

ITU Council Working Group on International Internet-related Public Policy Issues (CWG-Internet) - [Open Consultation](#) on Expanding Internet Connectivity

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Submission by the [Alliance for Affordable Internet](#)

Summary

With [only half of the world's population](#) connected to the internet today it is clear that we will not achieve the [SDG goal 9.c](#) *to significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020*. We, at the Alliance for Affordable Internet (A4AI), believe that there are opportunities and challenges with expanding internet connectivity and achieving universal, affordable access by 2030. One of the main challenges is overcoming rural connectivity, and therefore, through developing and implementing rural/remote broadband policies, governments must create enabling environments to bridge the growing digital divide and prioritize policies and regulations that allow rural connectivity to expand. The following is our responses to the three main questions posed by the CWG-Internet.

- 1. What are the challenges and opportunities for expanding Internet connectivity, particularly to remote and under-served areas? What are the roles of governments and non-government actors in overcoming these challenges?**

To achieve universal affordable internet access for all by 2030, we must take into consideration rural connectivity. Based on the 15 countries in the Global South that report on urban and rural access, the rural digital divide is very wide: as of 2019, on average 42% of urban areas have internet access while only 15% in rural area do¹. Several more countries do not report this data.

As A4AI highlighted in our brief, [Rural Broadband Policy Framework](#) (RBPF), the unique **connectivity-related challenges** for rural broadband include the fact that rural areas:

- are often separated from existing infrastructure by significant distances and challenging terrain. Consequently, connecting rural areas to the internet is typically substantially more difficult and expensive than connecting more urbanised areas.
- often lack the resources and supportive infrastructure necessary to facilitate broadband deployment (e.g., technical skills and access to reliable electricity sources—especially in emerging markets).

¹ A4AI, 2020. Rural Broadband Policy Framework, page 3. <https://1e8q3q16vyc81g8l3h3md6q5f5e-wpengine.netdna-ssl.com/wp-content/uploads/2020/02/Rural-Broadband-Policy-Framework-Report-web-ready.pdf>

- have lower population densities than more urbanised areas, meaning the number of potential customers in these areas is smaller. This makes it difficult to support the traditional business case for the large investments necessary to deploy broadband infrastructure in rural areas.
- often have average incomes below that of more urbanised areas, creating affordability challenges—particularly when coupled with higher rates often charged in these areas as well as other economic and social structural constraints, including gender-based inequalities and other marginalising factors for rural populations.
- often experience compounding effects of other forms of social exclusion, such as gender, socio-economic class, ethnicity or race. In Niger, for example, the digital gender gap is 83% between men and women in urban areas – this gap grows to 533% when looking only in rural areas. This puts certain groups – e.g., women in rural areas – at a stark disadvantage without targeted policy interventions.

Governments can make progress to close the rural digital divide by developing and implementing specific policies for this purpose. A4AI recommends the following as **opportunities and approaches** that should be taken by governments to support rural broadband development².

1. Harness market competition while addressing market failures
 - a. Support market competition as the first means for encouraging innovation and investment and supporting consumer choice in service providers.
 - b. Recognise the limits of markets to deliver universal access on their own, and use rural development funds and Universal Service & Access Funds to support network deployment.
 - c. Encourage infrastructure sharing at the wholesale level—which will ultimately facilitate greater competition at the retail level.
2. Streamline regulatory processes
 - a. Eliminate policies and regulations that are not necessary to achieve a valid and well-defined objective.
 - b. Create a supportive regulatory environment for nascent rural operations.
 - c. Include space for innovations to scale.
 - d. Streamline regulations governing market entry in rural areas.
 - e. Streamline processes for obtaining access to rights-of-way .
 - f. Leverage potential advantages within dig-once policies.
3. Invest in improving public access and universal service funds (USAFs)
 - a. Invest in public access solutions.
 - b. Employ public access facilities as community institutions to ensure broader socio-economic impact in society.
 - c. Establish and implement effective USAFs to support investments in underserved rural areas.
 - d. Ensure that USAFs operate under non-discriminatory conditions and according to transparent and consultative processes, incorporating stakeholder inputs and priorities.
 - e. Adopt and employ open data practices.
4. Effectively manage spectrum resources

² A4AI, 2020, Page 7-14.

