrenched regulatory frameworks that do not work in today’s economy? |
| **Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **Case C02:** | **Gigabit Libraries Network** |
| **Presented at the 2023 PNMA Plenary Session:** | **Yes** |
| **Location:** | Sausalito, California, USA |
| **Funding:** | IFLA, ISOC, Partnership for Public Access, ITDRC, Adaptrum, Broadband Breakfast, Washington D.C. ISOC chapter |
| **Responsible institutions / partners / people:** | Digital Village, IFLA, Partnership for Public Access, Internet Society |
| **What is the problem?** | Despite the technological developments that have taken place during the last decades. Many international organizations, bodies and agencies report an increasing expansion of the digital divide that may worsen inequality around access to information and resources. Bridging the digital divide is a key factor in achieving the Sustainable Development Goals of the United Nations as the access to information resources and the means of communication supports health and education as much as cultural and economic development.With nearly half of humanity remaining on the wrong side of an ever-widening digital divide, three main barriers to adoption persist: availability, affordability and usability. The GLN attempts to tackle these issues by facilitating connectivity and access to information in remote areas with the use of innovative technologies such as the TV Whitespace spectrum and others. |
| **Which were the actions taken to address the problem(s)?** | **Gigabit Libraries Network (GLN):** An open collaboration of innovative libraries cooperating as a distributed testbed and showcase environment for high performance applications and equipment in the service of educational, civic and cultural objectives.**LEO Libraries:** An initiative that marries potentially game-changing low earth orbit (LEO) satellite internet access with the myriad public services of libraries (see next case)[**Community SecondNets:**](http://bbpmag.com/wordpress2/2018/09/libraries-whitespace-project-wins-imls-leadership-grant-2/) an alternative network infrastructure which utilizes wide area TV Whitespace spectrum, are deployed to create Wi-Fi MESH intranets independent of the public infrastructure providing direct links between libraries, schools, clinics and other second responders.[**Libraries WhiteSpace Pilot:**](http://giglibraries.net/page-1712342) Project examines how integrating unlicensed open wireless communication technologies can benefit library users by combining the near universal compatibility of Wi-Fi with the range and penetrating capabilities of WhiteSpace devices.[**Fiber to the Library:**](http://www.ala.org/aboutala/sites/ala.org.aboutala/files/content/oitp/PDFs/fiber%20brief_%20published.pdf) DVA initiative to assure next-generation Internet connectivity into every U.S. community through the nation’s 16,500 public libraries. FTTL has served as a guiding concept and spearhead for national buildout of broadband under the National Broadband Plan. |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | These projects have helped establish libraries as natural community technology hubs, as show case environments for emerging tech, as demo sites for community awareness, as responders in disasters and as the “human face” of e-government. The technology pilot projects have also made the case for use of appropriate tech to match the challenge. Do not lead with a technology. Analyse, test, refine, commit. |
| **2023 Follow-up available** |
| **Has the problem been solved?** | Partially. Outcomes have varied by project. Detailed reports on various wireless technologies can be found at<https://gigabitlibrariesnetwork.wildapricot.org/SecondNets-Consortium> Success key has been found in thorough planning, flexibility and most important, partnerships. |
| **Did any new problems emerge during implementation?** | The pandemic disrupted plans and ability of some partners to participate |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | The most recent trial is in using new era satellite systems in low earth orbit. The technology has proven extraordinarily effective and simple to set up and operate. The remaining problem is one of expense. These early-stage systems, ideal for rural libraries, remain too expensive for many to adopt. However, the leading provider, Starlink, has begun to adjust pricing to fit national economic levels with greatly reduced rates. Very promising! |
| **Was the solution scaled or localized to other regions? If so, please share examples** | California, Kansas, Colorado, Mississippi, Illinois, and New Hampshire |
| **New milestones:** | Scaling this solution to other areas not just in the US but also in other regions in the world. Particularly in underserved communities who need it most. |
| **New challenges:** | Marking the advent of a new era in satellite communications over the next few years, thousands of new satellites are planned to be launched into low Earth orbit (LEO), medium Earth orbit (MEO), and into geosynchronous orbit (GEO) |
| **Next steps:** | What are the opportunities and challenges for this emergent satellite-based ecosystem? How can they work together to help us bring connectivity into every community, everywhere? And what are the policy issues that must be addressed both internationally and within nations? |

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| **2024 Follow-up on [write date]** |

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| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **Case C03:** | **LEO Libraries** |
| **Presented at the 2023 PNMA Plenary Session:** | **Yes** |
| **Location:** | Montana, New Mexico US, and Nigeria |
| **Funding:** | Within the US, the Institute for Museum and Library Services. Within Nigeria, provision for free by Starlink for 2 years |
| **Responsible institutions / partners / people:** | Gigabit Libraries Network, State Libraries of Montana and New Mexico, African Library and Information Associations and Institutions |
| **What is the problem?** | While libraries have a proven potential to support wider meaningful access goals through combining connectivity with an offer of devices, content and skills support, this is all dependent on having adequate connectivity themselves in the first place. This is not always the case, with libraries in remote and rural areas often not sufficiently connected to be able to meet what are often significant needs. Using alternative connectivity technologies offers an exciting option to overcome the challenge of distance.- Is it a Rural / Urban setting? Rural, and in the case of New Mexico, on First Nations land.- Is there a gender focus? Not explicitly, but it is generally seen that women tend to make more use of libraries than men- What were the services provided, subsidies used, anything else worth sharing? Primarily, the offer is about unlocking the pre-existing potential of libraries to support meaningful access to and engagement with knowledge. Through this, there is the possibility in particular for children to do homework, and for adults to access benefits and other support. |
| **Which were the actions taken to address the problem(s)?** | The primary work, led by the Gigabit Libraries Network, was to engage Starlink in order to open up the possibilities for libraries to access enterprise licences and through this provide access to users. Following this, the need was to ensure that the libraries could access and set up the relevant equipment, and then integrate this into the existing offer. |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | - Results: so far, four libraries have been connected in the United States, and plans are to connect five at least in Nigeria.- Impact: the programme is still underway, but it appears that there has already been a significant uptick in use of libraries, and positive anecdotal evidence from users of much strengthened ability to participate in learning.- Lessons learned (what worked / remaining challenges): the model appears to work, at least at the scale of smaller rural and local libraries (where the need is greatest anyway). As it expands, it will be welcome to see how well this type of access scales, as well as to monitor to what extent it also motivates people to purchase home connectivity as well. |
| **Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

**2022 selected cases:**

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| **2022 selected case** |
| **Case 1:** | **Contribution of SMEs Business Associations to Develop Meaningful Connectivity** |
| **Location:** | Georgia (isolated remote areas in highlands) - Eastern European Group |
| **Funding:** | n/a |
| **Responsible institutions / partners / people:** | * Telecom Operators Association of Georgia
 |
| **What is the problem?** | * Lack of connectivity in isolated areas in highlands
* MSMEs and CN have to be regulated minimally and state will give the non-regulated areas the last mile ISPs of rural areas
 |
| **Which were the actions taken to address the problem(s)?** | * Usage of SME ISPs resources and lobbying advantages in negotiation to create and plan assistance, training, tech and legal support of the CN
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results:
	+ After 2 years: traffic has doubled, there are new users and new settlements, new businesses
	+ For the last 7 years: establishment of community network projects with support and mentorship of internet champions (e.g., Jane Coffin, Maarit Palovirta, Massimiliano Stucchi) and trisectoral participation (state, private actors, NGOs)
* Impact: all local SME businesses are online and are bookable digitally; education and all local state services are accessible online and remotely.
* Lessons learned: after working with a state and regulatory body the CN model is now part of a public strategy to provide connectivity to remote areas; the state is ready to be a donor to these projects as it was done in the pilot region of Pshav-Khevsureti.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | A challenge of business model and economics sustainability is a case for almost all CNs, same in Pshavi-Khevsureti network at times (due to heavy snow, lightening, cheap hardware etc). An additional challenge was a dark fibre cable installed two years ago - it changed network performance and sustainability but added a few challenge. To solve funding problems, we raise the monthly fee but for operational expenses we add money from our personal salaries. |
| **Did any new problems emerge during implementation?** | On implementation level we did not meet any serious problems just small issues and were solved easily. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | This is a technical network so when you are using solar power and batteries issues are just adding, The network capacity has to be made bigger because of the end-user and network performance data is increasing and demand is rising so challenges are much more than a year ago. The radio network amortization period is not huge so this issues are also rising. |
| **Was the solution scaled or localised to other regions? If so, please share examples** | Our experience with solar panels, charge controllers and batteries were shared with SME's of Georgia. |
| **New milestones:** | We can say fibre optics operational challenges are related with heavy snow and landslides. This two issues take too much time and money - we mean restoration. |
| **New challenges:** | Georgian Parliament started creation of white paper on universal funding so it could be useful for CN funding, but we did not see any draft yet. The middle mile project - open net is almost finished so will be solved first and middle mile challenge and replayed in many areas. |
| **Lessons learned:** | Yes, if you are using cheap solar panels and batteries will find after two-three years that you have to buy new ones and installations. |
| **Next steps:** | We want to cover other isolated region but looking forward for additional funding at least 40% for all budget. |
| **2024 Follow-up** |
| **Has the problem been solved?** |  |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** |  |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **Case 2:** | **Alternative model for closing the connectivity gap in rural areas of developing countries based on multi-stakeholder initiatives for development** |
| **Location:** | Peru, Province of Condorcanqui (Amazonas Region) - Latin American and the Caribbean Group (GRULAC) |
| **Funding:** | Spanish Cooperation, on a multi-stakeholder nature - monetary contributions from the Binational Plan, the Regional Government and the Municipality of Condorcanqui; non-monetary contributions from other institutions, including Catholic University of Peru. |
| **Responsible institutions / partners / people:** | * Lead: Peruvian Government
* Pontificia Universidad Católica del Perú
* Several public and private institutions, including the Provincial Municipality, the Regional Government, and universities
 |
| **What is the problem?** | * Connectivity gaps in rural, remote areas of developing countries
* Specifics:
	+ The pilot localities have no broadband internet access services and only two of them have 2G mobile telephone service.
	+ Served population is almost entirely made up of natives belonging to the Awajun and Wampis ethnic groups
 |
| **Which were the actions taken to address the problem(s)?** | * Implementation of a series of telecommunications stations that function as repeaters. Between them, two free-band wireless links are established as backhaul. In each locality, wireless links are established from the repeater station to the public institutions; through this network, the highest public entities in the area are able to purchase and share the broadband Internet access service with rural institutions.
* The actions are carried out within the framework of the Multi-stakeholder Alliance for the Development of Reliable Digital Territories
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | Partially; although local public institutions already have Internet access, the possibility of a mobile operator participating in the project to provide 4G services in these localities is still being coordinated and evaluated. |
| **Did any new problems emerge during implementation?** | No new problems have emerged during project implementation. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | Considering that technology evolves very quickly, it is possible to state that, although the solution is still applicable today, PUCP and EHAS are still working to identify potential improvements or new alternative solutions. In this way, LEO satellite systems, for example, could be an option we want to test in the near future. |
| **Was the solution scaled or localised to other regions? If so, please share examples** | This initiative is being implemented in [other regions](https://www.gob.pe/34785-pilotos-de-intervencion-de-la-alianza-multiactor-para-territorios-digitales-confiables) of the country. As part of these activities, coordination is underway to replicate the connectivity project in those places. |
| **New milestones:** | Between June and July, PUCP and EHAS have installed tele-education and telemedicine stations in 10 schools and 5 health facilities, respectively in the Santiago river basin. |
| **New challenges:** | The change of authorities in the regional government of Amazonas (via the electoral process) has been a challenge for the continuity of the project because there was a possibility that these new authorities would not continue the collaboration with the Multi-Stakeholder Alliance and the Project. However, after a process of coordination and information sharing, the new authorities have not only continued with the support but are also evaluating financing of the second stage of the project. |
| **Lessons learned:** | Unfortunately, the lack of institutional framework in the regional and municipal governments makes it necessary to maintain a permanent and exhaustive coordination and awareness-raising effort with these institutions to ensure the continuity of the policies and activities committed to the project. |
| **Next steps:** | To implement telemedicine and tele-education services; to secure the participation of a mobile telephone operator to provide services in the localities benefiting from the Project; and to formalise the approval of the second stage of the project, which includes the construction of 8 additional repeater stations in the same number of rural localities. |
| **Other important matter(s) on the project and not covered above:** | As part of the initiative in Condorcanqui, the PUCP has organised the Seventh Workshop of the Multi-stakeholder Alliance with the participation of various entities from the three levels of government. This [workshop](https://www.youtube.com/watch?v=cKtu3NmtTFs) is a milestone in the process of multi-stakeholder alliances in this territory and was held with the participation of the Regional Government of Amazonas, demonstrating its commitment to the Project. |
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| **2024 Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **Case 3:** | **Internet access point ‘Cybercase de Popenguine’** |
| **Location:** | Popenguine, Sénégal - African Group |
| **Funding:** | n/a |
| **Responsible institutions / partners / people:** | * His Excellency the President of the Republic, Maître Abdoulaye WADE
 |
| **What is the problem?** | * Provide a pilot/experimental laboratory to enable the State to launch and test ICT projects for Senegaleses living in disadvantaged areas.
* Specifics:
	+ Laboratory 60 km from the capital in a rural environment made up of 3 large villages of ca. 15,000 inhabitants
	+ Gender-focused
 |
| **Which were the actions taken to address the problem(s)?** | * Implement an internet access point to promote ICTs for local development and ensure their democratisation
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results:
	+ Opening of an Internet room with a community radio and services for online administrative procedures
	+ Free remote training offers in French, Arabic and Wolof in an interactive e-learning platform
	+ Issue of electronic chip cards for financial inclusion (withdrawals, deposits or purchases)
	+ Quality telemedicine services offered to local and surrounding populations
* Impact:
	+ Improvement and modernisation of economic activities of women and young people in rural areas via training
	+ Telemedicine consultations generate local jobs as the suitcases/computers are handled by young people and women trained for this purpose.
* Lessons learned: we lack multistakeholderism in the management of such infrastructure. We need advice on how to implement an adapted business model to resurrect internet access points in a rural area.
 |
| **Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **Case 4:** | **One Country One Rate** |
| **Location:** | Bangladesh - Asia-Pacific Group |
| **Funding:** | n/a |
| **Responsible institutions / partners / people:** | * Bangladesh Telecommunication Regulatory Commission
 |
| **What is the problem?** | * The Bangladeshi government provided internet infrastructure to rural areas, but a considerable amount of people are still unconnected due to the high prices
 |
| **Which were the actions taken to address the problem(s)?** | * BTRC, in consultation with interested stakeholders (e.g., telecoms), proposed the adoption of a unified internet tariff across the country, regardless of use in urban or rural areas
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results:
	+ The unified price guarantees intersectionality.
	+ Along the “One Country One Rate” tariff a Grade of Service (GoS) was also implemented for internet service providers (ISPs), international internet gateway (IIG) operators and nationwide telecommunication transmission network (NTTN) operators. Each ISP, NTTN and IIG shall be obliged to maintain a GoS and ensure quality of service under provision of penalty conditions falling short of the grade.
* Impact: complete implementation of the single internet tariff across the country will bring visible change to the IT sector, increasing the number and size of industries such as ICT incubators.
* Lessons learned: it can be promoted as an acceptable business case for the ISP industry on how to maintain affordability and expand services to stakeholders in rural areas.
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| **Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **Case 5:** | **Sustainable Development by Internet Backpack** |
| **Location:** | Democratic Republic of the Congo (DRC), Liberia and Costa Rica |
| **Funding:** | n/a |
| **Responsible institutions / partners / people:** | * Syracuse University School of Information Studies (iSchool) partners and with support from the National Science Foundation's (NSF) Division of Engineering, and Computer and Information Science and Engineering (CISE)
 |
| **What is the problem?** | * The cost of services and the lack of infrastructure in the above mentioned countries prevent most people from accessing the Internet - operation costs are high starting from ISPs, which use satellite bandwidth use
* No other approach to community networks has been tested
 |
| **Which were the actions taken to address the problem(s)?** | * Creation of the Internet Backpack: a portable Wi-Max network covering a range of 5 miles, fully chargeable by solar energy, and able to simultaneously connect dozens of devices. Internet access is ensured by low-orbit satellites paired with the backpack. Each device costs USD 13.000
	+ Designed mainly to cover areas at risk of natural catastrophes, in order to reach the rural population disconnected from the electric grid or telephone networks
* Implementation of pilot studies with community feedback and user responses in the DRC, Liberia and Costa Rica.
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results:
	+ Emergence of a new type of community network: the ‘Pop Up Community’
	+ In Costa Rica, for instance, the Internet Backpack allows up to 50 users and 250 devices to share connectivity and device resources, anywhere, with a field set-up time of 4 minutes
* Impact:
	+ Capable of supporting the original design of ‘worst case scenario survival as a service’, as well as affordable resource-sharing for education and remote indigenous community access in less extreme circumstances
	+ Currently, 20 pilot studies are being implemented in 8 countries, on 4 continents.
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| **Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

