

The High-level Panel on Digital Cooperation

Public Access Centers such as Libraries, Community Networks and Offline Internet all combine to provide a solution to reach the billions of people not yet connected.

A contribution by the Partnership for Public Access(P4PA): Partners: International Federation of Library Associations(IFLA), The Internet Society(ISOC), IEEE, Electronic Information for Libraries(EIFL), People Centered Internet(PCI), Alliance for Affordable Internet(A4AI), Bibliothèques Sans Frontières(BSF), Gigabit Libraries Network(GLN) <https://p4pa.net/partners/> Submitted 1/31/19

Recent celebrations about half of the world's population getting online obscure the fact that the dominant strategies for reaching the remaining half rely on mere improvements to existing technologies and business models. Yet this combination is not projected to succeed until 2050, or even later as adoption rates decline per the World Wide Web Foundation. <https://bit.ly/2FosG2S>

Worse, the great majority of current infrastructure investments will further exacerbate the global digital divide by increasing levels of service and network performance primarily in already more well-connected markets where users have greater disposable incomes and the costs of delivery are lower. Predicted capabilities of so-called 5G represent the leading example where ubiquitous high-speed wireless depends on pervasive fiber deployments to support small cell, short-range wireless equipment.

These conditions are most absent in more rural and otherwise under/served areas as markets seek to optimize near-term returns on investment.

Even if market-altering innovative connectivity solutions like new LEO satellite systems prove effective at delivering internet access in remote regions, an equally daunting barrier exists in the lack of skills to make meaningful use of such a powerful resource.

Connectivity is essential but inadequate. As former World Bank President Kim put it, "Two things we know for sure will be needed: connectivity for everyone and also the ability of people to engage in that new digital world," Kim said. "We have to move quickly on connectivity, but we have to move equally as fast in making sure that people are able to take advantage of that connectivity."

Unless training and support, including digital skills, are integrated into infrastructure deployment strategies, the results will fall woefully short of any goal for universal inclusion in the global digital society and toward wider 2030 SDG's.

I. VALUES & PRINCIPLES:

- a. What are the key values that individuals, organizations, and countries should support, protect, foster, or prioritize when working together to address digital issues?**

The Partnership for Public Access (p4pa.org) is a coalition of international organizations dedicated to universal internet inclusion through public access. P4PA advocates for enabling policies like USAF and spectrum reform combined with local collaboration and responsibility to achieve this mission. To secure universal access, we recommend a three-pronged approach that incorporates Public Access Centers/

Libraries, Community Networks and Offline Internet as needed. Which solutions are applied would be determined by individual communities in keeping with these key values:

- * Universality: All people should have the possibility to connect.
- * Democracy: All people should be able to choose whether to connect (and have the information necessary to make this choice).
- * Opportunity: A focus on widest economic and societal benefits including narrower commercial interests.
- * Equity: All people, irrespective of gender, age, capacity, race or ethnicity, should have access to information through ICTs and the digital skills needed to participate fully in society.

The challenges will not get easier, with non-users of the internet often facing low incomes, remoteness or other barriers that stand in the way of the solutions which have worked to date. There is also ongoing effort required in order to understand what skills are needed to be a successful internet user, and how to teach them. There is no easy fix, but a combination of approaches could, together, offer a formula to address almost any circumstance.

B. What principles should guide stakeholders as they cooperate with each-other to address issues brought about by digital technology?

While no single approach will suit all communities, a combination of approaches could, together, offer a formula to address almost any circumstance. Public Access Centers such as Libraries, Community Networks, and Offline Internet all combine to provide a solution that can bring almost anyone anywhere into the global digital conversation. Cooperation among community stakeholders should be guided by these principles:

- * Internet connectivity as essential worldwide infrastructure.
- * The principle purpose of Universal Service and Access Funds is to provide a basic level of universal public access even if as a shared resource..
- * National governments have the leading obligation to ensure open access to public information, forms, regulations, records, etc., as well as to other information that allows people to improve their lives.
- * Focus on combinations of bottom-up and top down solutions.
- * Acknowledgment that commercial models do not work in many cases.
- * Training and support are essential for most new users to attain meaningful access and digital skills, which includes locally-generated content in local languages.
- * Tailored approaches should be informed by lessons learned and proven success cases.

