Challenges, Achievements and Experiences in Community Network Management in Latin America

### Moderator:

Valeria Betancourt, Association for Progressive Communications (APC)

#### Panelists:

- Oscar León, Secretary of CITEL (remote participation)
- Sebastián Bellagamba, ISOC (Uruguay)
- Lilian Chamorro, Colnodo (Colombia)
- Carlos Baca, Rhizomatica (Mexico)
- Agustín Garzón, ENACOM (Argentina)
- · Andrés Sastre, ASIET
- Ariel Graizer, CABASE (Argentina)

# Rapporteur:

• Marianne Díaz, Digital Rights (Venezuela)

### Introduction by the Moderator

Latin America is probably the global south region where community network initiatives have been most recently developed (Brazil, Colombia, Argentina, Mexico). This trend has to do with the work of communities and civil society, but also with the interest of the technical community, governments and the private sector. However, there are still many challenges ahead and much to understand regarding the impact of such initiatives.

The question that will guide this discussion is what conditions are needed for community networks to be regarded as viable and scalable initiatives for bridging the digital divide.

# Lilian Chamorro

Question: What is a community network? Based on your experience, what do you think are the main challenges and the social and economic impact of these initiatives?

The analysis of community networks is important because it affects their impact and viability. Community networks refer to a common good that belongs to a specific community. It is a special type of common good, as it combines physical (infrastructure) and digital (services running over networks) elements. Here, the communities are the agents of their own networks and take an active role in their design, implementation, operation and maintenance. An important factor of community networks is their governance models. Community members define how to manage a community network. Community networks are very diverse because each community has a different social, economic and cultural context, so each network has its own community model.

When we talk about community networks, we are not only talking about Wi-Fi networks or the Internet, but also about cell phone networks and a variety of other technological options as well.

Community networks represent an opportunity to do things differently and look for new

models. Fifty percent of the population is not connected, and this 50% mostly corresponds to ethnic minorities, rural areas, women. Community networks may provide an opportunity for these minority groups that, for various reasons, are still unconnected to propose disruptive models in which communities have real participation in the design and administration of the networks, in addition to generating new capabilities to use and take advantage of such networks.

The community needs an ecosystem that includes the technical community, government, academia, and even companies in order to be consolidated.

Oscar León

Question: What is the status of community network regulations in the region?

Some time ago, the discussion involved a broader concept, that of "connecting the unconnected." There are different solutions to this issue that are not necessarily technological and that allow providing access to the unconnected.

ITU-D19 Recommendation for Rural and Remote Areas seeks to have a framework where these networks can operate and have a source of funding that will ensure their continuity in the future.

This requires considering factors such as what technologies are available in the area, local training to solve possible initial failures, and maintaining the equipment. The recommendation focuses on sharing the results and experiences of national initiatives.

A preliminary survey of 15 countries was conducted to determine where clear regulations exist and where they do not, as well as to understand the changes required at the regulatory level. Homogeneous regulatory solutions are required to allow an extended implementation of these models.

Different models are possible:

In remote areas, where providing access may not be economically viable for an operator or regulatory changes may be required.

In areas where preexisting actors allow entry into the region.

In the 15 countries surveyed, there is some form of generic regulation covering the provision of service in remote areas. However, the only country that has clear regulations regarding community networks is Mexico. Chile, Argentina and Colombia are working on future regulations.

Some of these regulations require that these remote areas must offer quality conditions that are extremely demanding, making it technically and financially impossible to provide services in these regions.

In some places, there is an obligation to have technical centers for users (user service centers or maintenance centers), which may cost more than installing the community network.

## Agustín Garzón

Questions: What is the priority role of governments for the promotion, support and development of community networks in LAC? What criteria should be taken into account for allocating radio spectrum, as an essential and scarce resource for the provision of mobile Internet and broadband services?

States need to broaden their thinking to respond to the different variables involved. Community networks undoubtedly play an essential role, particularly in regions where it is very costly for companies to reach them, even with economic support from the State. Sometimes it is difficult to find providers willing to manage the last mile and provide the service.