* + 1. Preliminary conclusions and challenges for scaling/localisation (if any)

### Exploring Digital inclusion

* + 1. Evaluation of selected new best practices
		2. Monitoring of the implementation of best practices experiences identified in 2023 and in previous years

This subsection aims to showcase the development, successes and challenges faced by the good practices identified in the previous reports. The focal point of each case was directly contacted to provide information via a standard form as seen below.

**2023 selected cases:**

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| **Case DI01:** | **Finnish National eBook Platform** |
| **Presented at the 2023 PNMA Plenary Session:** | No |
| **Location:** | Finland (national) |
| **Funding:** | 2 years of national government funding as set up costs, with the intention that this is then taken on by local governments |
| **Responsible institutions / partners / people:** | National Library of Finland, City of Helsinki, conference of library directors |
| **What is the problem?** | eBooks offer a powerful tool for bringing new and more diverse voices to the public, allowing people across the population to access materials that are relevant to them, their experiences and their needs. However, in Finland, there was no centralised support for the development of an eBook offer in libraries, meaning that the level of access varied strongly from one region and town to another. This led, in effect, to different levels of possibility to benefit from what the internet can bring in terms of access to information and the fulfilment of cultural rights. - Is it a Rural / Urban setting? Libraries in rural areas tended to have a smaller (or no) offer, and so while the programme is national, it will tend to benefit people in rural areas more.- Is there a gender focus? Not explicitly, but libraries tend to be more used by women.- What were the services provided, subsidies used, anything else worth sharing? The programme is still in development, but the goal is to develop a platform that libraires across the country can use, and then choose which content is best suited to the needs and interests of their users. It is a good example of combining a new digital service with the pre-existing library network. |
| **Which were the actions taken to address the problem(s)?** | The creation of a new platform, and efforts to negotiate with publishers in order to include content. Unfortunately, some publishers have tended to resist here, meaning that those people who rely on libraries to access eBooks over the internet are left out.  |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | - Results and Impact: this project is still underway.- Lessons learned (what worked / remaining challenges): an early conclusion is that it is important to ensure that copyright laws cannot be used by publishers to deny libraries the possibility to lend eBooks, guided only by their professional judgement. |

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| **Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

**2022 selected cases:**

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| **2022 selected case** |
| **Case 1:** | **The Digital Music Market in West Africa** |
| **Location:** | West Africa |
| **Funding:** | n/a |
| **Responsible institutions / partners / people:** | * WIPO
* Local governments - Ministries of Culture
	+ Focal point: Paolo Lanteri, WIPO
 |
| **What is the problem?** | * African music is becoming an essential element in local creative economies, albeit without user/creator knowledge about communication tools or business models in digital technology.
* The lack of more interest in content distribution is due to the low income of music sector stakeholders and the restrictive value chain imposed by telecom operators, indispensable for network access and mobile payment means.
* Given low rates of banking, music downloading and/or streaming, services are purchased via postpaid telephone credit or mobile money. With telecoms involved, the value chain costs are over 63% bigger than the copyright royalties, with the remaining balance going to platforms and producers.
* Internet coverage and access are relatively limited in West Africa, at least until the arrival of 4G, social networks and access to low-cost smartphones. Mobile telecom operators use music as leverage to attract more users to their data packages.
* Specifics
	+ International platforms lack interest in the specificities of African music.
	+ There is no special attention in state cultural policies to supervising, legislating and promoting guarantees for private investment in the music industry.
 |
| **Which were the actions taken to address the problem(s)?** | * Transition to digital transformation through digital music platforms created by Africans for Africans. Local platforms are solutions that are suited to an appropriate (fee-based) premium subscription for local music and are different from international streaming services and traditional social networks.
 |
| **Follow-up on [write date]** |
| **Has the problem been solved?** | * (partial, fully; include numbers when possible)
 |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |
| **Has the problem been solved?** |  |
| **Did any new problems emerge during implementation?** | (an organisation’s statement that stood out in the survey reply) |