- a. Seek to “unlock” licensed and unlicensed spectrum so that it can be effectively leveraged to address rural connectivity challenges.
 - b. Incentivise operators to use their licensed spectrum resources in a timely manner and for the benefit of rural areas.
 - c. Apply special, more flexible rules for spectrum use in rural areas.
 - d. Enable unlicensed use of spectrum at additional wavelengths.
 - e. Make spectrum available on a technology-neutral basis.
 - f. Facilitate the reallocation of spectrum over time.
 - g. Encourage spectrum sharing, under appropriate conditions.
5. Leverage innovative technologies, architectures and business models
 - a. Afford operators flexibility in structuring their networks and businesses.
 - b. Promote the free flow of information.
 - c. Ensure that rural populations can benefit from the same speed data service standards as others in the country (e.g., in urban areas).
 - d. Support network cooperation.
 6. Adopt appropriate tax and fee structures
 - a. Consider reducing or eliminating taxes and fees charged in rural areas.
 - b. Ensure that the tax regime is competitively and technologically neutral and non-distortive.
 - c. Ensure that rural broadband services are taxed in a manner similar to or more favorable than other services.
 - d. Ensure that tax regimes do not render broadband services unaffordable.
 7. Stimulate demand for broadband services
 - a. Seek to enhance digital literacy amongst the rural population.
 - b. Promote practices that protect the safety and privacy, and personal data of rural populations.
 - c. Facilitate the development of relevant content that are responsive to local needs and languages.
 - d. Stimulate demand for rural broadband services, e.g., with e-services.

2. Are there particular challenges facing land-locked countries in securing affordable Internet access? What can be done to overcome these challenges?

According to [A4AI's Affordability Report 2018](#), geography plays a significant role in determining the cost of internet access, including for landlocked countries and especially those surrounded by other small and low and middle income countries.

Landlocked countries and small island developing states face affordability challenges for several reasons:

- They incur additional costs for connectivity because of the need to lease and/or interconnect with international transit capacity. These countries must pay substantial international transit costs in order to connect, and may struggle to avoid paying premium prices if they do not have a choice of transit providers or a population size that allows them to benefit from potential economic scale.

- The need for international transit links to a submarine cable landing station adds an additional cost for landlocked countries compared to a coastal country that has its own landing station.
- <https://www.internetsociety.org/wp-content/uploads/2017/10/2018-LLDC-Report-EN.pdf> - 'network custom systems have a significant impact on reducing the delays and costs of trading across borders'
- 'Land-locked countries need access to the sea for goods and trade and they also need it for access to fibre optic submarine cables'
- A large number of the population lives in mountainous rural areas, creating difficulty for laying down fibre optic cables. It's not just about affordability but also having [meaningful connectivity](#) access in rural areas.
- Islands face the challenge of small populations/low density, exposure to natural disasters and often political instability. A lot of these islands have huge debts/the economy is struggling. And due to the geographical disparity and remoteness, there's high cost with very low economies of scale.

[Policy suggestions](#) for overcoming such challenges include:

- Take a regional approach: across Southern Africa, where many poor countries are also landlocked, a [regional initiative](#) has been implemented to reduce the price of international transit and avoid exploitation by neighbouring countries that control the essential facilities of transit and access to the cable landing station. Indeed, [regional agreements](#) to establish fair interconnection and termination rates between operators in landlocked countries and their neighbours can help reduce costs.
- Countries should employ effective infrastructure sharing regimes, encouraging, among other things, "dig-once" policies to reduce capital costs for operators and, in turn, create cost savings that lessen the economies of scale.
- Focus on smart strategies, more public access points, and effective spectrum management: governments should adopt or update their national broadband plan with realistic targets; establish and implement effective universal service funds to expand underserved areas and populations; and commit to transparent, accountable, timely, and efficient allocation of spectrum.
- Incentives: Whenever necessary, governments should incentivize private sector players to reduce deploy infrastructure and increase service affordability. This can be done by removing regulatory barriers, providing access to land for building of sites and using public funding (including using Universal service funds) to support infrastructure roll out.
 - Government partnerships should consider the role of Multilateral Development Banks which [spend less than 1%](#) of their total commitments to ICT projects

3. **How can small/community/non-profit operators help in promoting the increase of Internet connectivity?**

Community networks and other non-profit and small/medium operator have an important role to play to bring internet connectivity. According to our analysis we jointly conducted with the World Bank for the UN Broadband Commission's [Working Group on Broadband For All: A Digital Infrastructure Moonshot for Africa](#), we estimated that around 10% of the global population will not be reached by traditional operators even after many reforms/endeavors are implemented. Thus, innovative business models like community networks will be required to reach them.

Please see the following summaries on why complementary providers is key for bringing internet access for all, as well as on what policymakers can do to create policies and regulations need to do to support such networks, including spectrum and licensing requirements:

- [Why Community Networks Matter to Advance Internet Access for All](#)
- [How policymakers can support community networks to expand connectivity](#)