

# IpT Brings Mobile Internet to Rural Peru

A neutral-host infrastructure sharing model paves the way to connect more people

## Snapshot



### Situation

Millions of Peruvians live in rural areas. Building the infrastructure needed to connect them is far too costly and complex for any one mobile operator alone.

### Why neutral-host NaaS?

A Network as a Service (NaaS) business model run by a neutral host allows for open infrastructure sharing, which attracts outside capital and gives mobile operators an equal-access, low-cost way to extend their reach.

### Results

So far, IpT's wholesale cellular network has improved connectivity for more than 3 million people in Peru, with no capital investments needed from mobile operators.

## About Meta Connectivity

Meta Connectivity works closely with partners in the mobile ecosystem to help connect more people to a faster internet. In addition to providing technology expertise, business model innovation, and funding to deploy the IpT network, Meta Connectivity is working with the Telecom Infra Project (TIP) to scale NaaS models globally, led by the TIP NaaS Solution Project Group.

## About Internet Para Todos

Internet Para Todos (IpT) is on a mission to bridge the digital divide in Peru. In 2019, this collaboration between Meta Connectivity, Telefonica, IDB Invest, a member of the Inter-American Development Bank Group, and the Development Bank of Latin America (CAF) began the world's largest rural NaaS deployment with a goal to connect rural communities in an economically sustainable way.

## Challenge

From the Amazon rainforest to the Andes mountains, Peru is a beautiful and resource-rich country. But one of its most valuable assets has gone largely untapped: its people. Students, entrepreneurs, and innovators alike are all eager to join the digital revolution, but many don't have access.

**As of 2018, 80% of Peruvian towns lacked sufficient internet coverage.<sup>1</sup>**

Connecting these mostly rural areas required installing and commissioning equipment across a complicated landscape of mountains, jungle, and coastal terrain—a costly investment that would be nearly impossible for any single mobile network operator.

## Solution

IpT set out to design and build a terrestrial backhaul network that could transmit mobile internet to more than 3,000 sites in rural Peru. The project would involve upgrading existing 2G sites to 4G and building new 4G greenfield sites. This would serve about 5 million people who previously had limited mobile internet connectivity.

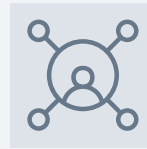
At the heart of IpT is an innovative NaaS business model that enables advanced forms of network and infrastructure sharing. In the mobile ecosystem, shared infrastructure is already a proven way for operators to lower their deployment costs. A neutral-host NaaS model takes infrastructure sharing to the next level for even greater scalability and funding opportunities.

In a neutral-host NaaS model, the access network and local backhaul is financed, deployed, and operated by a third party. Retail service providers share the network through wholesale agreements (revenue share, fixed fees, or a combination of fixed and variable). As a result, mobile operators can rapidly expand their coverage and gain new subscribers without having to commit to large investments—ideal in markets where it's impractical to build multiple networks, such as in rural or dense urban areas. This drives competition and user adoption while reducing costs for mobile network operators. And because the NaaS business model allows a third-party operator to attract outside capital, networks can be further scaled for even greater coverage.

## Benefits



Connectivity to enhance education, telemedicine, and economic prosperity



Expanded coverage and subscriber growth for mobile network operators



Financial returns with economic and social benefits for investors



Large market opportunity with an attractive risk/reward profile for NaaS provider

A project this ambitious could not be achieved by any one party alone. Telefónica contributed its existing 2G sites while Meta Connectivity, IDB Invest, and CAF provided funding for the project. IpT partnered with mobile operators to secure commitments for network use, access to spectrum, and distribution and customer support. Teams also worked with policymakers to understand potential barriers; with contractors to deploy and maintain equipment; and with local communities to plan the best routes for navigating equipment through rough terrain.

To ensure multi-vendor interoperability, IpT used OpenRAN solutions based on standards developed by TIP. This was the first large-scale commercial deployment of OpenRAN technology.

Since 2016, TIP has been working to accelerate global connectivity through open, disaggregated, and standards-based technology. More recently, TIP launched its NaaS Solution Project Group, which explores how shared infrastructure and NaaS business models can lower the cost to deploy mobile internet to rural and peri-urban areas.

**With more than 1,600 4G sites in Peru connected today, IpT has become the world's largest rural NaaS company.<sup>2</sup>**

The group has been recognized for its innovation with several awards, including LatinFinance's 2019 Social Infrastructure Financing of the Year Award, IJGlobal's 2019 Latin America Telecoms Transaction Award, and Peru for the Sustainable Development Goals' 2019 Award in the Alliances Category.

## Next steps

Building on its success so far, IpT aims to close 2021 with more than 2,000 4G sites and expand coverage to their second MNO partner, Entel Peru. But this work doesn't end in Peru.

IpT has become a prominent example of how disaggregated networks and collaborative business models can connect more people than ever before. But even as NaaS gains momentum, it still requires innovation from across the ecosystem. Together, Meta Connectivity and the TIP NaaS Solution Project Group are exploring how to scale NaaS business models around the world, bringing the benefits of connectivity to everyone, everywhere.

## Results

**3 million**

Mobile users on IpT's network<sup>2</sup>

**1,600+**

Sites with 4G technologies<sup>2</sup>

Source: IpT, March 2021

Together, Meta Connectivity and the TIP NaaS Solution Project Group are exploring how to scale NaaS business models around the world, bringing the benefits of connectivity to everyone, everywhere



To learn more about IpT, visit [ipt.pe](http://ipt.pe)



To learn more about Meta Connectivity, visit [facebook.com/connectivity](https://facebook.com/connectivity)

1. [New Approach to Rural Connectivity: The Case of Peru](#), Telefónica
2. [IpT](#), March 2021.