Argentina is a good example because of its size. There are many localities without any kind of Internet. We are promoting three community networks in Rio Negro through an agreement with ISOC. Also, we are working on a licensing project for community networks. This type of license, which currently costs about \$600, would be free in the case of community networks, and would provide access to additional contributions or subsidies for infrastructure. It is also necessary to accompany these initiatives from a policy or regulatory point of view to ensure that they can be sustained over time.

### Andrés Sastre

Questions: What is the vision of the telecommunications operator on the development of community networks in the region? How do you think they should be developed? What incentives and spectrum policies should be followed?

The greatest achievement to date in closing the digital divide is the existence of a competitive market. There are different ways to connect the 10% or 15% of unconnected territory: generating incentives for private networks or creating community networks. As telecommunications operators, it is not a matter of saying "with or without community networks." We cannot be pragmatic and refuse to allow community networks as a temporary solution, but the devil is in the details. In grey areas where there is no clear market interest in participating, we believe that community networks have the potential to replace rather than complement, which may result in a problem. This also has to do with spectrum issues, a key topic for telecommunications companies. In order to see how spectrum is allocated or assigned to community networks, we must have a closer look at the criteria and the way spectrum is allocated, so that there is no conflict.

### Sebastián Bellagamba

Question: What is the priority role of technical community actors for the promotion, support and development of community networks in LAC?

First of all, from the technical community, we have to promote the issue of why we should help connect people, not because of the technical problems this poses, but because technology brings benefits to people. If we focus on the benefits that people will receive, we can think of the issue from a different perspective.

Connecting the unconnected has become a matter of urgency. The Internet ecosystem is making good progress in connecting the unconnected, but the cost of being unconnected is increasing daily. As Agustín said, those who are unconnected are left behind: the more time it takes to close the digital divide, the greater the cost (in not receiving the benefits that others are receiving, and in mechanisms for interacting with the State, companies and society as a whole).

We must reach down to the bottom of the pyramid and push upwards. Community networks are a great tool to address the problems of those who are bearing this cost.

How do we advance community networks? We have to work on three key issues:

- Regulatory policies: creating an enabling environment to deploy community networks by developing policies on:
  - Radio spectrum
  - Licensing
  - Access to universal service funds
- Building technical and business model management capabilities to make community networks technically and economically sustainable.
- Creating community for the community (a community of those who are involved in community networks at national and regional level so that they can collaborate with each other and make networks sustainable, lasting over time).

### Ariel Grazier

Questions: How do the circumstances in which small and medium-sized private sector operators work relate to the development of community networks? What experiences, models and lessons are there in the region in terms of infrastructure sharing that can be used as a reference to make this a mandatory practice?

For small, medium and large operators, having clear rules is very important. Regulations are changing, from an approach based on penalizing the efforts of communities to connect, to an approach where regulations must be adapted to solve these problems. How can these initiatives be sustainable? It is important to understand that the first thing is to connect the unconnected. Everyone agrees that this is the first step, but then the question is how to improve quality and make these models sustainable. The answer is that competition improves these issues.

## Carlos Baca

Question: What do you think are the most relevant responses and measures that should be deployed to ensure the growth, sustainability and growth of community networks?

It's not just about connecting, but about meeting the needs of the people through connectivity. Community networks are the answer to that. To paraphrase Alfonso Gumucio, community media is a balancing act: constantly walking on the tightrope to reach the finish line. Community networks are on that path. There are three sustainability factors that need to be taken into account:

- Economic sustainability: providing continuity and viability to the networks, but also so

- that people who work on these initiatives can make a living.
- Institutional sustainability: creating a public policy environment that enables the creation and existence of networks, for example, allowing community networks to participate in universal access funds and modifying spectrum policies.
- Social sustainability: generating the environment needed to facilitate the social processes that allow the creation of community networks.

### **Audience Participation**

How does the community experience the introduction of different types of technology? How do you experience the arrival of technology in a language that is not yours?

