Open Access Networks in Slovenija – Lessons learned

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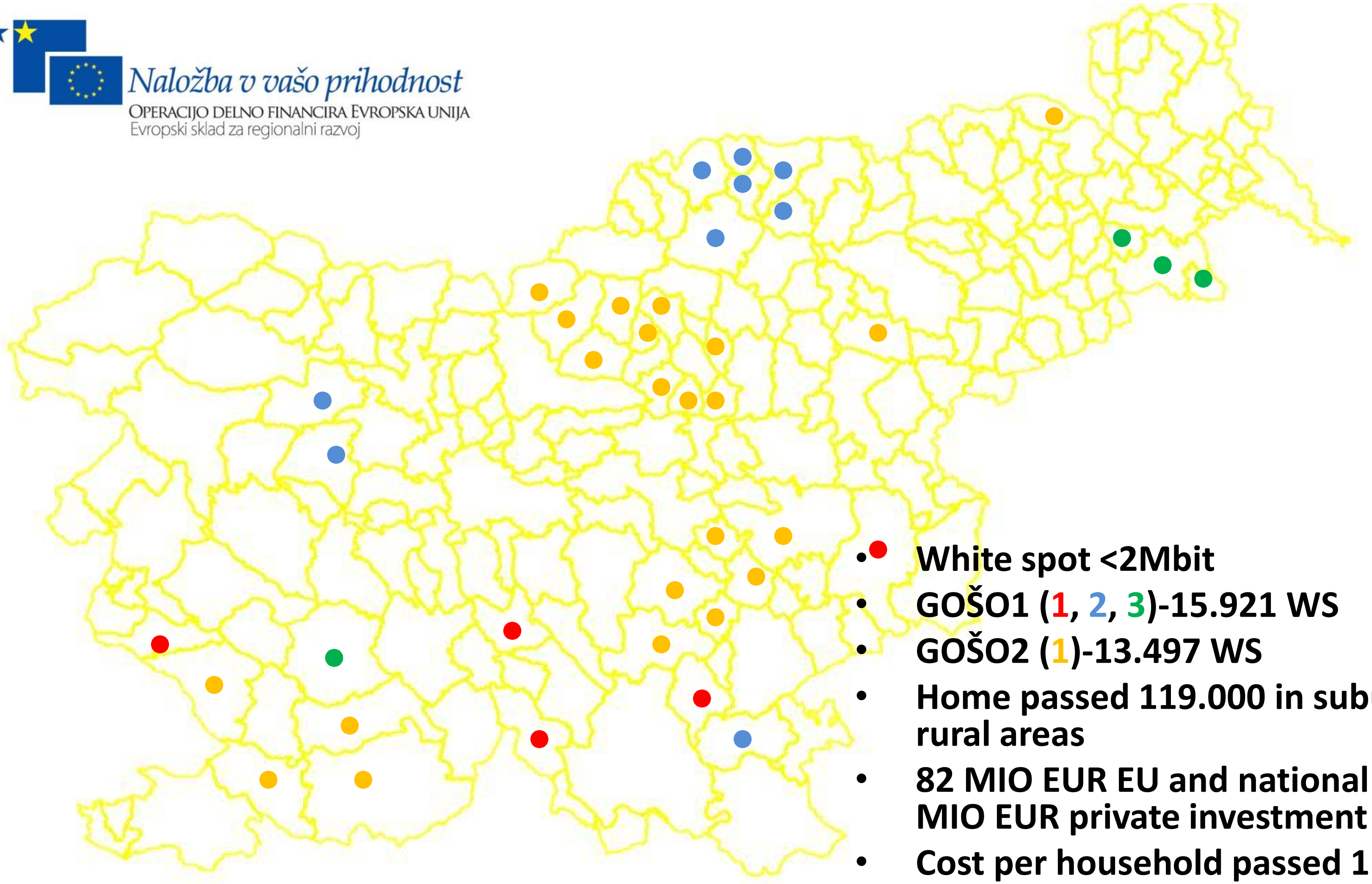
OAN in Slovenia

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



- White spot <2Mbit
- GOŠO1 (1, 2, 3)-15.921 WS
- GOŠO2 (1)-13.497 WS
- Home passed 119.000 in suburban and rural areas
- 82 MIO EUR EU and national funds, 38 MIO EUR private investment
- Cost per household passed 1.008 EUR

Geopedia.si

Until recently, only white spots could be connected.

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Why everyone says FTTH is too expensive for rural areas?

Infrastructure investments are not meant for fast payback!

If someone wants to be a real infrastructure provider, then equity (like) capital must be invested (in rural areas)!

Equity requires ROE, and not ROI! The inital investment must produce long term adequate return, but not repay itself (it is an investment for a long, undefined time). Equity will not be withdrawn from the operation.

Fiber is misunderstood as too expensive because of improper investment source!!