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| **2022 selected case** |
| **Case 2:** | **Are We Together?** |
| **Location:** | Uganda – African Region |
| **Funding:** | Internet Society Foundation |
| **Responsible institutions / partners / people:** | * Pollicy
	+ Focal point: Meital Kupfer
 |
| **What is the problem?** | * As Internet access continues to exponentially grow and reach communities that were previously offline, it is necessary to install proper, curated digital spaces to document and preserve languages, share, teach and disseminate material to new or existing speakers, and translate information for marginalised groups.
* Digital platforms give importance and value to minority groups when the use, production and consumption of digital products and design occur - hence, there is room and opportunity for linguistic empowerment online.
* Specifics:
	+ The project looks at rural areas (farmers who use applications for livelihood purposes) and informal economy workers in urban areas.
	+ It sheds light on the unique experiences of women and gender-diverse individuals in how they access and use online spaces in local languages. Intersectionality is key.
	+ The project prioritises local content - its white paper is translated into Amharic, Luganda and Swahili. The product of the ethnographic research will be disseminated in multiple languages; the focus groups are being conducted in local languages as by location.
 |
| **Which were the actions taken to address the problem(s)?** | * Individuals and organisations in all sectors touching the digital space should listen and adapt for a more inclusive and diverse language landscape. This includes the following actions::
	+ Policymakers and governments: mandate open source code; promote digital education in local languages; Incentivize tech businesses to operate in-country
	+ Technology firms: consult indigenous/local groups for feedback; hire people who speak underrepresented languages in their countries of origin; localise software and code so developers in the global South can translate products/services; spend more resources on software and code in non-Latin scripts; focus on content moderation in all countries of operation
	+ Civil society: support social media and other digital platforms spearheaded by indigenous groups; continue to conduct research; provide advocacy platforms
	+ International actors: sponsor and fund grants to preserve endangered languages online; support local organisations and conduct regional and global advocacy
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results (best example): farmers in rural Uganda can use applications or communicate in their local languages to apply for loans on WhatsApp with relative ease.
* Desired Impact:
	+ Understand/improve the impact of languages on the usability, accessibility, trustworthiness, growth and moderation of digital platforms
	+ Generate specific recommendations for technologists and developers to create a more inclusive internet for all. Digital platforms play a critical role in developing countries – beyond entertainment and commerce, they enable livelihood opportunities and enable governments and citizens to better engage with one another. In many developing countries, Big Tech platforms fill gaps in state capacity, and provide essential informational and social infrastructure. It is therefore critical to understand issues around access, usability and safety (domains) across different languages groups on digital platforms.
* Lessons learned: there are no specific local/regional/national policies or regulations that could help. Research on national language policies in Ethiopia, Tanzania and Uganda has demonstrated fallbacks - e.g., post-independence Tanzania has championed the use of Swahili resulting in 98% of its people speaking some level of it in everyday life; however, dozens of other local languages that are not prioritised are falling into disuse.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | No, we are continuing with advocacy on local language inclusion on online platforms. Advocacy has been ongoing among government agencies, civil society organisations. |
| **Did any new problems emerge during implementation?** | Yes, limited funding to continue with advocacy through workshops and conferences. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | 2022 solutions are still working to tackle the problem. |
| **Was the solution scaled or localised to other regions? If so, please share examples** | Solutions were localised to countries where the research was conducted. For example, because of limited funds, most of the physical advocacy has been done in Uganda where the Pollicy team is mainly based. |
| **New milestones:** | 1. Creation of a [microsite](https://www.arewetogether.com/) where resources on this project are shared and have been accessed by over 100 people.
2. We hosted dissemination [webinars](https://www.youtube.com/watch?v=qsvrIvk7Ktc) about the project
3. Data from this project was combined with that from other two projects; one on Future of work and the other on fair conditions for gig economy workers to advocate for a better future of work through workshops with different stakeholders including gig economy workers, linguistic experts, market vendors, influencers, bloggers, online entrepreneurs, e-commerce delivery personnel and students. A [report](https://pollicy.org/resource/swipe-right-for-work/) was published by Pollicy from this combined information.
4. Getting to collaborate with the government, specifically the Ministry of ICT, on our projects that focus on the future of work of which Are Together Project is among.
 |
| **New challenges:** | The most challenging policy has been the amended Computer Misuse Act that introduced measures and penalties that seek to control use of social media platforms to share content. This is a challenge as the Future of work moves to largely online platforms but also as we advocate for local language inclusion some content may be interpreted as "hate speech" or offensive because of lack of accurate online translation.The recently launched Digital Transformation Road map for Uganda presents us with an opportunity to scale up advocacy for local language app that can be easily used for communication and access to services. |
| **Lessons learned:** | It is important to involve the government in the work we do; advocacy, awareness raising, etc. This makes it easy for CSOs to penetrate the targeted community. Secondly, government involvement makes the target community to easily embrace any programs on the project as communities tend to believe in government programs that they focus on their needs and are credible as well as sustainable. |
| **Next steps:** | As we move into advocacy, we have been able to collaborate with the government and brought them on board on our projects that focus on the future of work of which the "Are we Together" project belongs to. We hope to widen our scope for advocacy as we leverage on this collaboration. |
| **Other important matter(s) on the project and not covered above:** | None |
| **2024 Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **2022 selected case** |
| **Case 3:** | **NUPEF Projects** |
| **Location:** | Brazil - Latin American and the Caribbean Group (GRULAC) |
| **Funding:** |  n/a |
| **Responsible institutions / partners / people:** | * Instituto NUPEF
	+ Focal point: Carlos Afonso, Oona Castro
 |
| **What is the problem?** | * Lack of support for the preservation/rescuing/presence of local languages of original cultures over the Internet
 |
| **Which were the actions taken to address the problem(s)?** | * Graúna Project: enable local access to knowledge packages in local community networks even without a good connection to the Internet.
* Caburé Project: develop online security resources to help NGOs and local communities to protect themselves
* Project actions take into account the concept of meaningful access defended by PNMA.
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results: ongoing projects
* Impact: ongoing projects
* Lessons learned: action is needed at the federal level, beyond the communities’ efforts. Given the challenges of growing inequality in Brazil and other countries, a major need is a strategic national public policy of meaningful access which coordinates with local (state, municipalities) actions.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | No |
| **Did any new problems emerge during implementation?** | Several challenges, given the diversity of the indigenous cultures and idioms. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | This is ongoing and also a learning experience for Nupef. Ideally a result would be the community enabled to carry out the further development of the activity. |
| **Was the solution scaled or localised to other regions? If so, please share examples** | Too early to tell. A full report will be available at the end of 2023. |
| **New milestones:** | - |
| **New challenges:** | One major challenge is funding sources for the proper continuity and advancement of the project. |
| **Lessons learned:** | - |
| **Next steps:** | - |
| **2024 Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **2022 selected case** |
| **Case 4:** | **WWW as a web of our Webs** |
| **Location:** | India - Asia/Pacific Region |
| **Funding:** | * APC and Dweb Camp (figures n/a)
 |
| **Responsible institutions / partners / people:** | * Janastu
	+ Focal point: Dinesh T.B.
* Tools development support: ISIF.asia, APC, Development Alternatives, Design Beku, Chiguru Coop
 |
| **What is the problem?** | * Script/text is a barrier to internet access: more than 3 billion people are not comfortable with written text in any script*.*
* Many are functionally literate, but
	+ prefer narratives to be read;
	+ prefer listening and prefer watching;
	+ their stories need to be shared;
	+ are of all ages.
* Specifics:
	+ This experience started from a COW (Community Owned Wireless) called COWMesh
	+ By observing conversation patterns, one notices there is no content accessibility problem when there is no written text shared.
 |
| **Which were the actions taken to address the problem(s)?** | * Resolve the issue of the written text using hypermedia towards a social semantic web
	+ Hypermedia linking and renarration using “Papad”: an open source media sharing and publishing platform. It allows audio and video uploads to a local server and adds tags in the form of text or images to entire or relevant parts (fragments) of files.
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results:
	+ For the past several years Janastu has been working on Community Owned Wireless (COW) Mesh Networks in rural areas, with emphasis on distance learning. Recently, additional attention was given to contents circulated on COWs and created by own CNs
	+ Focus on the larger number of people who are not "tech savvy" while also being marginalised by the literates.
* Impacts: we hope to direct attention to local content in local languages along with services on community networks. The effect of such interventions will stimulate economic transformation and situate the dialogue into an ecosystem that leads to a cohesive future of remote communities.
* Lessons learned: policies and regulations need to support development of internet technology services that are internet independent
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | No or rather partially addressed |
| **Did any new problems emerge during implementation?** | Lack of reciprocation as there is not a concerted effort by many groups to see the need to bring low-literates on board the Web. New "problems" are our realisation that many more do not see a way to handle these problems and seem to sideline it. This is an internet scale problem and related to human rights, meaningful connection to communities who are low-literate, emergence of new problems is natural. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | Our attempts are to develop hyper-media archives and renarration tools. We have developed a couple of ways to help initiate a dialog on the possibilities to address the problem. We further developed what we proposed and also have new approaches to demonstrate a future of possible solutions. |
| **Was the solution scaled or localised to other regions? If so, please share examples** | We are still striving to make it easy to use due to tech issues. We worked on scalability and localization and platforms are open for use and deployment. |
| **New milestones:** | We have gathered a number of local audio-visual narratives, developed a platform for hyper-media archiving and also for renarration which needs further fine tuning. Two platforms are now available online, which can be deployed in community networks. Stories.janastu.org and sweets.janastu.orgWe are documenting these as reference implementation of a tech-stack for including low-literates. |
| **New challenges:** | It is surprisingly tough to motivate young developers to proactively work on these issues. We are yet to see policies which advocate for inclusion of low-literates in meaningful access discussions. |
| **Lessons learned:** | It is important to provide R+D support for such inclusion which is otherwise looked up as meaningless activity. We need to bring explicit focus and bring policy and technology people to see the 3 billion who are not able to search or browse search results of the text heavy Web. |
| **Next steps:** | Possibly a larger recognition of this need and collective design and application of mindsets. The next step is to bring a federated approach to allow community expressions to bring in hyper links between text documents, media objects and community wide social networks. This would allow a demonstration of how the Internet today can be annotated by communities, thereby making it an internet for tomorrow that includes low-literate people as first-class citizens of the Web. |
| **Other important matter(s) on the project and not covered above:** | At a very high level, for the first time in human evolution anyone can easily record a narrative, store and share in time and space. Historically, lack of this possibility can be seen as the reason for powerful institutions of the past. Bible as a book would create an institute of churches, Quran mosques, Vedas and other texts have created a number of Brahmanical institutes, and the status quo continues this. All of them use these to determine power structures where the knowledge of the book will mean higher in community structures. We have an opportunity now because of technology to bring in new senses for community structures. We may have to also regulate a runaway possibility that restructures knowledge as determined by more powerful computationally and resources wise (e.g., chatGPT like AI). |
| **2024 Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible) |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **2022 selected case** |
| **Case 5:** | **Habeshaview - streaming platform of African movies in Ethiopia**  |
| **Location:** | East Africa and Ethiopian Diaspora |
| **Funding:** | Private investment (figures n/a) |
| **Responsible institutions / partners / people:** | * Habeshaview Technology & Multimedia
	+ Focal point: Mrs Tigist Kebede, CEO
 |
| **What is the problem?** | * Making and offering local content in local languages that reflects and dramatises local cultural values, aspirations and societal debates remains challenging in many developing countries. As a result, people accessing local Internet services may not always see themselves and their cultures represented in the available content offered, a factor that undermines meaningful access.
* Specifics:
	+ Market failure in local audiovisual production: Meeting the production and marketing costs of local audiovisual content is often more difficult in countries where sources of funding such as government subsidies, hypothecated tax, private equity and bank financing are not yet developed or – when they are – are not tailored to the needs of the local audiovisual content production industry. The result is that local market failure for culturally meaningful content production is not always being addressed. The issue is compounded by the difficulty in constituting and protecting audiovisual works as IP assets that can be leveraged to raise certain forms of collateralised debt financing such as are available in some developed markets.
	+ Lack of distribution channels, including online services: the content financing challenges are exacerbated by the difficulties involved in generating revenues from the distribution of audiovisual works across the local, regional and global value chains.
 |
| **Which were the actions taken to address the problem(s)?** | * Develop a sustainable local content production and distribution model. The company specialises in bringing curated Ethiopian films, TV series and documentaries to Ethiopian citizens and diasporic populations.
* The company has built without subsidies in a production hub and an online distribution ecosystem based on a sizeable technology investment, at risk. Services offered include live news and entertainment channels with a ‘catch-up’ service as well as Video on Demand.
* Culturally relevant content is sourced from a variety of studios and producers and made available in multiple local languages within Ethiopia (most of times in the original language it was created in) and subtitles in major languages such as English, French and Arabic.
* Online offer caters for the different purchasing power of the Ethiopian population and foreign users by offering content through different pricing options (e.g., 24-hours ‘all-you-can-eat’ subscriptions, pay-per-view, and regular monthly access). There is also free content from producers and studios that are motivated to reach a wider audience at home and in the diaspora.
* By creating an opportunity for local audiovisual producers in Ethiopia to monetise the content they make in local languages, Habeshaview contributes to adding a cultural dimension to meaningful access: the curated content reflects Ethiopian users’ own cultures, social issues and creative preferences.
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * By creating an opportunity for local audiovisual producers in Ethiopia to monetise the content they make in local languages, Habeshaview contributes to meaningful access by adding a cultural dimension to it. The curated content reflects Ethiopian users’ own values, social issues and creative preferences.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | It has been partially solved. In May this year, Habeshaview signed a carriage deal with ethio telecom, Ethiopia's leading ISP and launched the first IPTV service in Ethiopia in October 2023. The agreement gives habeshaview's online platform and its diverse offer of news and locally sourced original audiovisual content, potential access to a user base of 72 million out of which over 38 million are smart phone, data and voice package customers. habeshaview's technology also permits access to the platform by subscribers in other countries; depending on its licence agreements with individual local content producers, it will either make the content available globally, or it will apply geofiltering technology, to respect and protect creators' IP according to the terms of their agreements. |
| **Did any new problems emerge during implementation?** | Internet suspensions in the context of civil conflicts in Ethiopia have had some slowing down effect in the capability of habeshaview to reach - and attract - new potential subscribers within the country. Additionally, the rising cost of living combined with an adverse economic climate in Habesha's country of establishment has meant an intensification of the challenges in generating new original audiovisual content for the platform, as the already fragile sustainability of producing local content has been further weakened. Widespread illegal use of audiovisual works - sometimes organised on a criminal scale - is further undermining the ability for local creators and producers of content in local languages, to finance new works. Local creators recognise that this is also a cultural challenge and that there is a need for more awareness-raising campaigns about the link between illegal downloads or physical media copying and the challenges experienced by local film and TV industry workers in making a sustainable living, so they may continue to make audiovisual works that communicate or dramatise relevant local socio-cultural or economic themes and preoccupations. Finally, the local content industry suffers from a lack of specialisation and professionalisation, due to insufficient resources available to training and skills' development and the difficulties for film and TV workers to make a sustainable living. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | To a fair degree, habeshaview has had to adapt its 2022 local content generation strategy to meet the challenges of a tougher economic environment. In the current climate, Habesha either finances a new project 100%, controlling the IP on the finished film or series, or it seeks to share the financial risk by attracting co-financing partners in Ethiopia or further afield, to enable the content to be made and rights to split pro rata of Habesha's and partners' relative contributions. habeshaview has also adopted a flexible business model in dealing with local content creators and producers. It will only buy out all rights in cases when it finances the content 100%; in all other cases, it will either request an exclusive licence for its platform for a maximum term of 2 to 3 years, being mindful of the need for content producers to exploit their works in other markets after that initial window, in order to earn additional revenue; or it will offer a straight revenue-share based on a recognition of the value of the producers' work as well as the value-added of being programmed on the habeshaview platform. To address the threat of the content being devalued through piracy and illegal uses, habeshaview has deployed a bespoke Digital Rights Management [DRM] technology, which allows the platform to protect the integrity of the local creators' works and their economic value. |
| **Was the solution scaled or localised to other regions?** | habeshaview's business and social responsibility ethos is based on applying a flexible rate card, with offers adapted to the different levels of subscriber purchasing power and available income, based on the firm belief that culture and entertainment - especially of the kind that genuinely reflects and honours local cultures and languages - sits very high in the pyramid of people's needs. To illustrate this approach in practice: within Ethiopia, habeshaview offers a low-priced 24h 'all-you-can-eat' subscription that reflects many local consumers' shifting priorities in the allocation of film/video entertainment needs. It also offers a very discounted monthly 'Silver' package with advertising or a monthly 'Gold' package with the same content available ad-free. |
| **New milestones:** | 1) habeshaview's May 2023 carriage agreement with ethio telecom makes the company the first IPTV service provider to launch in Ethiopia to provide potential access by 72 million ethio telecom’s subscribers to this local film/video content platform in local languages - the extended outreach is the single most important factor in the development of habeshaview's platform and its social/cultural impact2) A flexible rate card that factors in the economic challenges faced by many local subscribers3) A strategic approach to original new content financing and production, through 100% upfront financing or via co-financing with third parties4) A business philosophy that considers the importance of helping local creators and producers of content become economically sustainable in the long run.5) Option to license the habeshaview’s state of the art OTT / IPTV platform to third party telcos, network operators and broadcasters generates revenue . |
| **New challenges:** | See reply to previous question/questions. |
| **Lessons learned:** | There is a need to consider Internet capacity building and measures to boost the economic sustainability of local audiovisual content as inseparable strategic constructs. Meaningful cultural content in local languages drives demand for Internet connection (be they fixed or mobile) the world over. Governments, civil societies and local creative industries need to work in a joined-up way to address local content sustainability as an integral part of the strategy to develop a meaningful Internet for All. |
| **Next steps:** | A lot of work remains to be done to promote economically viable local creation and production of content and the role of platforms such as habeshaview is vital in this respect, as they provide alternatives to globally tailored content curated through larger international streaming platforms. Additionally, habeshaview is very committed to develop its presence amongst expatriate Eastern African communities at large and the Ethiopian Diaspora in particular. Emigration too often results in languages and cultural riches being lost amongst the emigrating populations and subsequent generations. Platforms such as habeshaview perform a socially beneficial service by bringing relevant content from the home countries to communities where underlying demand for content that upholds their cultures is strong. |
| **Other important matter(s) on the project and not covered above:** | Very significant progress on meaningful access to this - one of the few - local platforms dedicated to culturally relevant local content in local languages (e.g., Amharic, Tigrinya, Oromo) was achieved through the carriage agreement with ethio telecom, the country's leading telco. |
| **2024 Follow-up on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible)  |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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* + 1. Preliminary conclusions and challenges for scaling/localisation (if any)

