



The Association for Progressive Communications together with Rhizomatica and the Internet Society started partnership discussions and work in August 2017 on a project called “Local Access Networks: Can the unconnected connect themselves?”, funded by the International Development Research Centre (IDRC).

The project expects to draw on other donors and partners to achieve its goals over the next three years.

For further information on the project and opportunities for collaboration and support, contact: [access@apc.org](mailto:access@apc.org)

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## LOCAL ACCESS NETWORKS: CAN THE UNCONNECTED CONNECT THEMSELVES?

### Background

Innovations in low-cost communication technology have created new possibilities for the development of affordable, locally owned and managed communication infrastructure. Using off-the-shelf low-cost networking equipment, a small but growing number of communities and small-scale operators are using Wi-Fi, GSM and fibre connections to establish affordable voice and data communications. But, there are as yet relatively few examples of these innovative bottom-up and small-scale local access initiatives. The knowledge of their potential is limited, the different models most suitable for local conditions are not widely understood, and they generally face substantial regulatory hurdles. In addition, these networks are needed in areas where technical and business skills are lacking, and finance or capital to meet startup or scaling challenges is limited.

# THE PROJECT

The project addresses the following research questions:

1. Are local access infrastructure models a viable alternative to connecting the unconnected, and if so, what are the circumstances that make them successful?
2. What are the benefits to the local community in terms of well-being, gender equity and social or economic development where connectivity infrastructure is locally owned?

The core of the project is based on four interrelated activities. There is one research component to look closely at the business, technology and institutional models that have been adopted in a range of community-based and local access networks, and another to identify the policy and regulatory constraints, along with the telecom data needed by these initiatives (spectrum availability, location of towers and backhaul infrastructure). There is also a set of community building and awareness raising activities aimed at increasing the profile of these models among policy makers and to promote information sharing and collaboration between community-based network initiatives. And, finally, there is an activity to provide support for special opportunities to scale existing networks and help start new ones. The four activity areas have the following objectives:

## IN-DEPTH CASE STUDIES AND ANALYSIS

1. Assess to what extent and how small-scale local networks can help to address unmet connectivity needs in developing countries, especially Least Developed Countries (LDCs).
2. Explore and document how local connectivity projects link to broader social, human and economic development processes.
3. Identify and understand the gender dimensions of local access networks, the roles women play in them, the barriers to women's participation, and mechanisms to increase their participation and transform gender roles.
4. Identify the business and economic models and technologies that are being used and assess how effective they are.

## OPEN TELECOM DATA, POLICY AND REGULATION

1. Identify the policy and regulatory barriers and opportunities for local access networks.
2. Develop and disseminate recommendations to create a more enabling environment for local access initiatives.
3. Identify telecom infrastructure gaps and opportunities through development of a public online digital resource of telecom infrastructure data and help create a culture of openness among regulators, operators and international agencies with regard to telecom data.
4. Quantify the value of approaches or proposals to regulate and assign spectrum in ways that improve connectivity for marginalised populations.

## AWARENESS RAISING AND MOVEMENT BUILDING

1. Facilitate peer exchange among local connectivity stakeholders in Latin America, Africa and South Asia to build a community of practice that can share information, knowledge, skills and contacts and that will contribute to greater coordination between initiatives.
2. Ensure that effective capacity-building resources and training strategies are available to those wishing to start or scale up local access initiatives.
3. Share information about approaches and technologies for innovation in sustainable local access provision with local connectivity stakeholders.
4. Establish a Local Access Support Consortium to broaden on-the-ground support from international organisations, and to guide a small grants facility to strengthen and foster the growth of local access initiatives.

## SUPPORT FOR EXISTING AND EMERGING LOCAL CONNECTIVITY INITIATIVES (PATHFINDER)

1. Identify, develop, test and demonstrate specific innovative approaches to scaling and sustainability for existing and emerging connectivity initiatives in under-served communities.
2. Partner with a handful of select local communities, organisations and existing local connectivity initiatives to conduct interventions and action research.
3. Systematise learning from interventions in order to contribute to overall research outcomes and the development of good practice for emerging strategies.