C. How can these values and principles be better embedded into existing private and/or public activities in the digital space?

The Partnership for Public Access (P4PA) advocates for enabling policies like USAF and spectrum reform combined with local collaboration and responsibility to achieve universal access. This assumes digital skills advocacy is central to core education policy. Support for such collaboration would require these values and principles:

- * Regulators to be careful that rules set do not just reinforce the position of the strong.

- * The possibility of internet access and digital skills as a core right.

- * A readiness to work with communities and community anchor institutions.

- * Public assets like rights of way and spectrum should not only be licensed/ sold off to commercial interests but should also have direct public use and benefit.

- * Barriers against new innovative community-based access solutions to form and operate should be lowered.

II. Methods & Mechanisms:

- a. How do the stakeholders you are familiar with address their social, economic, and legal issues related to digital technologies? How effective or successful are these mechanisms for digital cooperation? What are their gaps, weaknesses, or constraints? How can these be addressed?**

Libraries, schools, and other community anchor institutions(CAI's) have embraced this pivotal role around which so many issues revolve. They seek to offer help in finding and making best use of information digitally. They have formed partnerships with companies and digital skills agencies, as well as other providers.

Connecting anchor institutions has proven a double return on investment. The first is to deliver internet connectivity to support the essential social services of education, health, and other public information or services. Second, are as nodes on regional scale open "middle mile" infrastructure, to be leveraged by "last- or first-mile" providers whether private commercial ISP's or community networks, using wired and/or wireless technologies at a much lower overall capital cost.

Providing no-fee or low-fee access has proven to generate increased new demand for higher performance commercial services, once new users discover the value of being connected.

Partnerships among government, private, and civil society groups will enable holistic solutions that account for social, economic, and legal issues. By collaborating and complementing the strengths that various partners bring to the table, multi-pronged strategies can leverage these powerful yet underutilized approaches:

* **Public access centers such as libraries:** Promotion of digital inclusion through technology access, information access, and development of digital skills.

* **Community networks:** A complementary way – across various sectors, economies, and technologies – to self-provision connectivity.

* **Offline internet:** A growing movement striving to provide digital information access for communities that are not yet connected to the internet.

The Partnership for Public Access(P4PA) is already demonstrating Global Digital Cooperation as a leading consortium of international technology and information organizations and associations. P4PA embraces and advocates for these three approaches which support and reinforce each other to actually reach the goal to Connect and Enable the Next Billions(CENB) <https://bit.ly/2HI11fo> P4PA is currently looking to refresh founding principles and to create templates in support of USAF and spectrum reforms.

B. Who are the forgotten stakeholders in these mechanisms? How can we strengthen the voices of women, the youth, small enterprises, small island states and others who are often missing?

* Those who are still offline!

* The general public who owns the assets critical to communications infrastructure as public rights-of-way and public airwaves.

Promote local responsibility for planning and implementation of community networks as a foundational action to gain skills, access and relevant content, especially in the case of people who may otherwise be left behind.

It is essential to convene community-level strategic planning to develop locally appropriate solutions. Trusted local community institutions like libraries can serve as hubs for planning and development, as safe spaces for women and girls and other forgotten stakeholders, as co-working spaces for entrepreneurs, as well equipped environments for guided or self-directed learning, and even as physical network hubs and tech support centers. Build local skills to deploy and maintain networks, in local languages with local content.

Extra evidence on the value of public access points from the latest Affordability Report analysis on broadband policy found that investment in public access points had the strongest correlation with affordable internet access over other policy dimensions. (https://a4ai.org/affordability-report/report/2018/#universal_&_public_access)

C. What new or innovative mechanisms might be devised for multi-stakeholder cooperation in the digital space?

* It is critical that national governments re-invest a portion of fees (USAF) derived from taxes on communication services, spectrum licenses and rights-of-way access permits to insure universal basic public access.

* Community-level cooperation – starting from offline internet, through public access through community anchors, to community networks.

- * Understanding local needs and resources as a means of reaching the remaining unconnected billions. Initiate community led projects to develop the digital skills needed to operate basic networks and to “Build In” toward internet backbone.
- * Prioritize deployment of high-performance regional interconnection points under most generous cost recovery structures.
- * Since all airwaves originate as public property, more open public spectrum, like WiFi, should be allocated for all to use and to foster wider innovation.