### Exploring Capacity Development

### Evaluation of selected new best practices

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| **Case 1:** | **School of Community Networks (SCN) – Indonesia Common Room Networks Foundation** |
| **Location** | Nationwide project in rural and remote places in Indonesia with piloting locations below:1. Ciptagelar indigenous village, Sukabumi Regency, West Java Province (Ongoing, 2019 - present);2. Ciracap Sub-district, Sukabumi Regency, West Java Province (Ongoing, 2020 - present);3. Pulo Aceh, Aceh Besar Regency, Aceh Province (Ongoing, 2021 - present);4. Ketemenggungan Tae, Sanggau Regency, West Kalimantan Province (Ongoing, 2021 - present);5. Mata Redi village, Central Sumba Regency, East Nusa Tenggara Province (Ongoing, 2021 - present);6. Tembok Village, Buleleng Regency, Bali Province (Ongoing, 2021 - present);7. Sukadana Village, North Lombok Regency, West Nusa Tenggara Province (Ongoing, 2021 - present);8. Hitu Messing village, Central Maluku Regency, Maluku Province (Discontinued, 2021 - 2022);9. Lapeo Village, Polewali Mandar, West Sulawesi Province (Discontinued, 2021 - 2023);10. Nimboran District, Jayapura Regency, Papua Province (Discontinued, 2021 - 2023);11. Bobong Village, Taliabu Island Regency, North Maluku Province (Ongoing, 2022 - present);12. Don Bosco Training Center, Southwest Sumba Regency, East Nusa Tenggara Province (Ongoing, 2023 - present);13. Ngata Toro indigenous village, Sigi Regency, Central Sulawesi Province (Ongoing, 2023 - present). |
| **Time Frame** | First Phase (2019 - 2024)The School of Community Networks (SCN) training and capacity building program in Indonesia was officially launched in 2021 along with the development of community-centered internet infrastructure prototype in Ciptagelar indigenous village in 2019 and SCN training program preparation in 2020. Currently the SCN training and capacity building program in Indonesia is still ongoing and expanded to other rural areas and remote places in Indonesia. |
| **Funding:** | The program was developed with support and assistance from the Association for Progressive Communications (APC), as well as funding support from The Swedish International Development Cooperation Agency (SIDA), MEDCO Foundation, ASEAN Foundation, The Foreign, Commonwealth and Development Office (FCDO), the Information Society Innovation Fund (ISIF Asia), and Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ). |

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| **Responsible institutions / partners / people:** | The Association for Progressive Communication (APC) was in partnership with Rhizomatica to collaborate with Common Room and initiate Connecting The Unconnected: Supporting Community-led Approaches to Addressing the Digital Divide Indonesia (LocNet Project) in 2019. Subsequently, the initiative became integrated into the Digital Access Programme (DAP), ledby the Foreign, Commonwealth and Development Office (FCDO) in 2020. Later on, SCN training and capacity-building programs were also developed in collaboration with ISIF Asia by the end of 2021. |
| **What is the problem?** | Since the COVID-19 pandemic outbreak, internet connectivity has become an important tool to support daily communication, including for carrying out public administration, health services, education, economic activities, etc. Although in recent years there has been a significant growth in internet penetration in various regions in Indonesia, currently the digital divide challenges still exists among the general public, particularly in rural areas & remote places.Digital divide challenges in Indonesia are mainly faced with a number of issues, ranging from vast and diverse geographical conditions, insufficient supply of electricity sources, inadequate basic infrastructure, as well as significant disparities in bandwidth costs (both within and outside Java Island). This also includes unavailability of suitable and affordable devices, the inability to generate local content and knowledge, including the gender gaps and limited funding resources available to expand the internet outreach.According to the survey made by the Indonesian Internet Service Providers Association (APJII) in 2019, the number of internet users in Indonesia has reached 196.71 million from a total population of266.91 people (73.7%).1 The increase of internet users in Indonesia is predicted to continue to develop after the Palapa Ring network project is completed in 2019. Subsequently, the growth of internet users in Indonesia is also surge by the increasing need for internet access as one of the impacts of the COVID-19 pandemic outbreak on a global scale.In 2024, one in five Indonesians are still not connected to the internet. Data from the Indonesian Internet Service Providers Association (APJII) shows that the number of Indonesians connected to the internet in 2024 reached 221,563,479 out of a total population of 278,696,200 (79.50%).2 As the follow-up to this survey, it is estimated that 82.6% of the population in underdeveloped areas with total numbers around 8,114,273 users out of a total of 9,823,575 people already have internet access in |

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|   | 2024.3Despite of increasing number of internet penetration in Indonesia in the past years, digital divide challenges in rural and remote places, as well as among underserved communities in within the region still persist, with the following gaps and disparities:● Infrastructure and digital connectivity gaps;● Skills and digital literacy gaps;● Internet security and personal data protection issues;● Adaptive digital access policies and regulations;● Inclusive digital connectivity (Gender Inclusion, Disability and Social Inclusion - GEDSI). |
| **Which were the actions taken to address the problem(s)?** | Training and capacity building program through the School of Community Networks (SCN) in some rural and remote places in Indonesia. The training and capacity building program was developed with a user centered approach, started with participatory rural appraisal (PRA) method to conduct needs assessment and define the targeted beneficiary group. Apart from training and capacity building programs, the initiative was also enhanced with research and policy advocacy from rural, regional to national level that involves multistakeholder approach, ranging from local communities, civil society organizations (CSOs), government, academics, business sector, and technical community. SCN training and capacity building programs also consider 4 core elements, which include: (1) policy and regulatory frameworks, (2) internet safety and security protocols, (3) affordability, and (4) meaningful connectivity. At the technical level, the training and capacity building program was developed with 5L frameworks, which consist of the following key points:1. Low TechThe technology chosen to build the community-centered internet infrastructure should utilize affordable and accessible technology at the local level.2. Low EnergySome rural and remote areas in Indonesia have limited power sources. Community-centered internet infrastructure development should consider reliable and sustainable electric sources at the local level.3. Low MaintenanceAs local communities in rural and remote areas have limitations in technical skill and digital literacy,community-centered internet infrastructure should be easy to maintain using locally available resources.4. Low Learning CurveSCN training and capacity building aims to increase technical skill and digital literacy of local communities in underserved areas. Training modules and curricula should be easy to |

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|  | understand so that all members of the community can learn easily regardless of their technical and gender background. 5. Local SupportCommunity-centered internet infrastructure is putting specific emphasis on the importance of multi stakeholder approach and community engagement. Support from local stakeholders are also essential to develop, maintain, as well as to utilize the internet access and connectivity in rural and remote places.The SCN training and capacity building program was also enhanced with Rural ICT Camp, an annual event that was organized since 2020 aimed to support and consolidate ongoing effort to sustain community-centered internet access and meaningful connectivity in rural areas and remote places. This event was facilitating policy dialogue, a series of workshops on technical skills for community-centered internet infrastructure and digital literacy, as well as arts and cultural events. |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | 1. Results:a. The School of Community Networks (SCN) training and capacity building program has been developed in around 13 locations in 11 different provinces in Indonesia. The program was able to increase technical skill and digital literacy, allowing local communities in some project locations to develop and maintain community-centered internet infrastructure in their respective regions.b. SCN program also able to develop 12 training module and curricula, ranging from (1) COVID-19 pandemic prevention protocols, (2) basic computer, (3) computer networking, (4) internet infrastructure, (5) managing community-centered internet services, (6) internet safety and security, (7) internet utilization for village administration, (8) remote education, (9) internet for SME development, (10) health service and telemedicine, (11) Internet of Things (IoT) and (12) disaster risk reduction (DRR).c. Throughout 2021 to 2024, SCN training and capacity building programs have been held in 13 locations in 11 different provinces in Indonesia. The total number of participants involved was 891 people, consisting of 302 female and 589 male participants.d. Community-centered internet infrastructure prototyping has been successfully developed in Ciptagelar indigenous community village (2019) and CiracapSub-district (2020). Later on the prototype was expanded to other areas such as Ketemenggungan Tae (2022), Sukadana Village (2022), Mata Redi |

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|   | Village (2022), Tembok Village (2022), Pulo Aceh (2022), Nimboran District (2023), Don Bosco Training Center (2023), Bobong Village (2023), and Toro Village (2024). Some of the prototypes have been able to achieve an advanced level, while others are still in the development process.e. In early 2023 the community-centered internet infrastructure development was also enhanced with bamboo towers for internet backhaul as an alternative solution for utilizing locally sourced materials and promoting the sustainable development of internet infrastructure in rural areas by addressing the environmental impact of the internet infrastructure. The bamboo tower prototyping was deployed in Buka Tanah Village (2022), Tembok Village (2022), Ketemenggungan Tae (2023), Ciptagelar indigenous village (2023), Don Bosco Training Center (2023), and Ciracap Sub-district (2024).f. This program was also enhanced with a research and policy advocacy process. From 2021 until present, research and policy advocacy has delivered some policy brief documents, position papers, joint statements, and publications in academic journals.g. From 2020 until 2024, Rural ICT Camp has involved2.268 participants, consisting of 1.076 female and 1.192 male participants from 13 SCN project locations in Indonesia, including national CSOs, and international participants. This also includes online participants from 35 different provinces in Indonesia, including Aceh, North Sumatera, West Sumatera, Bengkulu, Riau, Riau Island, Jambi, Lampung, Bangka Belitung, South Sumatera, West Kalimantan, East Kalimantan, South Kalimantan, Central Kalimantan, North Kalimantan, Banten, DKI Jakarta, West Java, Central Java, DI Yogyakarta, East Java, Bali, West Nusa Tenggara, East Nusa Tenggara, Gorontalo, West Sulawesi, Central Sulawesi, North Sulawesi, Southeast Sulawesi, South Sulawesi, North Maluku, Maluku, West Papua, Papua, Southwest Papua.h. Recently the SCN training and capacity building program was also integrated with climate adaptation and mitigation programs while deploying weather stations in some SCN project locations to collect microclimate data to increase knowledge and awareness about climate change, as well as to increase climate resilience at the local level.2. Impact:a. This initiative has been able to map and identify the digital divide challenges in Indonesia;b. The project has been able to increase recognition and |

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|   | visibility of community-centered meaningful connectivity initiatives in Indonesia;c. The project has been able to introduce and identify various community-centered internet service governance model, as well as to implement and develop community-centered internet service business models with diverse and contextual approach;d. The School of Community Networks training and capacity building program has been actively engaged in the development of peer-to-peer learning ecosystem;e. Provide and facilitate a space for policy dialogue, as well as multi-stakeholder collaboration involving government representatives, civil society organization (CSO), the business sector, academic institutions, technical communities and communities in rural and remote areas;3. Lessons learned:a. The School of Community Networks (SCN) training and capacity building program is a long-term effort that needs to be developed gradually and sustainably, and is based on a human-centered and multi-stakeholder approach;b. Internet technology is not rocket science. But it still requires contextual approaches and training techniques in terms of capacity building for rural and remote communities who have never interacted with computers and digital technology;c. Community engagement can be built if the shared interests and common needs of local communities can be met through the development and utilization of community-centered internet infrastructure;d. Acceleration can occur through collaboration with the village government and local stakeholders who share the same vision and interests, in addition to having the knowledge to integrate community-centered internet infrastructure into rural development, including other needs such as job creation, economic empowerment, disaster risk reduction (DRR), climate change adaptation and mitigation, etc;e. Technology transfer in rural communities cannot happen in a hurry. It requires a gradual process with hands-on learning through a human-centered approach;f. Determination of location and beneficiaries needs to be articulated through a thorough survey and needs assessment that directly involves local communities;g. There are several SCN locations that failed and could not be continued due to several technical constraints, including transparency and accountability issues. To |

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|   |  sustain community-centered internet infrastructure, long-term commitment that includes transparency and accountability is crucial. Ongoing efforts to develop community-centered internet infrastructure can also be improved and refined by learning from failures;h. In order to sustain community-centered connectivity in underserved areas, a diverse, flexible and responsible funding support is needed;i. In regards to the development and utilization of community-centered internet infrastructure in underserved areas, local adaptation and contextualization is required to meet the needs and technical challenges in addressing diverse geographic and social contexts.j. Ongoing efforts are needed to mitigate and anticipate potential conflicts, in addition to anticipating the impact of technological disruption on the local values and traditions among rural and remote communities, including to anticipate the unintended consequences of internet and digital tech adoption such as the spread of hoax news, disinformation, misinformation, online gender-based violence, etc. |

1 Indonesian Internet Service Providers Association (APJII), Internet Survey Report 2019 - 2020 (Q2).

2 Indonesian Internet Service Providers Association (APJII), Internet Penetration Survey 2024. Conducted from December 18, 2023 to January 2024, released on February 4, 2023.

