Needs of the Region
Romania

Avanti Communications
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Needs of the Region: Romania

The Broadband Needs of Romania and the Non-Technical Roadblocks

The aim of this presentations is to capture the Regional Broadband Needs of Romania and identify any potential non-technical roadblocks that exist.

Presentations may be posted of the EC Broadband Portal

1. What are the main objectives of a broadband scheme in your region?

➤ To Meet the EC Digital Agenda

The Digital Agenda for Europe is one of seven flagship initiatives of the Europe 2020 Strategy. The objective of the Agenda is to exploit the social and economic potential of ICT and promote innovation and economic growth across Europe in a single digital market.

➤ To Provide Broadband to Rural users

Nearly 9m people, or 47% of the Romanian population, live in rural areas and large discrepancies exist between urban and rural areas as a consequence of lower GDP and GDP growth rates. This difficult socio-economic context makes rural areas high risk for private investment in broadband networks, discouraging development and making public intervention necessary to ensure equal opportunities for the entire population.
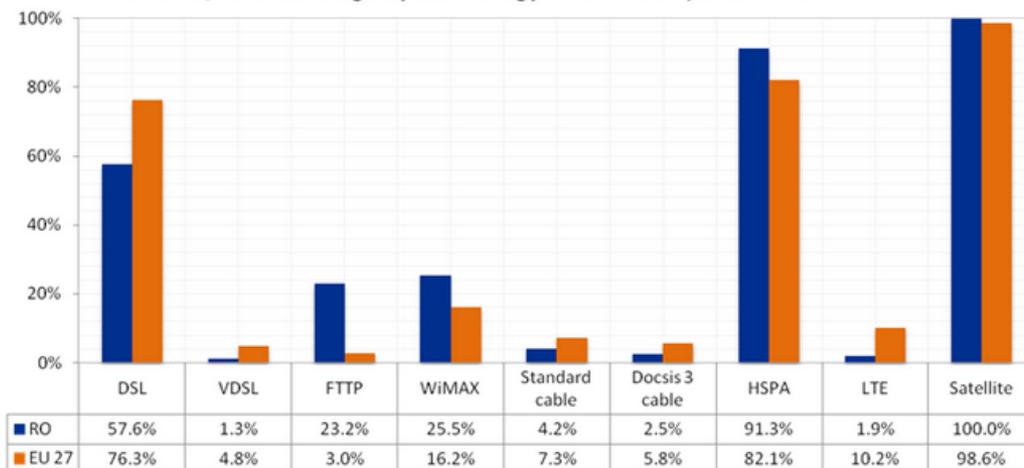
cip competitiveness and innovation framework programme 2007-2013

1. What are the main objectives of a broadband scheme in your region?

➢ To Close the Digital Divide

In 2012 Romania ranked fourth lowest in the EU, with only 60% of the rural population covered by fixed broadband compared to over 80% at the EU27 Level.

Romania, rural coverage by technology in 2012: comparison with EU

	DSL	VDSL	FTTP	WiMAX	Standard cable	Docsis 3 cable	HSPA	LTE	Satellite
■ RO	57.6%	1.3%	23.2%	25.5%	4.2%	2.5%	91.3%	1.9%	100.0%
■ EU 27	76.3%	4.8%	3.0%	16.2%	7.3%	5.8%	82.1%	10.2%	98.6%

Source: Point-Topic

Rural citizens and businesses need access to adequate broadband and e-services to close the social and economic gap.
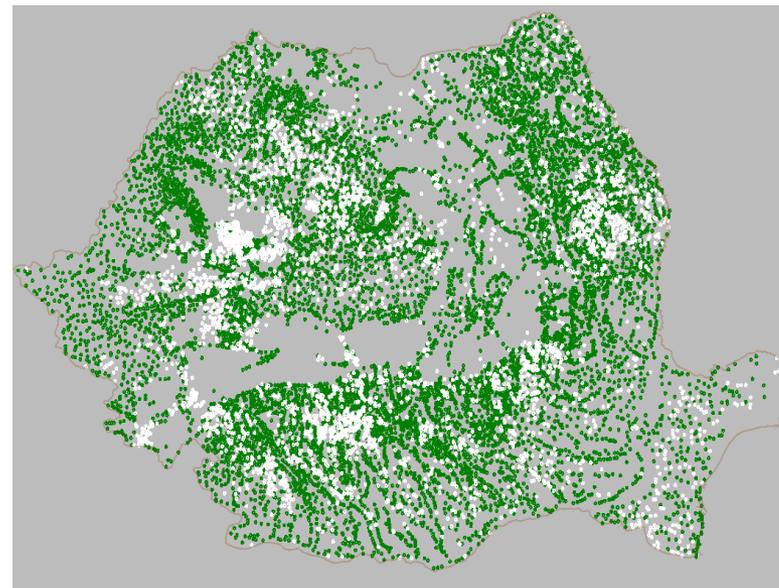
2. What are the target regions for a broadband scheme?