There also needs to be a combination of top-down and bottom up initiatives. In other words, we should both build out, and build in. Libraries, schools or other community anchor institutions such as ICT hubs, offer the most economical and equitable way to deliver universal (albeit shared) access to the internet. Generally, open to all on a no-fee / low-fee basis with dedicated staff, these hubs are well suited to train and support new users in acquiring use of educational, health and other public information services like e-gov applications. Combined with support services, PA acts as a stepping stone to ‘private’ access by driving demand for commercial services once users begin to experience the value and possibilities capabilities available through the internet.

Governments cannot reasonably be expected to provide internet access to every home and office. However, they can and should prioritize ensuring high quality broadband to core anchor institutions in every community to guarantee delivery of (public) information and services as the most economical, equitable way to provide access to the greatest number. As open “middle mile infrastructure”, these anchor institution connections can further serve as (or be proximate to) interconnect points for various last mile/ first mile solutions by whatever combination of business models and technologies that may prove most effective in each area.

Where markets have clearly failed, the combined public and private interests in communities can organize to provide access services. Community (wireless) networks, and other forms of grassroots DIY networking models, serve as complementary to the Internet communication infrastructures.

Every community is a unique combination of attributes and circumstances, and where poor or no internet services exist, each community must step forward to find their own solutions. New, simpler and more cost effective networking technologies are permitting local and regional areas to deploy their own networks to solve intractable business model barriers for most carriers. Cooperatives, non-profits, and volunteer-built networks can tailor local infrastructure to the needs of each community, and seek lowest cost and common interconnections back to the internet.

A further innovative approach is “Offline internet”. In all too many cases, internet connections are not available in large and often remote regions. In such cases, solutions still exist to provide meaningful access as “Offline Internet” systems. An OLI approach depends on local needs in specific circumstances. Autonomous servers hosting a broad range of relevant content and applications as well as performing as local network hubs, can operate successfully without continuous internet connections.

OLI means the systems and services designed to bring internet-accessible content to people and places without existing, adequate, and/or affordable network access. OLI solutions serve as a key step towards enabling access to and mastery of digital information and education.

Given the importance of National Broadband Plans in expanding access in a strategic way and their capacity to influence a number of the other issues in this submission, the drafting of NBPs could offer a

unique and new opportunity for cross-sectoral cooperation when done right to have public, private, and third sectors come together on equitable footing to complement each other rather than compete. Spectrum and wholesale network access could be key interventions in this area.

III. ILLUSTRATIVE ACTION AREAS:

The Panel plans to explore, among others, the following areas where greater digital cooperation is required:

- **inclusive development and closing the digital gap**
- **inclusive participation in the digital economy**
- **data**
- **protection of human rights online, particularly of children, women and marginalized communities**
- **human agency and voice/participation in shaping technological choices and architecture**
- **digital trust and security**
- **building the capacity of individuals, institutions and governments for the digital transformation.**
- **agree upon a standard definition of digital skills**

A. What are the challenges faced by stakeholders (e.g. individuals, Governments, the private sector, civil society, international organizations, the technical and academic communities) in these areas?

While these are all extremely complex challenges and issues, there is no single institutional response that better addresses all of the above than by increasing support for libraries or other types of trusted community centers. Rather, they face a combination of the below:

- * Poor use of USAF
- * Spectrum mis-allocation
- * Difficulty of obtaining authorizations for community-based solutions.
- * Dominance of major commercial players to the exclusion of newcomers
- * Lack of confidence and skills
- * No standard definition of digital skills
- * Failure to realize the potential of community anchor institutions

B. What are successful examples of cooperation among stakeholders in these areas? Where is further cooperation needed?

Public Access Centers (libraries, telecenters, etc.)

Hundreds of millions if not billions of people rely on community anchor institutions, such as the world's 2 million libraries, for internet access. In the US alone, roughly one in three adults (about 80 million) accesses the internet at a public library, in many cases not only as their sole connection resource but also as a trusted place for support, training, safety.