3 Indonesian Internet Service Providers Association (APJII), Survey of Internet User Penetration in Underdeveloped Areas in 2024. Conducted from July to September 2024

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| **Case 2** | **TOWARDS AN ENABLING POLICY ENVIRONMENT FOR SUSTAINABLE COMMUNITY TELECOMMUNICATIONS (2024).** |  |
| **Location** | The Americas. Facilitated from Mexico. All OAS member states invited. |  |
| **Time Frame** | 2024 (first edition). January-March (11 weeks) |  |
| **Funding:** | APC covered the costs for transferring content to the OAS learning platform |  |
| **Responsible institutions / partners / people:** | CITEL partnered with Rhizomatica and APC to embed the program as part of PCC1 2024 trainings and invite all CITEL members. APC covered platform contents costs and several of APC and Rhizomatica collaborators were guest speakers.  |  |
| **What is the problem?** | Regulation as a barrier to local models of connectivity;urban-rural digital divide; old paradigms for new technologies |  |
| **Which were the actions taken to address the problem(s)?** | An online training program for regulators and policymakers in Latin America and the Caribbean where paradigms of regulation are reviewed, myths unveiled, and collectively we build an enabling policy and regulation framework for meaningful access to connectivity . |  |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | Results:35 trainees admitted, from 153 applicants from 12 LAC countries.12 received their certificate of completion.…… Impact: Methodology to help them identify bias, dated paradigms, myths or legacy regulation that hinders inclusion and how to revert that thinking, proved a success.Trainings like this, help regulators think out-of-the-box, unlearning myths that are not fit for purpose; act really for the public interest. Know that many colleagues face the same challenges and succeed when doing things differently if using the correct information and methodology.Too soon to tell if regulators put in practice what they learned here.….Lessons learned: …Chatham House Rule worked great to create a circle of trust. Hands-on exercises of analytical thinking, create their own road-map to inclusion, diversity of group, speakers and facilitators. Tutoring is intense in time. Daily feedback is key and deadlines so no one lags behind. Live webinars (1/unit) were fundamental and we all learned from peer experiences and diverse ways of thinking. Admit around 50 as only 50% or less will complete the program.Only for regulators, policy makers, law makers, not aimed at community networks advocates/reps, but one or two may be guest speakers.Book guest speakers far in advance so that all webinars may be calendarized since day 1 of training.…..  |  |

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| **Case 3** | Central American Training Programme in Telecommunications and Broadcasting |
| **Location** | Central America (Guatemala, El Salvador, Belize, Costa Rica & Panamá) |
| **Time Frame** | Two years, one year ongoing |
| **Funding:** | CLUA (Climate and Land Use Alliance)Open Society |
| **Responsible institutions / partners / people:** | Escuela Mesoamericana de Liderazgo Red Centroamericana de Radios Comunitarias IndígenasAlianza Mesoamericana de Pueblos y BosquesCooperativa Sula BatsúRedes por la Diversidad, Equidad y Sustentabilidad A.C.Rhizomática |
| **What is the problem?** | Insufficient technical and organizational capacity building for establishing and sustaining community-centered connectivity and communication own projects in rural and indigenous communities in Central America. |
| **Which were the actions taken to address the problem(s)?** | Development of a training program for capacity building in rural and indigenous communities in Central America, focusing on sustaining community-centered connectivity efforts and advocating for the necessary regulatory changes for their recognition. |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** |  Results:* Completion of four in-person modules focused on community communication, electricity, community networks, participatory content creation, broadcasting, and sustainability, held in El Salvador, Guatemala, Costa Rica, and Belize.
* Culmination of three virtual sessions focusing on the themes: legal framework and self-determination of indigenous peoples, digital security and critical vision of social networks.

 Impact:* Strengthening a network of individuals, organisations and collectives working to strengthen community-centred connectivity projects in Central America.
* Visibilisation of issues and challenges for community-centred connectivity and communication projects by indigenous communities in Central America.
* Generate alliances for the transformation of regulatory frameworks to facilitate the creation of community-centred communication and connectivity projects.

 Lessons learned:* The importance of generating processes of encounter and capacity building with indigenous communities in Central America.
* Major challenges in Central America in terms of regulation and policy, almost entirely designed for large companies.
* Challenges in terms of infrastructure in order to have better connectivity conditions in rural and indigenous communities.
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### Monitoring of the implementation of best practices experiences identified in 2023 and in previous years

This subsection aims to showcase the development, successes and challenges faced by the good practices identified in previous reports. The focal point of each case was directly contacted to provide information via a standard form as seen below.

**2023 selected cases:**

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| **Case CD01:** | **Tech Savvy Libraries** |
| **Presented at the 2023 PNMA Plenary Session:** | Yes |
| **Location:** | Uganda (various locations) |
| **Funding:** | Uganda Communications Commission, Enabel, private sector (Absa Bank Uganda, Airtel Uganda, MTN Foundation) |
| **Responsible institutions / partners / people:** | Uganda Communications Commission, Electronic Information for Libraries, National Library of Uganda (NLU), Maendoleo Foundation, Peer 2 Peer University |
| **What is the problem?** | While many libraries in Uganda are now connected, it is important to match this with efforts to build the skills of librarians and other library and information workers to realise the full potential of connectivity to deliver development outcomes - including both skills in using the internet, but also roles in outreach to communities as a whole, in order to address the challenges faced by vulnerable women and youth. Particular challenges include low or under-employment and poor school performance. |
| **Which were the actions taken to address the problem(s)?** | Since 2014, IFLA has partnered with the NLU to [build the capacity of public librarians in Uganda](https://www.eifl.net/eifl-in-action/capacity-building-public-librarians-uganda) to use ICT in innovative services, and especially to offer ICT training in their communities. Building on a programme of training librarians in how to train people to use computers and make the most of them to improve their lives, the librarians carried out an outreach campaign, focused on women and youth but also open to others. They then designed classes and support programmes tailored to the community needs.In 2021 we expanded our work in Uganda with grant funding from the Wehubit Programme implemented by the Belgian development agency, Enabel, which is ending in the middle of 2023. The “[Digital skills and inclusion through libraries in Uganda](https://www.eifl.net/eifl-in-action/digital-skills-and-inclusion-through-libraries-uganda)” project built digital literacy and training skills of 50 librarians and volunteers at 27 public and community libraries, enabling them to provide ICT training in their communities. The project is implemented in partnership with NLU, Maendeleo Foundation and Peer 2 Peer University. |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | · Over 14,000 persons took part in courses.· Over 1,000 women and youth were connected to useful free online courses, including covering entrepreneurial, technical, craft-making and other skills.· Interestingly, there has also been a lot of take-up among health workers, local government officials, officials, police, market stall holders, teachers and students.· Participants have reported success in getting jobs, developing businesses, completing school, and being better able to support families and communities in general.· Energetic library outreach campaigns have attracted thousands of vulnerable women and unemployed youth, many of whom had never used a computer before. In addition, people from different walks of life - health workers, local government officials, police, market stallholders, teachers and students – are all queuing up to enroll. |
| **2023 Follow-up available** |
| **Has the problem been solved?** | The training is improving lives in communities across the country, as people apply their new skills to start small businesses, study and complete school projects, and find new jobs. Watch [‘Now I have a job!’](https://youtu.be/Y-UU8mmRkHk) with testimonies about how library ICT training is changing lives (EIFL, YouTube, 6 min). |
| **Did any new problems emerge during implementation?** | N/A |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | The chosen solutions still prove effective today so no new solutions have been developed or adapted to the project |
| **Was the solution scaled or localized to other regions?** | In April 2023 we welcomed the news that the Uganda Communications Commission (UCC) will be equipping 10 more public and community libraries with technology packages comprising 10 computers each, plus wireless internet, a printer, a scanner and a photocopier in 2023. |
| **New milestones:** | The libraries that will receive computers from the UCC in 2023 are:· Center For Youth Driven Development Initiatives (CFYDDI) Community Library-Gayaza* Florence Nightingale Community Library-Apac
* Kitengesa Community Library
* Marko Lukoya Community Library-Mukono
* Mubende Public Library
* Nagongera Public Library and Resource centre-Tororo
* Nyaka Aids Foundation Kanungu
* Nyarushaje Community Library
* Pakwach Public Library
* Uganda Development Services Community Library-Kamuli

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| **New challenges:** | Adapting and installing the equipment to be received at the above-mentioned libraries. Also ensuring dissemination of the programme to attract youth and people who may be interested in joining |
| **Next steps:** | Assess possibilities for scaling it in other African regions |
| **Quote:** | “When this community programme came, I started going to the public library to use the new facilities and for computer training. Thanks to this training I obtained a job at Noyo City TV” - Nassaazi M.Joanita (Digital skills trainee at Kawempe Youth Centre Community Library) |
| **Follow-up for 2024 available on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible)  |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **Case CD02:** | **Small businesses in Uganda flourish thanks to digital skills training by local libraries** |
| **Presented at the 2023 PNMA Plenary Session:** | No |
| **Location:** | Uganda, various locations (Eastern Uganda) |
| **Funding:** | The project is funded by Belgium through the Wehubit Programme implemented by the Belgian development agency, Enabel. |
| **Responsible institutions / partners / people:** | Electronic Information for Libraries (EIFL), National Library of Uganda, Maendoleo Foundation, Peer 2 Peer University |
| **What is the problem?** | A lack of digital skills was identified as one of the most significant barriers to Internet adoption and use by people in Uganda. Many Ugandans still lack the skills to use the Internet and perform basic money transfer and payment functions. This not only leaves many excluded, but it also leaves people more vulnerable to safety and security risks. More advanced digital skills are also crucial to accelerate inclusive digital growth, for example for the use or development of digital solutions by small and micro-enterprises and start-ups. - Is it a Rural / Urban setting? Mixed- Is there a gender focus? There has been a particular focus on women, as well as youth, as beneficiaries.- What were the services provided, subsidies used, anything else worth sharing? The programme focuses on helping beneficiaries to connect with online resources in order to launch or develop businesses. Crucially, the work is about connecting people who would not otherwise have been able to make the most of available skills and materials. |
| **Which were the actions taken to address the problem(s)?** | The programme focuses on helping beneficiaries to connect with online resources in order to launch or develop businesses. Crucially, the work is about connecting people who would not otherwise have been able to make the most of available skills and materials. Since 2021, the “[Digital skills@your local library” project](https://www.eifl.net/eifl-in-action/digital-skills-and-inclusion-through-libraries-uganda) has worked with a network of 27 public and community libraries in Uganda to provide digital skills to young people and women. 50 librarians and volunteers have been trained to teach vital digital and mobile literacy skills in their communities. Across Uganda, over 15,000 members of the community have benefited from training to date. They can draw on digital tools to become trainers themselves. This has included a focus on digital and mobile literacy, as well as the development of programmes that are responsive to needs.These activities take place both in libraries and in other community centres, including workplaces and beyond. Whilst many classes are held in library buildings, librarians also go out into the community, visiting workplaces such as garages and shops to demonstrate, using mobile devices, how the internet can provide skills to help entrepreneurs, including mechanics, marketing or communications skills. |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | - Results: over 15,000 members of the community have benefitted, in particular women and young people, but also others from across society. There are strong stories of people who have been able to develop their business, using the internet to develop new business offers, to become more productive, and to offer new services that support, for example, schools. This proved particularly useful during COVID, allowing people to keep on working. - Impact: there are strong stories of people who have been able to develop their business, using the internet to develop new business offers, to become more productive, and to offer new services that support, for example, schools. This proved particularly useful during COVID, allowing people to keep on working.· Success story 01: In the small town of Bugiri, Eastern Uganda, Juliana Awor is growing her tree nursery business thanks to a tin of seeds, a thirst for knowledge and the help of her local library. After enrolling in digital and mobile literacy training, offered by Bugiri Public Library, Juliana learnt how to research tree species and the process of tree cultivation. Using her newly acquired digital skills, Juliana used the internet to learn about Eucalyptus, a fast-growing tree cultivated in Uganda for fuel, timber and use for telegraph poles. Eucalyptus has a high market demand and slowly Juliana’s business has grown. She started by raising 50,000 Ugandan Shillings (12 EUROS) from friends and family to purchase her first tin of seeds. Juliana’s business is growing, and she supplies over 5,000 seedlings each growing season, providing a good income to support her family. Stories such as Juliana’s are replicated across Uganda, as public and community libraries provide local entrepreneurs and small businesses with access to ICT tools and the support they need to succeed in earning a good income to support their families.· Success story 02: In Nakaseke, librarian Peter Balaba and volunteer David Tuhairwe have been visiting their local high street, meeting entrepreneurs and introducing new technology tools and digital resources useful for their businesses. Thanks to David and Peter, Carol Wanyenze’s ice cream shop now uses new recipes from the internet to make ice-cream for their happy customers. At Yiga Bookshop, Jackson Lubega was able to help his father’s business through the COVID-19 pandemic following skills training with Peter and David at the library in Nakaseke. - Lessons learned: (what worked / remaining challenges): while they do already offer connectivity and a strong awareness of local needs, libraries on their own cannot do everything, but with support to develop skills and outreach, can have a significant impact. |
| **2023 Follow-up available** |
| **Has the problem been solved?** | Partially. More funding would allow it to expand to other areas or regions. |
| **Did any new problems emerge during implementation?** | While the programme does already offer connectivity and a strong awareness of local needs, libraries on their own cannot do everything, but with support to develop skills and outreach, can have a significant impact. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | Current solutions seem to be effective when tackling the issue but follow up processes and additional funding are essential if new solutions were to be developed. |
| **Was the solution scaled or localised to other regions? If so, please share examples** | Bugiri (initially), then to Nakaseke, Nayarushanje. |
| **New milestones:** | Obtaining external support to make the programme scalable. |
| **New challenges:** | Ensure follow up processes with the community and obtain a diverse source of funding. |
| **Next steps:** | N/A |
| **Quote:** | “The digital skills training provided by the library enabled me to set up a business that can support my children and allowed me to manage my own enterprise. I want to encourage other people to learn these important skills, it is a golden opportunity for our future.” - Juliana, Burigi Public Library “The most inspiring for me was desktop publishing. Now, I have introduced computer and printing services to the bookshop. We have bought a computer and I design school badges, stamps and exercise books – we are planning to buy a colour printer to print exams and posters in bulk.” - Jackson Lubega, Yiga Bookshop |
| **Follow-up for 2024 available on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible)  |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** | (an organisation’s statement that stood out in the survey reply) |

