



CASE STUDY – Broadband Open Access Network Komen

GOCO PPP

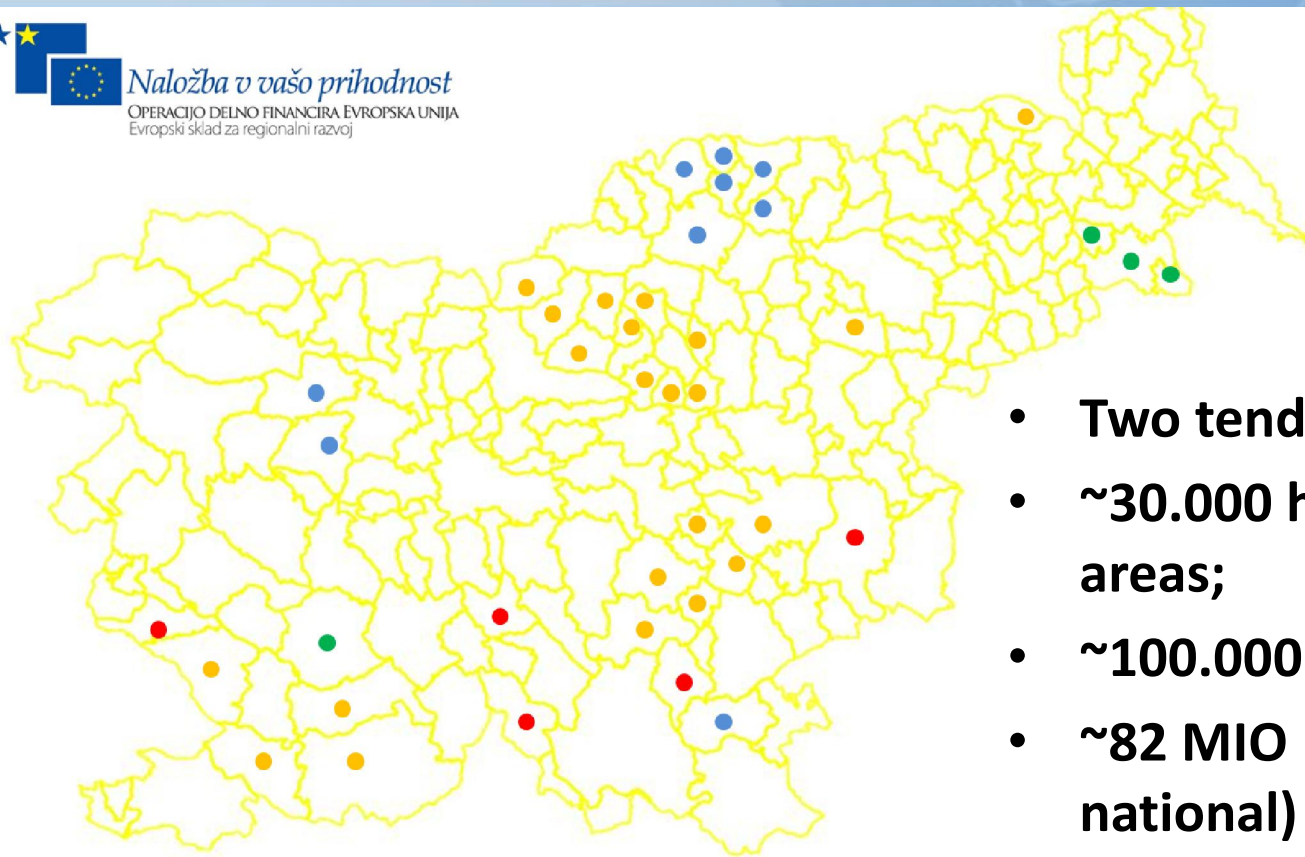
Goran Živec, Vahta d.o.o.
Bled, 11.November 2013



OPEN ACCESS NETWORKS IN SLOVENIJA



Naložba v vašo prihodnost
OPERACIJO DELNO FINANCIRA EVROPSKA UNIJA
Evropski sklad za regionalni razvoj



- **Two tenders;**
- **~30.000 households on white areas;**
- **~100.000 households passed;**
- **~82 MIO EUR (85% ERDF, 15% national) + ~ 30MIO private coinvestment.**



20 km



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INFO ABOUT MUNICIPALITY

Komen municipality:

- Western Slovenija, Carst region, bordering with Italy;
- 103 sq.km., ~1340 households in 35 villages, 903 of those on white areas;
- Very hard terrain (solid rock) and low population density make non viable for commercial interest;
- Demographically depressed area;
- In 2007, very scarce connectivity, due to the lack of any fibre over the territory.