➤ White Areas

Of the 12,500 villages in Romania, there are over 2,300 where there is no backhaul and no local loop available now, or projected to be available in the next three years.

This area covers about 13% of the land area and contains around 336,298 households and businesses.

In these 'White Areas' the Romanian National Broadband Strategy commitment of a minimum transfer speed of 1Mbps for residential users and 4Mbps for business users is not met.

White Areas in Romania. *Source: Ministry of Communications and Informational Society*

2. What are the target regions for a broadband scheme?

➢ Economic Growth

Villages in these White Areas were targeted for a broadband scheme through demand analysis. Calculating the Return on Investment over a seven year period identified 783 eligible villages. Each of these showed the economic potential to generate a business loopback with a positive Net Present Value for a broadband service.

➢ Targeted End-Users

The 783 villages include 5 hospitals, 15 schools and over 5,600 households and small businesses. The distance of the locations from the nearest town varies between 14km and 60km.
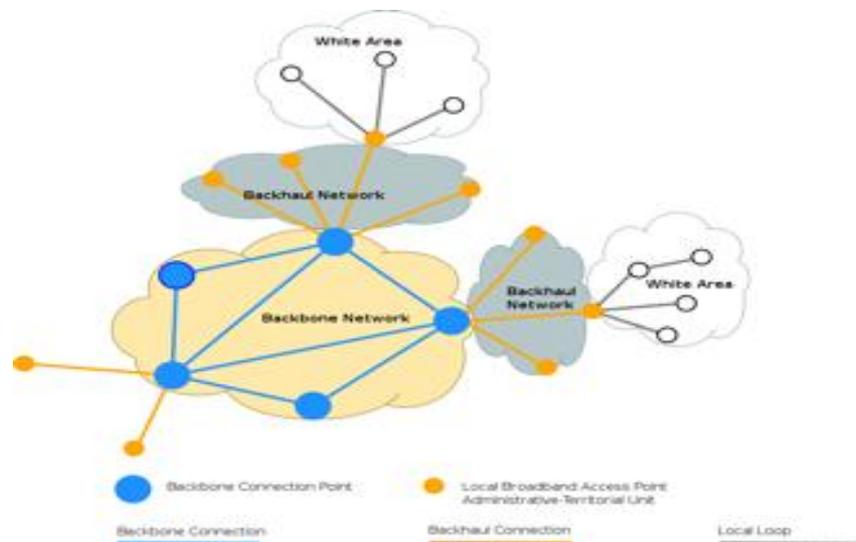
3. What kind of scheme is needed?

➢ Network

To serve these 783 areas the Romanian Government launched Project Ro-Net. The decision was made to invest in backhaul networks, based on sufficient local demand for last mile connections by operators. The scheme was offered to tender on 20th January 2014.

➢ Scheme Transparency

The design and execution of the backhaul networks will be technology neutral:

- ✓ Satellite
- ✓ Fibre
- ✓ DSL

*Source: Ministry of Communications and Informational Society*
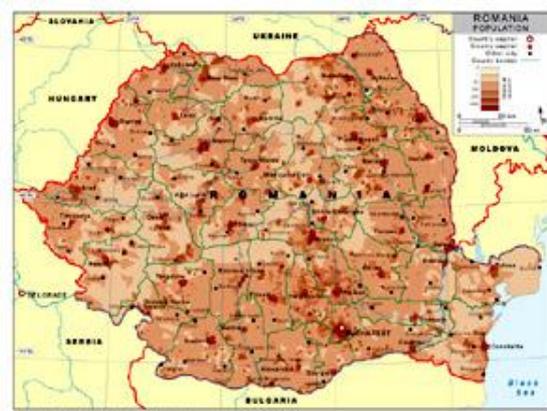
4. What are the non-technological roadblocks?

➢ Topography & Geology

The Responses to the Ro-Net Tender are expected to recommend terrestrial fibre as the backhaul solution.

But with rural areas covering 88% of the territory, the variety of landscape and soil in Romania is not so favourable to civil works like digging trenches and erecting towers.
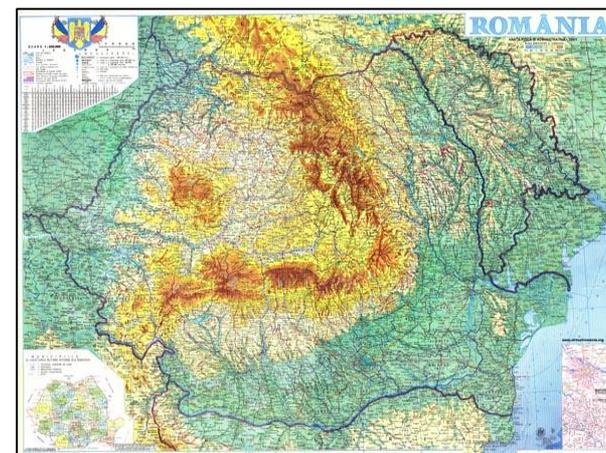
Physical Map. Source: World Trade Press Best Country Reports

➢ Rural Population Density

And with a low rural population density of around 45 inhabitants/km and a negative growth rate of -0.6% in 2012, it is likely to be hard to justify demand-led broadband infrastructure works country-wide.