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| **Case CD03:** | **The Glass Room Project: Misinformation edition** |
| **Presented at the 2023 PNMA Plenary Session:** | No |
| **Location:** | Italy, Germany, Spain, France, Sweden, Slovenia, Lithuania, Ukraine |
| **Funding:** | European Union |
| **Responsible institutions / partners / people:** | Tactical Tech, IFLA, Save the Children Italy |
| **What is the problem?** | Amid escalating crises and the spread of misinformation, digital technologies play an increasing role in the way people get informed, form opinions and find solutions to situations like war, climate crises, and political polarisation. Many are still unaware of the relationship between digital technologies and people's responses to crises. This realisation drove our mission to engage people in exploring this crucial topic.There is a lot of optimism surrounding digital technologies but less focus on their potential for civil society and the risks that could arise. Digital skills and technology can be an empowering force, but more action needs to be done to navigate and keep up with the constant developments. |
| **Which were the actions taken to address the problem(s)?** | We hear a lot about misinformation, disinformation and conspiracy theories these days. But what makes a piece of information reliable or unreliable? Is something “misinformation” if it simply presents an opinion we do not agree with? And what role do new technologies and social media platforms play in how misinformation spreads and the impact it has on our culture, politics and society?The exhibition explores what misinformation is, why it is shared and how it spreads. One can find out how we, the individual users, can take part in it through our many clicks, likes and shares. Visitors learn about the business models, design practices and habits that create an environment where misinformation can spread or go viral. Additionally, they understand how misinformation becomes normalised, and how the decisions made by the gatekeepers of technologies can influence our behaviours and opinions. The Glass Room Misinformation Edition, originally launched in 2020 and updated in 2022, explores how social media and the web have changed the way we read information and react to it. We present new types of influencers, the new and old tactics they use, and the role we the users and consumers play in the way information flows and changes within that flow. We also examine the relationship between personal data, targeting and our opinions, views and behaviours, as well as the business models behind it.The exhibition consists of 9 posters available in 3 formats; 8 video animations accessible via screenings or QR scans; and 4 interactive app games which help visitors engage with the themes. Its newest edition is available in three different in-person versions as well as a [digital one](https://www.theglassroom.org/en/misinformation-edition/). The materials can be downloaded to facilitate the campaign outreach:·  [Poster](https://cdn.ttc.io/src/theglassroom.org/Infosheet/220812_GR_Misinformation_InfoSheet_Poster_EN.pdf): ideal for gallery spaces, libraries, and conferences (75x75cm, 150x75cm)·  [Easyprint](https://cdn.ttc.io/src/theglassroom.org/Infosheet/220812_GR_Infosheet_Easyprint_EN.pdf): low-cost, accessible design printed on A3 and A4 sheets of paper, ideal to be hosted in classrooms·  [Outdoor](https://cdn.ttc.io/src/theglassroom.org/Infosheet/220812_TC_GR_Outdoor_Banner_InfoSheet_Portrait_EN.pdf): large banners printed on PVC to be mounted on metal fencing and displayed in open-air events (340x173cm)·  [Data Detox Kit](https://datadetoxkit.org/en/home): reveals different ways misinformation disguises itself and gives the user practical tips on how to find verifiable information on the internet. Anyone can host [workshops](https://theglassroom.org/workshops/) using the resources to help engage communities in questioning its engagement with technology. |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | So far, there have been over 471 Glass Room events across 61 countries all around the world, reaching over 352,000 people – with many more planned in 2023. When someone hosts a Glass Room Community Edition event, they join a global conversation on data and privacy. During the week of the exhibition, some libraries organised several virtual workshops accompanying the events; nearly a hundred people attended each of these. Feedback from participants suggested that some things they heard and saw during these events – for example around covert advertising – were completely new to them, something they have never considered before. Participants also mentioned that it was an important realisation for them – understanding just how strongly social media and the web are affecting their daily lives. Overall, the interest from visitors and their feedback have once again shown that it is important to speak about information, misinformation, digital design tricks. People should get reliable information, and the library is a good source. This experience has only confirmed the fact that libraries are ready to be actively involved in raising public competences in the field of media and information literacy. A very useful and proven solution in these circumstances was to organise a combined exhibition – matching a physical with a virtual exhibition. It was also helpful that the format of the physical exhibition was flexible and easily adaptable to different rooms. |
| **2023 Follow-up available** |
| **Has the problem been solved?** |  The results have been very positive so far |
| **Did any new problems emerge during implementation?** | Covid-19 issues, unfortunately, limited the number of people at physical events. Our solution was to apply the same rules as for wider library visits – limiting group sizes and instructing visitors to wear masks. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | Yes, it is much easier to expand on these solutions in 2023 |
| **Was the solution scaled or localised to other regions? If so, please share examples** | Yes, in the above-mentioned countries, but also in other projects with a similar focus, again in collaboration with Tactical Tech. |
| **New milestones:** | Expanding exhibition to other countries and libraries |
| **New challenges:** | N/A |
| **Next steps:** | Kickstarting new projects on Digital Literacy and Digital and Green Transitions |
| **Follow-up for 2024 available on [write date]** |
| **Has the problem been solved?** | (partial, fully; include numbers when possible)  |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

**2022 selected cases:**

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| **2022 selected case** |
| **Case 1:** | **Policy and Regulation Initiative for Digital Africa (PRIDA)** |
| **Location:** | Continental project implemented by the African Union Commission |
| **Funding:** | * Budget - €10 million (October 2018 - June 2023)
 |
| **Responsible institutions / partners / people:** | * African Union Commission
* ITU
* European Union
* African Union Member States
 |
| **What is the problem?** | * Challenges hindering African participation in global digital policy decisions:
	+ Capacity gaps at the technical and policy level
	+ Lack of synergies between the national, regional and continental processes
	+ Gender gap, rural-urban divide and barriers to youth involvement in the digital space
	+ 23 out of the 55 AU member states did not have internet governance (IG) structures as at the end of 2019
 |
| **Which were the actions taken to address the problem(s)?** | * PRIDA is responsible for below actions to build capacity of policy officers, Internet community and diplomats of Member States, strengthening the ability of African stakeholders to actively participate in the global IG processes (policy and technical debates) and develop their negotiation skills
	+ Set up a coordinated African roadmap for addressing public policy issues on IG
	+ Set up and promote an African Union Academia on Internet Governance to build capacity in IG, especially among youth
* Development of a strategic plan focused on supporting/creating synergies from national, regional, continental and global initiatives
* A curriculum was developed to support the 23 African countries in the creation of their national IG structures.
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results:
	+ A generic curriculum has been developed and used to support around 29 national and regional SIGs (with localised application), available in English, French and Portuguese
	+ 16 countries have been supported to hold their first School of Internet Governance (Botswana, Eswatini, Madagascar, Cape Verde, Comoros, Liberia, Egypt, Mauritania, Morocco, Ethiopia, Guinea Conakry, Seychelles, Central Africa Republic, Djibouti, Lesotho and Somalia).
	+ Of these 16 countries, 8 (Lesotho, Somalia, Eswatini, Madagascar, Botswana, Liberia, Cape Verde and Ethiopia) have subsequently been supported to hold their first National IGF.
	+ The PRIDA IG course has also been used in Togo, Uganda, Nigeria and at the regional IG schools of West Africa and North Africa
	+ In collaboration with UNECA, the PRIDA IG course was used to train 80 UNECA youth volunteers who offered support during the 17th Global IGF in Ethiopia
	+ Between 2020-2022, 29 training sessions have been held using the PRIDA platform, with an average of 50 trainees per session (ca. 1,500 trained people across the continent)
	+ PRIDA has trained around 100 trainers to replicate the knowledge
	+ 30 people across the region have been trained on e-facilitation
* Impact: for sustainability of the course, PRIDA is collaborating with The Pan African University Institute for Governance, Humanities and Social Sciences (PAUGHSS) to offer it as an elective discipline at the Bachelors or Masters level (pilot expected in the first quarter of 2023).
* Lessons learned:
	+ In all the training we entail to have gender balance at 50/50; progressively reaching the goal
	+ Inclusion of all stakeholders and age diversity are requirements for joining the training - about 50% of the participants are expected to be below 30 years old
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | By the time the project closed in June 2023, there were about 35 Schools of IG held across the continent. 16 out of the 23 Countries that did not have IG structures had been supported to hold their first school of IG and about 1,500 people had been trained. There is still a need for more people to be trained so we are far from addressing the capacity and skills gap. |
| **Did any new problems emerge during implementation?** | Yes. Sustainability of the training has not been addressed. There is a demand for the developed customised training, but there is a need to have more volunteers to support the training or a model that will ensure that the materials are being utilised efficiently and effectively. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | Yes, this solution is still very applicable. Re-thinking on sustainability is needed to ensure that more people benefit from the model - it utilises youth across the continent to facilitate the trainings. The courses developed and implemented are still very relevant going forward. |
| **Was the solution scaled or localised to other regions? If so, please share examples** | The solution has been used in all the five African regions, at the national and regional levels, in more than 30 Schools of Internet Governance (SIGs). Since it is a generic customised course, it can also be applied in other continents. The course is available in French, English and Portuguese. |
| **New milestones:** | The project ended in June 2023. |
| **New challenges:** | The implementation was smooth all through. |
| **Lessons learned:** | The need to have more volunteers to conduct capacity building activities across the continent. |
| **Next steps:** | Continue with capacity building work. Encourage more people to volunteer with capacity building work at varied levels. |
| **Other important matter(s) on the project and not covered above:** | N/A |
| **2024 Follow-up on [write date]** |
| **Has the problem been solved?** | * (partial, fully; include numbers when possible)
 |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| **2022 selected case** |
| **Case 2:** | **Techio Comunitario and National Schools of Community Networks** |
| **Location:** | Mexico, Latin American and the Caribbean Group (GRULAC) |
| **Funding:** | n/a |
| **Responsible institutions / partners / people:** | * Rhizomatica Communications
* APC
 |
| **What is the problem?** | * Low technical skills (installation, operation and maintenance of CNs) of the indigenous communicators that live in remote areas.
 |
| **Which were the actions taken to address the problem(s)?** | * Design of a comprehensive training programme to address the priority issues stated by indigenous communicators, based on the Participatory Action Research (PAR) methodology, as well as the pedagogies practised in the ways of learning and sharing knowledge that occur in indigenous territories
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Result: development of “Techio Comunitario”, a training programme for technical promoters in broadcasting and telecommunications from Mexico and Latin America, to address not only technical issues, but the social and economic implications of technologies, regulation, and sustainability.
* Impact:
	+ Although the programme cannot be fully replicable because all pedagogical processes must be contextualised, currently, the methodology used in the design and implementation of “Techio Comunitario” is the basis for the development of the National Schools of Community Networks in five countries of the Global South (Brazil, Indonesia, Kenya, Nigeria and South Africa), through the training and mentoring from LocNET, an initiative led by the Association for Progressive Communications (APC) and Rhizomatica.
	+ The main contribution of this programme has been the building of an international network of peers who have the knowledge and skills to install, maintain, operate and manage their telecommunications projects. Its replicability does not lie in the curricular structure of the programme, but in the methodology used for its design and implementation.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | This problem of low technical skills of the indigenous and rural communicators that live in remote areas was partially solved, as this program has their limits in terms of resources.First, in Latin America the Techio Comunitario Program has been developed successfully with the ITU in a hybrid format. A total of 150 students from three generations have graduated from 13 countries of the region (45% are women). That is a significant number in terms also of indirect beneficiaries, that are those members of the communities where those graduates live or work, but still there needs to be a big impulse and continuity of this training program to impact more people and their communities. The main impact also is not in terms of numbers of participants, but in the consolidation of a network of technical promoters that help each other.Second, The National Schools of Community Networks (NSCNs), in Brazil, Nigeria, Kenya, South Africa and Indonesia, completed their cycles divided into three stages: program design, training implementation, and support and mentoring of community projects. At least 21 people from 7 communities graduated from each NSCN, for a total of more than 100 graduates from these schools in the global south. The participatory methodology implemented generated very diverse processes in the five cases and allowed for the direct strengthening of local connectivity solutions through capacity building in rural and indigenous communities.Finally, this process generated a solution to the lack of access to useful resources for the development of community networks. This was done through the CN Learning Repository (https://cnlearning.apc.org/), which is in the consolidation phase as a Learning Management System (LMS). |
| **Did any new problems emerge during implementation?** | - Training must be accompanied by the mobilisation of resources and support for community projects to become sustainable.- Hybrid and online training strategies must be improved to promote better teaching-learning processes.- There is a need to train trainers in the organisations so that they are capable of developing their own training processes.- The inclusion of women and other genders continues to be a challenge, especially when it comes to technical or managerial issues.- There is a need, particularly in Africa and Asia, for a regional initiative that can generate networks of peers who can undertake alternative connectivity solutions in rural and indigenous contexts. |
| **2022 solutions still work to tackle the problem? New solutions needed to be developed?** | The solution has been proven to work since 2016, when the Techio Comunitario program started in Mexico. This solution has suffered improvements and updates in terms of curricula structure, instructor and training resources, and as we mentioned in 2022, the programme cannot be fully replicable because all pedagogical processes must be contextualised, but the methodology used in the design and implementation has been the basis for other important training programs in different regions of the world. A hybrid regional training programme is therefore being developed in Africa in coordination with ITU, based on the one developed in LAC.In the case of the NSCNs, it was possible to implement the Participatory Action Research (PAR) methodology as a strategy for the design of training programs adapted to the needs and ways of learning of the target communities. This led to a series of very diverse training processes that allowed the development of local solutions with significant access that could be sustainable over time.Following the methodology itself, after the completion of these training cycles, an evaluation process is now necessary to understand the improvements to be made to the model generated. With this evaluation carried out, it will be possible to address the requests for replicability of the experience in the three regions where it has been implemented.In relation to the repository, the space has already been generated and is being nurtured to solve the lack of access to materials related to CNs, but it needs to be consolidated as an online learning and networking space to strengthen the movement in the global south. |
| **Was the solution scaled or localised to other regions? If so, please share examples** | Due to the visible results of the NSCNs and the training program in LAC, replication processes of the methodology have been generated in other contexts.First, there is a growing interest in the creation of similar programs in countries and regions such as Malawi, Francophone Africa, northern Argentina, Colombia, northern Mexico, Central America, the Philippines, etc.Second, the process for the replicability in Africa of the hybrid training program developed with ITU in LAC has been started. In Q3 and Q4 of 2023 we will be developing a regional mapping and consolidating the collaboration with the ITU after the initiative was approved at the 30th meeting of the Telecommunication Development Advisory Group (TDAG).Finally, due to the demand for an online Learning Management System by several organisations, the CN Learning Repository is being scaled up to become an integral space for training in community networks and local solutions with significant access. |
| **New milestones:** | A fourth generation of the LAC training program began in May 2023. A record number of applications was broken, receiving more than 700 and accepting 94 participants. This year's bootcamp will be held in late November in Guatemala.Closing cycles and microgrant program of the National Schools of Community Networks (January to August 2023):- Brazil: The community communication movement in the region was strengthened thanks to the installation of six online community radio stations, each with an Internet access point that will provide connectivity to the local population.- Indonesia: Ten community projects were developed to use technology to solve local problems, from improving connectivity to the use of AI for fishing and agriculture. The support organisation is planning the Rural ICT Camp 2023, an annual event where they will link the NSCNs with national and international stakeholders.- Nigeria: Training processes were generated to address the lack of digital literacy in the communities with which they work. Projects were generated, in partnership with other organisations, for the installation of access points supplied with solar energy.- South Africa: This was the first school to complete its activities and, after almost a year of training in community project management, the graduates of the 7 supported communities presented their projects to key stakeholders and potential donors in January 2023.- Kenya: They developed a process of on-site accompaniment to the communities they supported, achieving the consolidation of local projects very close to the needs and lifestyles of the population. They are currently generating materials and courses to replicate the NSCN model in Africa. Progress has been made in the development of a hybrid training programme for ICT network managers in Africa in collaboration with ITU. A contribution to the 30th meeting of the Telecommunication Development Advisory Group (TDAG) was submitted in June 2023 and approved by the countries represented in this group. Subsequently, mapping activities of training initiatives and organisations that could be partners in the process have been developed.The CN Learning Repository has more than 100 materials, mostly in Spanish and English, and has gradually grown stronger through its relationship with training programs and courses. This online learning space was launched in March 2023.Several spaces for reflection and advocacy have been generated in international events, such as:- In September 2023 the session “Capacity-building and an enabling policy and regulatory environment to empower communities” will be developed at Africa Internet Governance Forum 2023.- In March 2023, in collaboration with the ITU Office of Digital Inclusion, the session "Capacity Building and Enabling Environments for Meaningful Access in Indigenous and Rural Communities" was held at the World Summit on the Information Society Forum.- In November 2022 the participation of the representatives of the 5 National schools of Community Networks during IGF in Ethiopia sharing during the panel “Lessons Learned from Capacity Building in the Global South”.- In August 2022 the initiative has been recognised during the las Participatory Design Conference held in August 2022, in Newcastle, UK, and received an award for the outstanding achievement in the area of participatory design of information and communications technologies (ICTs). |
| **New challenges:** | The most important advocacy action in 2023 related to the project was the approval at the 30th meeting of the Telecommunication Development Advisory Group (TDAG) of the contribution to the development of a hybrid training programme for Africa. As was previously the case when this same action was developed for Latin America, this action allows ITU to consolidate its position as a key partner in the development of a project of this nature. |
| **Lessons learned:** | Communities around the world have generated strategies to address their communication needs and achieve ICT insertion processes in a way that is relevant to their development objectives and ways of life. This has been possible, among other things, thanks to capacity building processes aimed at the people who live in the communities and where methodologies, contents and learning goals are formulated based on the specific contexts of the territories where the training takes place. The sharing of the practical and theoretical learning that has been generated in these processes becomes fundamental to achieve more solid training actions that have repercussions in practice. Therefore, the systematisation of experiences, access to relevant pedagogical resources and communities of practice are aspects that ultimately allow the achievement of the proposed objectives of digital inclusion and meaningful access. Being able to make knowledge and pedagogical resources available to indigenous, rural and marginalised urban communities is key to strengthening capacity-building initiatives focused on achieving meaningful access conditions in these territories. This implies a series of elements that an enabling environment should contain and in which certain public policies can facilitate the existence and consolidation of these training experiences. |
| **Next steps:** | 1. Development of a comprehensive evaluation of the methodology and process developed in the NSCNs and the training program in LAC.2. Redesign and update of the courses taught in the program in LAC.3. Generation of materials and/or courses for the replicability of the model in other contexts.4. Development of the collective design and implementation of a continental hybrid training program in Africa in collaboration with the ITU, based on the PAR methodology.5. Accompaniment and mentoring in the development of training programs specific to the initiatives that have started their own processes.6. Scalability of the repository to include an online learning platform in which a first virtual course is taught, as well as linking the space with existing training projects. |
| **Other important matter(s) on the project and not covered above:** | The development of such capacity building processes in community contexts, as a basis for the development of alternative connectivity and meaningful access solutions, requires the joint efforts of a wide range of stakeholders. Hence, it is necessary to continue building strategies and learning communities around the development of multi-stakeholder pedagogical processes. In this sense, the process of sharing experiences that can take place in a space such as the PNMA group is key. |
| **2024 Follow-up on [write date]** |
| **Has the problem been solved?** | * (partial, fully; include numbers when possible)
 |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

