

Case study Mobile & Telecom

Radio link equipment for Telefonica.

Telefonica, a leading mobile carrier in the world, was looking for a partner who had a long-term mobile experience and flexible resources capable to fulfill their requirement at a short term.

Project

The customer goal was to bring 3G connectivity to a small village called RVVA site, from the closest active site named BCHP.

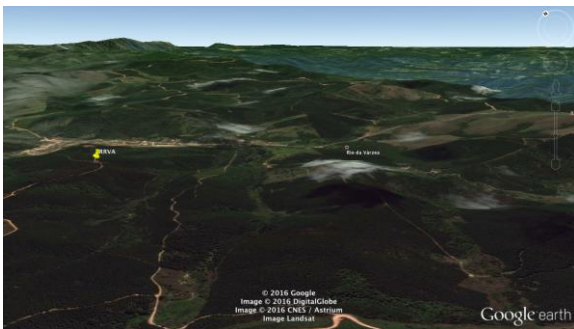


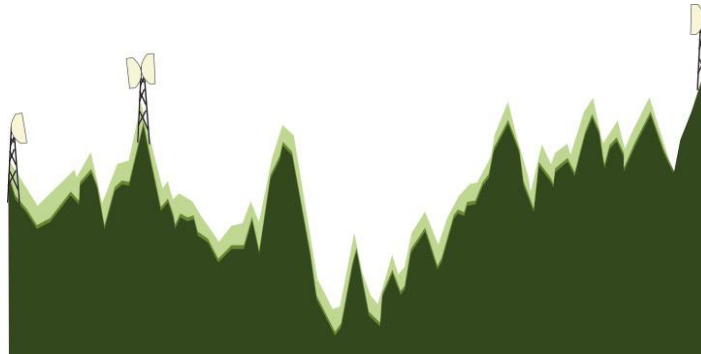
Figure 1 –Tower Localization (RVVA).



Figure 2 – small village to 3G service

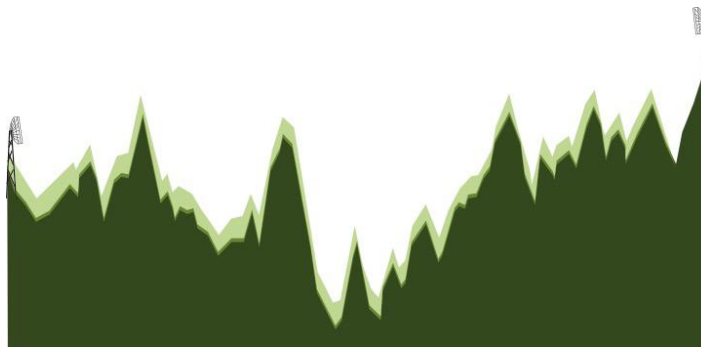
Competitor's options

1. Using Microwave solutions – 6 GHz



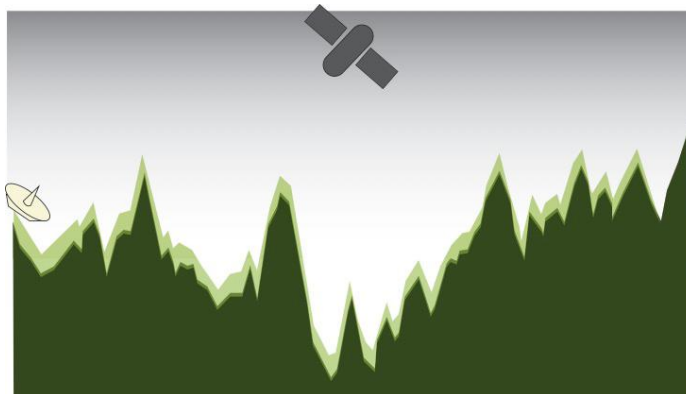
The 3G link can be reached with the help of an additional repeater. The implementation of extra equipment means extra costs, extra time and a lot of work. That is why this solution provides high capacity but high Capex and high Opex.

2. Using UHF NLOS solution in 400 MHz



Operating at a frequency of 400 MHz, the solution ensures a link between the two transmit/receivers. This option provide low capacity, high Capex and high Opex.

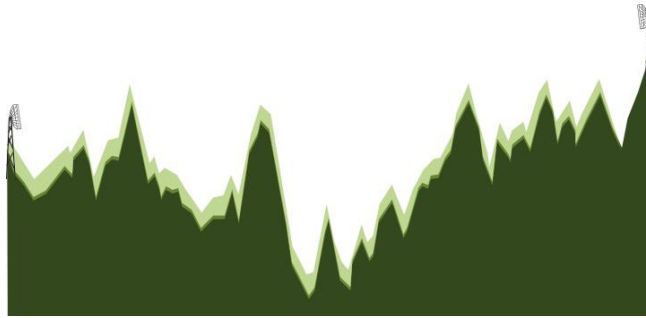
3. Using Satellite



The satellite allows to reach the needed link. The drawback of this kind of option is the very low capacity and very high Capex and Opex.

Youncta's solution

The proposed and accomplished solution envisaged: The installation of Y-Packet.



Y-Packet operates at 2.2GHz and provides high capacity (170 Mbps) and link protection, lowest Capex and Opex that is impossible to reach with the help of other microwave, UHF and satellite solutions.



Figure 4 – BHP Site with 2+0 ODU and 1.20m Dual Pol Antenna. Figure 5 – BHP 1.20m Dual Pol Antenna

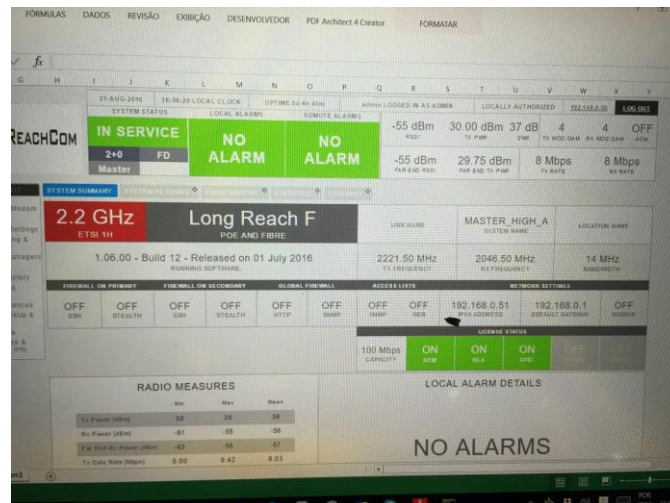


Figure 6 – Screen of BHP Site Master ODU

Results:

Y-Packet 2GHz and 4GHz becomes a very good option to improve the services portfolio for:

- Backhaul 3G for remote Node B;
- Carrier class corporate customers;
- Public services for Government remote zones;
- NLOS links with high capacity;
- And more.

..... avoid high Capex:

- Using repeaters with microwave regular solution;
- Using low capacity with UHF low frequencies;
- Using low capacity with expensive satellite services;
- And more.

..... avoid high Opex:

- Using many units to control;
 - Using complex low frequencies to deploy, operate and maintain spare;
 - Using services when you don't have the full control.
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