The "community" is what brings value to community networks. "Networks" already exist and are leaving behind 50% of the population. Community networks try to respond to this need. It is an important challenge to succeed in promoting an environment that favors community management. Community networks are not only relevant in terms of how we can help people access the Internet, but in also in terms of how we help people inhabit and build the Internet. It requires the generation of local content and local infrastructure.

Are community networks that are not necessarily intended to generate access but to promote and protect data privacy harmful or are they a burden for the creation of other community networks?

What was the network's experience with the use of free software?

The history of freedom of expression has been a history of transgression and disobedience (free community radio stations, free community television stations). Community media represents a way of understanding technology, a new way of looking at digital communications in general, not only the Internet.

We focus on access, but there are many communities that live in areas where connectivity is irrelevant because it is impossible to afford. We should think about how we can connect the people living in areas where there is connectivity, but people cannot afford access. How can these people go online if they cannot afford their basic needs?

When we talk about community networks it is very difficult to talk about a business model. Not every State action responds to a business model; therefore, it is essential for all actors to be involved in the process and define regional public policies that allow *not* defining business models in this area.

Whether networks are first installed in a territory and then begin to multiply their functions, or whether the function has an impact on the territory.

Whether these networks have a horizontal form of governance and maintain the notions and criteria of community participation.

How much have the experiences of telecenters and community networks been incorporated into the current reflections of the multiple stakeholders? What supports community networks is the issue of autonomy and technological sovereignty, so I am concerned that this issue

has not been mentioned.

### Reactions from the Panel

Lilian Chamorro: I would like to emphasize that, indeed, the issue of community networks extends beyond access. We must think about how it impacts the community and the possibility of creating contents, services, applications, etc. adapted to local needs, which has to do with the concept of autonomy mentioned by Kemly. I believe that with regard to the tax burden, it is necessary to understand that commercial operators are not the same as community operators, which is why organizations and communities must take part in this dialogue.

Oscar León: We have seen that, when new regulations have been approved, some operators have shown interest in communities in which they did not seem to be interested before. This means that they have realized that community networks have proven to be feasible solutions for smaller populations that have worked through an operator with local agreements.

Agustín Garzón: In the case of the Argentine regulator, it is clear to us that community networks focus on openness and accessibility. Together with community networks, our first goal is coverage. The ENACOM board will approve a licensing resolution in the next month or two.

I don't agree that the network design leaves out 50% of the population. Last year, Argentina added 9 million people to 4G. A large part of the challenge is the scale; therefore, a large part of the solution will come from commercial operators.

Andrés Sastre: I think it is unfair to say that 50% of Latin America is left out, mainly because it is not true, and the idea does not resist any kind of analysis. We must not engage in a logic of good and evil. The following aspects are being considered: complementing each other's efforts, instead of replacing each other, in order to reduce the digital divide.

Sebastián Bellagamba: The digital divide is a reflection of other social and economic divides. Factors related to the divide: relevance of online content (languages, for example), accessibility (cost), and coverage. We must choose which problem we will attempt to solve. Community networks are indeed about coverage. This is not a marginal factor: 86% of the Latin American population lives in a place where there is coverage. This means that 14% – one hundred million people – are not connected because they live in an area that does not have coverage. We have to address all these problems, but here we are focusing on coverage.

Ariel Grazier: I agree 100% with Sebastián. However, when we talk about sustainability, we are talking about a business model, and this is not because we have to earn money, but because we have to do it in a sustainable way, given that nothing is free in this world and we need our creations to be sustainable over time. That is part of what we are discussing.

Carlos Baca: Technological solutions for the last mile that have worked in remote and rural areas are those where the community participates and sets its own terms with respect to network management.

Generating ties between different community networks and learning from each other's experience is a work in progress and an important process.

# Conclusions and Moderator's Closing Remarks

The community network trend will continue to grow in LAC. Communities are betting on their self-determination, so these initiatives are not being projected as temporary solutions. Likewise, they are related to structural aspects affecting the region, which continues to be the most unequal region worldwide. Community networks are here to stay and need viable, feasible and long-term solutions.