* + 1. Preliminary conclusions and challenges for scaling/localisation (if any)

###

## **Collaboration streams within the IGF**

### IGF Leadership Panel

### Intersessional work with Youth IGF, DCs, and/or NRIs

### An effective contribution to other related UN processes: GDC and Summit of the Future

PNMA leadership has contributed to the GDC process -based on the 2023 report and on the new suggestions collected this year during the intersessional work- through written contribution and intervening at some of the Open Consultations held by the the “facilitators” countries, and also participating in person to the Summit of the Future actions days and to the Summit itself. The concept of “meaningful access” has been supported by many and has found a proper recognition not only in the GDC final text, but also in the overarching Pact for the Future (see recommendations 59 and 64)

1. **Collaboration streams beyond the IGF: Intersectional Work****s**

### ITU

This subsection aims to showcase the development, successes and challenges faced by the good practices identified in the previous reports. The focal point of each case was directly contacted to provide information via a standard form as seen below.

|  |  |
| --- | --- |
| **Case 1:** | **ITU-D: ICT Infrastructure Map** |
| **Location:** | Global |
| **Funding:** | Ca. EUR 200.000,00 yearly since 2016 |
| **Responsible institutions / partners / people:** | * FNS/ITU-D
 |
| **What is the problem?** | * Lack of global broadband/infrastructure activities mapping, with which regulators and operators can assess service availability and quality locally, nationally, and regionally to inform better decision making
* Lack of information on connectivity and infrastructure level of schools
* Add resilience to infrastructure and develop sustainable financial models for universal digital access
 |
| **Which were the actions taken to address the problem(s)?** | Mapping performed under the following steps:* 1 - Data collection: made available in open access, to assist harmonisation of infrastructure attributes across regions and avoid duplication of financing as subsidies can be allocated to areas truly affected by market failure and regulatory needs linked to market regulation
* Collection on existing and planned broadband infrastructures, services offered, demand and investment, gaps of broadband coverage, quality of service level and suitable areas of investment.
* 2 - Visualisation: an interactive online mapping application that aggregates and visualises various dimensions of global data related to broadband networks (fixed and mobile). The map includes many important layers of geographic context, such as topography, population, disaster risk, fibre nodes, submarine cables, transport infrastructure, and connectivity statistical indicators..
* 3 - Analysis: draw analytics of connectivity gaps on the mapping platform to drive potential correlations. Offer network design and planning to assess the amount of investment required to fill the gaps. Telecom manufacturers, operators and other stakeholders have a vested interest in such insights to facilitate the deployment of next-generation networks, simplify their operation and reduce cost to provide affordable connectivity in rural areas.
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results: production of [ITU Transmission Maps](https://bbmaps.itu.int/) / [Mapping Platform](https://itu.int/go/maps)
	+ It helps to increase the understanding of ICT infrastructure presence around the globe, with focus on researching terrestrial fibre reach at national and international scales.
	+ As of December 2021, the database contains the following information on global terrestrial fibre and microwave links
		- 4 million km of fibre and microwave links
		- 44,000 transmission links
		- 27,000 nodes (access points to backbone fibres)
		- 596 operators
	+ Data supports ITU’s partnerships - such as PRIDA - in estimating the amount of effort to close connectivity gaps and in how to better provide Internet access to communities, schools, financial hubs, and others.
* Impact:
	+ It brings together several available global data layers relevant to infrastructure in a single user-friendly platform. This includes a combination of compiling and collating relevant public domain datasets, and selectively acquiring key proprietary datasets using internal surveys from ITU members.
	+ It facilitates and amplifies use of other ITU indexes and data portals, such as:
		- National mapping systems (NMS) survey.
		- G5 Benchmark
		- ICT Regulatory Tracker
	+ The platform also contributes to SDG 9 by helping to build resilient infrastructure, promoting inclusive and sustainable industrialisation, and fostering innovation.
* Lessons learned: the maps showcase that broadband data, combined with in-situ data as well as other sources (population, macro-economic indexes etc.), can provide a real benefit to end users by helping reduce investment risks and assess where networks need real buildup.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | * (partial, fully; include numbers when possible)
 |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** | (an organisation’s statement that stood out in the survey reply) |

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| **Case 2:** | **ITU-D: Last Mile Connectivity (LMS) Solutions Guide** |
| **Location:** | Global |
| **Funding:** | Ca. EUR 250.000,00 yearly since 2019  |
| **Responsible institutions / partners / people:** | * FNS/ITU-D
* Ministry of Science and Technology, South Korea (MSIT)
 |
| **What is the problem?** | * Low benchmarks availability for designing middle and last mile connectivity networks.
* Data/tools to support decision-making and assist designers when selecting technical solutions are often proprietary.
* Importance to assess economic feasibility and cost of connectivity to build solutions.
 |
| **Which were the actions taken to address the problem(s)?** | * Identify key technologies, policies, and business models to build and expand last mile connectivity, especially in rural and remote areas.
* Build a comprehensive database of connectivity parameters working across ITU-D regional offices.
* Build software tools to simulate design and cost of networks.
* Develop methodologies for topology and cost estimation.
* Produce empirical modelling of network’s technical and financial aspects.
* Use open data and collect data from regulators and stakeholders in various countries.
* Simulate projects using real data.
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results:
	+ Publication of [Last Mile Connectivity Solutions Guide](https://www.itu.int/en/myitu/Publications/2020/12/16/09/24/Last-mile-Internet-Connectivity-Solutions-Guide-2020), featuring
		- Key challenges to address the connectivity gaps for scaling and sustaining the connectivity.
		- Key technologies, policies, and business models to build and expand last mile connectivity.
		- Collaborative strategies to ensure that people at the bottom of the social pyramid achieve reliable and meaningful connectivity.
		- Case studies of successful rollout of last mile connectivity projects deployment.
	+ Establishment of LMC products - e.g., [https://connectschools.online](https://connectschools.online/), a school community broadband calculator
* Impact:
	+ Development of additional resources to help member states address last-mile connectivity challenges, including a database of case studies ([LMC Case Studies Database](https://drive.google.com/open?id=11OX2LEXxzll3N7wOZ21iDxIq-FBda_K3EJsmy6tMbBI)), [capacity-development courses on last mile connectivity](https://academy.itu.int/training-courses/full-catalogue/emerging-technology-last-mile-connectivity), and interactive last-mile connectivity diagnostic and decision-making tools.
	+ Building broadband access networks and local area networks (LAN) in localities
	+ Connecting schools and hospitals to broadband transport backbones.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | * (partial, fully; include numbers when possible)
 |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

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| --- | --- |
| **Case 3:** | **ITU-D: Spectrum Management System for Developing Countries (SMS4DC)** |
| **Location:** | Global |
| **Funding:** | Ca. EUR 250.000,00 yearly since 2015  |
| **Responsible institutions / partners / people:** | * FNS/ITU-D
* Ministry of Science and Technology, South Korea (MSIT)
 |
| **What is the problem?** | * No shareable effective spectrum management tools and experiences for sustainable economic and social development, including developing computerised frequency management and monitoring systems.
* Assistance to the transition to digital terrestrial television broadcasting (DTTB)
 |
| **Which were the actions taken to address the problem(s)?** | * Development of a spectrum management software/tool (SMS4DC)
* Direct assistance in spectrum management including cross-border frequency coordination
* Development of national roadmaps and guidelines for DTTB transition
* Digital Switch-Over (DSO) database maintenance and update
* Spectrum management training program
* Compilation and analysis of the regulatory policies concerning human exposure to electromagnetic fields (EMF) for authorising the installation of radiocommunication sites
* Awareness on the effects of EMF from radiocommunication systems, and on technical regulations on the limits for maximum exposure
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results:
	+ SMS4DC assists governments of developing countries in performing their spectrum management responsibilities more effectively. The software has continuously been updated and published reflecting the decision of the World Radiocommunication Conference (WRC)
	+ Available [general interface tool](https://www.itu.int/pub/D-STG-SPEC-2022-V5.2) to implement network planning for optimization of spectrum monitoring networks
	+ Regional and national spectrum training workshops for developing countries in collaboration with several projects such as PRIDA, with advice and country-level recommendations
	+ [Self-paced spectrum management training](https://academy.itu.int/itu-d/projects-activities/curriculum-development/smtp) course via the ITU academy platform.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | * (partial, fully; include numbers when possible)
 |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