Population Density Map. Source: World Trade Press Best Country Reports

4. What are the non-technological roadblocks?

➢ Lack of Satellite Knowledge

No one scheme fits all and Satellite could meet some of the requirements for the Ro-Net backhaul network. With 100% of the country covered by satellite the costs of lengthy and extensive terrestrial civil works could be minimized.

The backhaul scheme proposed also relies on operators to fund the local loop connection into the White Areas. Satellites transmit directly from the backbone network to the user's location, removing the need for local loop investment, ensuring no-one misses out.

4. What are the non-technological roadblocks?

➤ Lack of confidence in satellite to meet broadband speeds

The Romanian National Broadband Strategy is 4Mbps download speed for business and the Digital Agenda requires 100% coverage at 2Mbps. Today's satellites can easily provide superfast speeds of 20Mbps.

➤ Absorption of EU Funds

Public support for Project Ro-Net is taking the form of Structural Fund grants, which were finally secured in 2013. EUR 68.5m will come from the European Regional Development Fund (ERDF) and EUR 15.5m from the State Budget.

However, in the 2007-2013 EU budget, Romania was allocated EUR 19.7bn, yet by January 2012 only 4% of funds had been absorbed – the lowest absorption rate in the EU27. This was partly due to the Romanian Government being unable to match the EU's 75:25 rule for the ratio of Grant to State Funding.
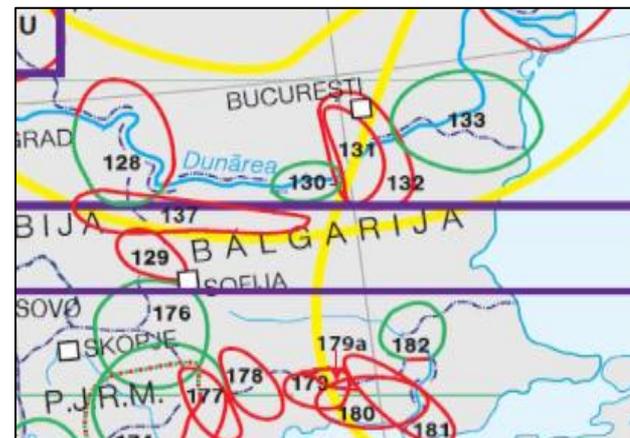
5. The Needs of the Regions

➤ Other White Areas

The Project Ro-Net Demand Analysis identified 2,300 rural and remote villages located in White Areas, but only 783 were selected for broadband infrastructure. Some of the remaining 1,500 villages could benefit from a Satellite Broadband solution. And small wireless clusters with satellite backhaul can be very cost effective.

➤ Cross-Border Cooperation

The Bulgarians would also like to participate in a cross-border satellite solution, serving a shared 70,000km^2 area.

5. The Needs of the Regions

➢ Opportunity

With more than 300,000 remote and rural households and businesses yet to be included in a broadband infrastructure roll-out plan, the opportunity exists to service some of these regional needs with a satellite broadband solution. Successful implementations like the Scottish Broadband Reach program have shown satellite technology is a good solution for providing broadband infrastructure in very rugged and rural regions.

And as these areas are often characterised by low income and low rates of computer ownership, the region may be well suited to a demand aggregation project providing subsidies both for the end-user set up fees and the running costs of the connection.

Such a solution would enable remote unserved users to take immediate advantage of the digital economy and assist Romania in meeting the EU's Digital Agenda.
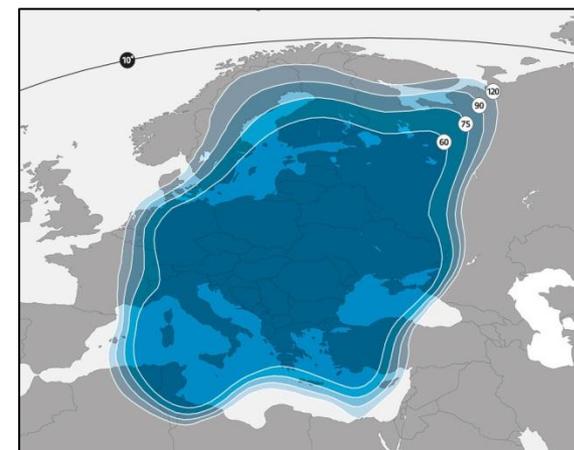
Astra 1G Ku-band footprint over Europe.

Thank You