([Vive Digital in Colombia](#), [Fatih in Turkey](#), [Connected Homes in Costa Rica](#), [Public WiFi in South Africa](#) and [WiFi hotspots in Botswana](#), among them) tend to vary per implementation. Public connectivity can be funded in some instances by governments; in others, by public-private partnerships or businesses. Connectivity can be provided by separate "telecenter" spaces or as part of existing public institutions.

A conducive policy environment is crucial to success. "Analysis shows that Colombia, Costa Rica, Ecuador, Rwanda and Turkey score higher than their peers on public access policy, thanks to the development and implementation of policies to support the expansion of public access." ([The Alliance for Affordable Internet](#), in its report, "[Employing Public Access Solutions to Close the Digital Divide](#).")

Community Networks

To truly connect everyone, everywhere, community networks - networks that are managed (and often owned and built) by communities rather than outside telecoms companies - must be recognized as a viable way for the unconnected to connect their communities. This is a paradigm shift where the focus is on allowing communities to actively connect themselves.

As evidenced by [BOSCO in Uganda](#), [TunapandaNET in Kenya](#), [Rhizomatica in Mexico](#), [Alter Mundi in Argentina](#), [Digital Empowerment Foundation projects in India](#), [Guifi.net in Spain](#), [Tribal Digital Village in the United States](#) and others, the world's successful community networks are as varied as the communities they serve. Indeed, the [IEEE statement](#) points out that "definitions of community networks can be simple or more complex" and that when "based on open internet standards are technically no different than other networks for providing internet access."

Offline Internet

Many have experienced the dramatic potential of the "offline internet," meaning the systems and services designed to bring internet-accessible content to people and places without existing, adequate, and/or affordable network access. Participants perceived "offline internet" solutions as a key step toward enabling access to and mastery of digital information and education, as well as preparing users to participate fully in global communications.

"Through the creation of innovative tools and creation / curation of quality content, we bring library to the most isolated / fragile population." - BSF ([Libraries Without Borders/Bibliothèques sans Frontières](#))

C. What form might cooperation among stakeholders in these areas take? What values and principles should underpin it?

- * Support of local community infrastructure planning and responsibility.
- * Enabling policies include use of USF to connect anchor institutions in middle mile networks, open to last / first mile providers.
- * Expand availability of open, license exempt spectrum like WiFi and TV Whitespace, especially in areas least served and where unused spectrum is most abundant.
- * Agree upon a standard definition for digital skills.

IV. Do you have any other ideas you would like to share with the Panel?

The Partnership for Public Access is committed to universal access and advocates for a multi-stakeholder participation. By incorporating one or more of P4PA's 3 approaches (Public Access Centers/ Libraries; Community Networks; Offline Internet) nearly all of the remaining billions can be connected and enabled to participate in the global digital society.

P4PA, as a pre-existing broad collaboration, already embodies the spirit of Digital Cooperation at all levels from global to local.

V. Please provide your numbered references or links to additional reports/documents here:

Public Access Centers/Libraries

Public Access Toolkit https://www.ifla.org/files/assets/faife/publications/policy-documents/public_access_toolkit_final_review_all_partners.pdf

Principles on Public Access in Libraries <https://www.ifla.org/publications/node/10328>

Employing Public Access Solutions to Close the Digital Divide https://a4ai.org/affordability-report/report/2017/#employing_public_access_solutions_to_close_the_digital_divide

Community Networks

ISOC links <https://comconnectivity.org/resources>

Policy Brief: Spectrum Approaches for Community Networks

Offline Internet:

Tempe OLI Declaration: <https://bit.ly/2WrVHA8>

About OLI <https://www.offline-internet.org>

Potential tactic is ring-fencing USAF resources for marginalized groups' needs, much as the A4AI-led report on USAF activation around closing the digital gender gap in Africa urges (<http://webfoundation.org/docs/2018/03/Using-USAFs-to-Close-the-Gender-Digital-Divide-in-Africa.pdf>).

Another potential example would be the recent pivot by the Indonesian USAF to support more locally-relevant content (https://kominfo.go.id/index.php/content/detail/4532/Siaran-Pers-No-11-PIH-KOMINFO-3-2015-tentang-Suspensi--Penghentian-Sementara--Layanan-Kewajiban-Pelayanan-Universal--Universal-Service-Obligation--KPU-USO-/0/siaran_pers).