### WAN-INFRA

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| **Case 4:** | **WAN-IFRA: Internews’ Ads for News Initiative (AFN)** |
| **Location:** | Global, with a focus on APAC, EMEA, LATAM |
| **Funding:** | * Internews, USAID, private/other donors
	+ Focus point: Chris Hajecki, Director, Ads for News (Internews)
* Founded in 2018 / Rebranded in 2021
* Budgets of approximately UDS 250.000,00 yearly
 |
| **Responsible institutions / partners / people:** | * Internews
* World Economic Forum
* World Association of News Publishers
* GroupM
 |
| **What is the problem?** | Local news is being cut out of digital ad spending, forcing many local news outlets to close and preventing others from starting up. In turn, local communities are losing access to culturally relevant information and voices that hold those in power to account. In many places around the globe, people now live in news deserts. These are defined as communities without a local daily news source. In freedom-restricted and ethnically diverse countries, the lack of trusted local news can be especially harmful to people, removing the information they need to hold to account those in power and make informed decisions about their lives. Additionally, brands are missing the performance benefits and reach of trusted local news environments. They are also missing diverse consumer segments that the inclusion of local news audiences can provide. These recent realisations within the ad industry are key to AFN’s growth in 2022 and beyond.  |
| **Which were the actions taken to address the problem(s)?** | Ads for News vets news websites, by country, according to journalism and advertising industry standards (including the GARM Brand Safety Standards). Then, AFN delivers trusted local news inclusion lists to global and national programmatic advertisers. |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | Results: demand for programmatic ad inventory on trusted local news websites is boosted, resulting in increased programmatic ad revenue for publishers. Impact:* Improves access to quality news and information in countries indexed
* Helps local journalism survive and thrive
* Addresses disinformation and curbs the spread of fake news and hate speech by helping defund websites that publish these types of content
* Helps news outlets in diverse communities produce culturally relevant information
* Sector collaboration: AFN has contributed with over 8,000 local news URLs in 30 countries for GroupM’s Global Local News Marketplace, following its [Responsible Investment Framework](https://www.groupm.com/newsroom/groupm-rallies-responsible-investment-as-go-to-market-standard-redefines-scale/). The framework aims to rally global brand clients and their ad spend approaches around brand safety, data ethics, diversity, equity, inclusion (DE&I), responsible journalism, and sustainability.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | * (partial, fully; include numbers when possible)
 |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

### WIPO

|  |  |
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| **Case 5:** | **WIPO: Project on Enhancing the Use of Intellectual Property for Mobile Applications in the Software Sector** |
| **Location:** | Kenya, Trinidad & Tobago, Philippines |
| **Funding:** | WIPO - budget n/a |
| **Responsible institutions / partners / people:** | * Senior Counsellor and the Associate Program Officer of the Development Agenda Coordination Division (DACD) at WIPO in cooperation with the national governments of Kenya, Trinidad & Tobago, and Philippines.
	+ Focal point : Paolo Lanteri
 |
| **What is the problem?** | * Improve software sector stakeholders’ knowledge and expertise on when and how to use various intellectual property (IP) tools in support of developing and commercialising mobile applications
* Create linkages between IP offices, ICT hubs, research institutions and industry within the beneficiary countries and amongst them
 |
| **Which were the actions taken to address the problem(s)?** | * Participatory approach to the problem:
	+ Pilot and knowledge from Kenya defined the elaboration process in other countries.
	+ The design process was executed by in-house experts, member states representatives, relevant communities, and relevant audiences. They participated in several steps by providing knowledge and experience, with constructive discussions that helped to refine and further strengthen the project before final approval.
 |
| **Results / Impact / Lessons learned (what worked/remaining challenges)** | Results:* Since April 2020, all tools and resource materials can be found [online](https://www.wipo.int/ip-development/en/agenda/ip_mobile_apps/). By mid-January 2022, the website had had a total of 9,453 visitors and 17,922 downloads, demonstrating the success of the tools, learning resources, research, and infographics.It had an average of 47 downloads per month during its first 8 months of operation, which increased exponentially in December 2020, and reached its peak one year after its launch, with 642 downloads between April 18 and May 2, 2021.
* A few numbers on the project tools:
	+ The *Handbook on Key Contracts for Mobile Applications – a Developer’s Perspective* had the highest number of visitors - 3,381 hits by the end of the project.
	+ *The Scoping Study* was the tool with the most downloads - 4,742 times, followed by the *WIPO Guide on Alternative Resolution for Mobile Applications Disputes* with 1,475 downloads, and the *IP Toolbox for Mobile Applications Developers* with 1,241 downloads.

Impact:* Countless advances have been achieved or promoted by WIPO in the three implementing countries. Some of them are tangible and were included in the logical framework of the project, such as the tools created for developers, entrepreneurs or lawyers; the tools on IP practical management, financing, commercialisation, and tools to raise awareness and knowledge on IP. Other achievements identified in the evaluation phase are:
	+ Developers have started to think about IP as an option to protect their interests and generate income streams, whereas at the beginning of the project they were mainly interested in selling their products without making real use of IP.
	+ The project has broadened the horizons of all the developers, lawyers, entrepreneurs, and researchers who have participated in it; a mentoring program allowed them to easily interact with each other and with potential partners.
* Interest in organised business representation: a movement has been reported to create app associations in the implementing countries to defend the interests of app developers, help them better advocate for their interests, have a more regulated environment, and better representation in international forums. Specific impacts forthcoming.
* The website reached audiences beyond the original 3 implementation countries. There were 1,600 visits from the USA - it is important to note that, technically, these numbers include visitors from the entire Caribbean region, and hence from Trinidad and Tobago. This is followed by India (930,000 visits) and the Philippines (889,000 visits). Visitors from Kenya appear in seventh place with 288,000 accesses.
 |
| **2023 Follow-up** |
| **Has the problem been solved?** | * (partial, fully; include numbers when possible)
 |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** |  |

### ICANN

|  |  |
| --- | --- |
| **Case 6:** | **ICANN: Coalition for Digital Africa** |
| **Location:** | 1st Phase: 10 countries; 2nd Phase: 20 countries |
| **Funding:** | ICANN - budget n/a |
| **Responsible institutions / partners / people:** | * ICANN in partnership with:
* Africa Network Operators Group(AFNOG)
* Africa Top Level Domains Organization (AFTLD)
* Association Of African Universities (AAU)
* Internet Society (ISOC)
* Network Startup Resource Center (NSRC)
 |
| **What is the problem?** | Internet penetration in Africa grew from 1.2% in 2000 to 43% in 2022. This explosive growth is driven by a digitally savvy, young, and educated urban workforce for whom the adoption and consumption of online services is second nature. ICANN is committed to ensuring that the Internet continues to grow safely in Africa, and in a stable manner, to bring communities, cultures, and economies together. This can only happen by creating an alliance among the various stakeholders who contribute to and influence the Internet ecosystem in Africa.Collaborating with partners across the continent, the Coalition for Digital Africa will be able to accomplish more than each organisation could achieve on its own, thus creating workable responses to regional challenges and ultimately, serving the global public interest. |
| **Which were the actions taken to address the problem(s)?** | * Install 2 ICANN Managed Root Server (IMRS) clusters in Africa - one in Kenya, other location to be announced - in order to:
	+ Add crucial capacity to support the anticipated growth in Internet use across Africa.
	+ Diminish the risk of Internet service disruptions and degradation due to cyberattacks.
	+ Support and enhance the overall resilience of the DNS infrastructure in Africa.
* Prepare email systems and other communication platforms within higher education institutions for Universal Acceptance (UA) and Email Address Internationalisation (EAI) by:
	+ Creating awareness of and developing capacity for UA and EAI within academic institutions.
	+ Providing training so that these institutions can build their email systems, databases, and websites UA-ready.
	+ Offering information to higher education institutions, enabling them to incorporate UA and internationalised domain names into their curricula.
	+ Encouraging higher education and research institutions to participate in the work of the Universal Acceptance Steering Group (UASG).
* Encourage Domain Name System (DNS) operators, registries, and registrars in selected African countries to implement and deploy DNS Security Extensions (DNSSEC), while working with network operators to turn on DNSSEC validation. This effort will ultimately lead to the development of a DNS resource portal for Africa. Expected follow-ups in:
	+ Overall improved DNSSEC deployment across many ccTLDs in Africa.
	+ Increased uptake of DNSSEC at the second and third levels of domain names.
	+ An online DNS resource portal and library.
	+ More secure and resilient DNS infrastructure in Africa.
	+ Greater percentage of DNSSEC validation among African DNS Operator
* Increase (or attract) participation and contribution from Africa in multistakeholder Internet policymaking by:
	+ Offering tailored capacity development activities led by industry experts through online courses, hands-on workshops, and webinars.
	+ Making each ccTLD an asset for the development of meaningful connectivity in their respective country.
	+ Assisting ccTLD registries to establish a sustainable environment for the development of the Internet country code.
	+ Assisting governments, regulators, and selected ccTLD registries in the development of partnerships, growth strategies, and network registrars.
 |
| **Results / Impact / Lessons learned (what worked / remaining challenges)** | * Results: the project has just been launched at the Global IGF 2022 in Addis Ababa. Results (some mentioned above) are expected over the next three years. The first concrete achievement should be the installation of a new IMRS cluster server in Kenya, within a few months.
 |
| **2024 Follow-up** |
| **Has the problem been solved?** | * (partial, fully; include numbers when possible)
 |
| **Did any new problems emerge during implementation?** |  |
| **Do 2022/2023 solutions still work to tackle the problem? New solutions needed to be developed?** |  |
| **Was the solution scaled or localised to other regions? If so, please share examples** |  |
| **New milestones:** | (include date of achievement and numbers when possible) |
| **New challenges:** |  |
| **Lessons learned:** |  |
| **Next steps:** | (an organisation’s statement that stood out in the survey reply) |

### UNDESA

* 1. …

## **Looking Ahead**

### Connecting the dots with the IGF Community and IGF 2024 Themes

Section to be concluded post-annual meeting; it will contemplate the connections between the PNMA work, the subtheme “Advancing human rights and inclusion in the digital age”, and other relevant workshops/activities taking place in Riyadh.

* 1. Lessons learned between 2021 and 2024
		1. Driving impact with policy and practice
		2. Revised policy issues for consideration

Section to be concluded post-annual meeting

###

## **2024 IGF PNMA Process and Plenary Session: key messages and concluding remar****ks**

Section to be collated/concluded post-annual meeting. It will include achieved outputs (vis à vis what had been enlisted as priority in the PNMA Work Plan); key messages raised during the Plenary Session, and concluding remarks.

8.1 The Plenary Session

In 2024, the PNMA Plenary Session will be split into two complementary moments, each touching upon a topic close to the current policy network’s deliberations: the traditional presentation of good successes towards meaningful access - this time with focus on the Arab region -, and a second discussion on the role of meaningful access in the proper setup, use, and reporting of crisis response mechanisms (e.g., emergency systems connected to natural disasters).

We have already raised a few examples endorsed by our community members. The PNMA gladly welcomes suggestions and feedback: even if the cases are not presented during the session, they will be part of the final output report:

* [Airborne 5G communications](https://theconversation.com/a-third-of-the-worlds-population-lacks-internet-connectivity-airborne-communications-stations-could-change-that-234986), research project by Mr. Mohamed-Slim Alouini, the Al-Khawarizmi Distinguished Professor of Electrical and Computer Engineering (ECE) and the holder of the [UNESCO Chair on Education to Connect the Unconnected](https://www.linkedin.com/company/kaust-unesco-chair-on-education-to-connect-the-unconnected/) at the King Abdullah University of Sciences and Technology (KAUST);
* Pakistan’s [Digital Gender Inclusion Strategy](https://www.pta.gov.pk/assets/media/digital_gender_inclusion_strategy_28-02-2024.pdf), developed by an all-female team based on a nation-wide, community-centered consultation process and endorsed by the Global Digital Inclusion Partnership;
* [Universal Meaningful Connectivity](https://www.itu.int/itu-d/sites/projectumc/) yearly update, by Mr. Martin Schaaper, ITU;
* [Low-Cost Weather Stations in Kyrgyzstan’s Challenging Terrain](https://isoc.kg/news/low-cost-weather-stations-kyrgyzstan-research/), by Mr. Talant Sultanov (ISOC Kyrgyz Chapter);
* [Meaningful Connectivity Measurement Proposals](https://globaldigitalinclusion.org/2024/07/15/the-state-of-meaningful-connectivity-in-brazil-measuring-quality-and-revealing-hidden-gaps/) and the the portrait of the population in Brazil, by nic.br

## **References**

Collated in the final report version

## **Annexes**

I. PNMA 2024 Work Plan

II. PNMA Output Report 2023

III. PNMA Output Report 2022

IV. PNMA Repository of Good Practices

V. tbc

1. The [resolution adopted by the UN General Assembly on 16 December 2015 (70/125)](https://unctad.org/en/PublicationsLibrary/ares70d125_en.pdf), “Outcome document of the high-level meeting of the General Assembly on the overall review of the implementation of the outcomes of the World Summit on the Information Society”, extended the mandate of the IGF as set out in paragraphs 72 to 78 of the Tunis Agenda. [↑](#footnote-ref-1)
2. IGF website: <http://www.intgovforum.org>. The IGF is one of the key outcomes of the World Summit for the Information Society (WSIS). [↑](#footnote-ref-2)
3. [Statement of IGF 2021 PNMA Multistakeholder Working Group](https://www.intgovforum.org/en/content/igf-2023-policy-network-on-meaningful-access). [↑](#footnote-ref-3)
4. [IGF 2021 Report](https://intgovforum.org/en/filedepot_download/223/20706), p 45. [↑](#footnote-ref-4)