INFO ABOUT PROJECT

Project (with private partner FMC d.o.o. from Ljubljana):

- Give connectivity of at list 1 Mbps, but enable triple play...;
- A hybrid, xDSL and FTTH bitstream solution was foreseen;
- Users with less than 1km from active nodes served by xDSL (via LLU on existing Telekom Slovenije copper), others FTTH;
- 65 km of optical backbone, 14 hybrid DSLAMs, 110km of optical overhead cable for local drop (using existing power utility poles),
- 2,7 million EUR of ERDF and national funds, 18months for build-out phase.



RESULTS

- All households with broadband connectivity;
- Currently ~600 households connected (penetration 2/3), practically all with triple play services;
- 4 service providers present in the network (all national service providers);
- The private partner has a 20year network operation contract.



LESSONS LEARNED

- xDSL has much higher operating cost than FTTH;
- Service providers do not like non homogeneous networks on the same area (the network was upgraded soon after the completion to a full FTTH solution);
- It takes time for service providers to enter new networks. Start working with them as soon as possible;
- Initial investment is only a part of the problem, sustainability comes out from the operational results.



QUESTIONS?

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Public – Private partnerships for Broadband network projects

Presentation of
Guidelines on how to use PPP models in practice

BROADBAND DAYS

Goran Živec, Vahta d.o.o.
Bled, 14. november 2013



PPP4BROADBAND GUIDELINES TARGET GROUP

The aim of this guide is to assist and to guide all stakeholders, but mainly the local authorities that want to participate in this kind of projects, to better understand and deploy broadband infrastructures, enabling a better life to their citizens.



A LOT OF DOUBTS

Why should local municipalities take care of broadband?

Broadband is not a public utility?!

As „Europe” set the Digital Agenda 2020 goals, then „someone” must have thought of where to finance them from?

One of the goals of DAE2020 is to give the possibility to connect with at list 30Mbps to every European, and that more than half should be connected with more than 100Mbps.



A LOT OF DOUBTS?

Type of Effect	Magnitude	Remarks
GDP Growth		
Direct	+1.1%	Direct effects are a result of investment in a fiber access network. Indirect effects are the capacity of the economy to promote innovation, offering new services and enabling substantial economic development
Indirect	+3.5%	
Employment Growth	+1.1%	Overall job creation
Public Welfare (as measured by HDI)	+14%	The United Nations Development Program Human Development Index (HDI) takes into consideration network effects on welfare key indicators

Source: Cisco IBSG and University of Rome II Tor Vergata, 2011.

In areas without commercial interest and/or with market failure signs, local authorities must step in! It helps development and it pays out.



WHY THE PROPER FORM IS IMPORTANT?

„In spite of the financial crisis, there is no fundamental shortage of capital even for a faster switchover. We have interviewed numerous financiers, funds and banks who confirm this. If the industry goes to the markets in the right way then there is plenty of capital. We have met funds that are almost desperate to find fibre projects with the right structure and risk profile. „

Financing Stimulus for FTTH, November 2012, Ventura team and Portland Advisers for FTTH Council



IT'S NOT ONLY ABOUT EU FUNDS!

**EU funds will be largely insufficient!
Official estimates are that 260 billion EUR are needed.
Alltogether, only 7 billion EUR is supposed to be available
through various EU sources.
More than half on the necessary sum is prospected to
derive from „Project financing“ and „Bonds“***

*Financing Stimulus for FTTH, November 2012, Ventura team and Portland Advisers for FTTH Council

**ALL NEW APPROACH IS NEEDED!
ALL NEW KNOWLEDGE IS NEEDED!**



THE MOST EXPRESSED RISK

Take-up rate - OAN monthly (3 years)

**RELATIVE UTILITY OF BROADBAND CONNECTIVITY IN RURAL AREAS IS MUCH HIGHER THAN IN URBAN AREAS!
RURAL USERS CAN GET SERVICES THAT ARE FAR AWAY OR NOT ACCESSIBLE TO THEM, BUT ARE PHYSICALLY AT HAND TO THOSE LIVING IN THE CITY.
IT IS CRITICAL TO ATTRACT THE PRESENCE OF RETAIL OPERATORS!
SERVICE IS THE KEY!**

GOŠO 1	connections	build-up	build-up	31.03.2013
TOTAL GOŠO 1	15957	3966	8679	9785
Take-up rate		24,85%	54,39%	61,32%



PUBLIC-PRIVATE PARTNERSHIPS

**5 PPP models identified by EPEC (part of European Investment Bank);
3 technology levels of Broadband networks identified by EU DG Comp in the EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks (2013/C 25/01).**

In the project, we tried to identify the most appropriate PPP model, based on the local needs and the technology level.



MODELS

PPP4Broadband Matrix	PRIVATE DBO	PUBLIC DBO	GOCO	PPP Joint-Venture	Bottom up
BASIC Broadband	X	X		X	
NGA Broadband		X		X	X
ULTRA FAST Broadband	X		X	X	



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