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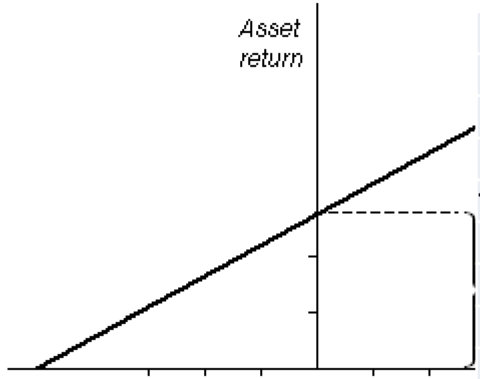
Is Broadband risky for equity investors?



$$E(R_i) = R_f + \beta_i(E(R_m)$$

Source of graph and formula: Wikipedia

Higher risk => Higher ex

Telecommunication company		Beta (β_u) value			
Industry Name	Number of firms	Beta	D/E Ratio	Tax rate	Unlevered beta
Utility (General)	20	0,56	69,35%	29,93%	0,38
Power	106	0,68	85,11%	16,03%	0,40
Utility (Water)	20	0,75	57,90%	14,52%	0,50
Telecom. Services	**82**	**0,94**	**71,23%**	**8,40%**	**0,57**
Coal & Related Energy	45	1,28	86,63%	2,44%	0,69
Retail (Distributors)	87	1,00	43,82%	16,18%	0,73
Healthcare Equipment	193	0,85	17,26%	5,80%	0,73
Retail (General)	21	0,98	35,62%	25,03%	0,77
Computer Services	129	0,92	20,48%	9,94%	0,78
Chemical (Basic)	47	1,01	29,67%	6,27%	0,79
Tobacco	12	0,94	20,83%	14,23%	0,80
Real Estate (Development)	22	0,99	24,90%	3,00%	0,80
Electronics	191	1,02	16,01%	7,52%	0,89
Electrical Equipment	135	1,14	13,74%	7,49%	1,01
Building Materials	37	1,27	30,05%	16,33%	1,02
	349	1,12	9,15%	1,13%	1,02
	131	1,14	10,77%	6,90%	1,04
Heavy Construction	46	1,67	56,30%	19,40%	1,15
Total Market	7766	1,01	74,28%	10,32%	0,60

Source: Damodaran, Stern Univ, 2014

Broadband is infrastructure, and has low risk.

Fixed broadband is THE ONLY industry where natural monopoly is possible without paying concessions!

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Natural monopolies can lead to market defections – OAN is the solution

Fixed broadband is THE ONLY industry where natural monopoly is possible without paying concessions!

The risk is to influence the market mechanisms with public funds – non allowed state aid! Beside the administrative solutions (national state aid scheme notifications and new GBER rules) it is critical for public partners that are involved in broadband network projects to recognise the risks of creating an infrastructurural monopoly.

„A natural monopoly occurs when the most efficient number of firms in the industry is one. A natural monopoly will typically have very high fixed costs meaning that it impractical to have more than one firm producing the good." http://www.economicshelp.org/blog/glossary/natural-monopoly/

"[a]n industry in which multiform production is more costly than production by a monopoly"
William Baumol (1977)

Imposing Open Access mechanisms limits the possibility of monopolistic behaviour from the infrastructure operator's side, and stimulates the competition on the service provider's side.

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EU Guidelines

EU Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks (2013/C 25/01) (some points):

- Mapping of the existing situation and of economic interest for future 3 years (very tricky);
- Technological neutrality (very tricky);
- **Wholesale access;**
- Reasonable profit: „Any profit in excess of a reasonable profit, i.e. **profits beyond the average industry return on capital** for deploying a given broadband infrastructure, could be assigned to the financing of the SGEI in the nonprofitable areas while the remaining profits could be part of the financial compensation granted.“;
- Clawback mechanism: „Member States should implement the clawback mechanism if the aid amount of the project is above EUR 10 million (113). Granting authorities can **foresee** that any extra profit reclaimed … could be spent for further broadband network expansion …“;
- An accounting separation obligation for the winning bidder.

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Wholesale access

„ … wholesale access enables third-party operators to compete with the selected bidder (when the latter is also present at the retail level), thereby strengthening choice and competition in the areas concerned by the measure while at the same time avoiding the creation of regional service monopolies…“

„… subsidised companies should provide **a wider range of wholesale access products** than those mandated by NRAs under sectoral regulation to the operators who have significant market power …“

„… Such wholesale access should be granted as early as possible before starting the network operation…“

„…should be offered for at least a period of 7 years…“

„…the average published wholesale prices that prevail in other comparable, more competitive areas of the country or the Union shall be taken…(the role of NRA)“

„**Aid to ultra-fast broadband networks: on black spots -** the subsidised network will be based on an open architecture **operated as a wholesale only network**;“

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OAN in Slovenia's past projects

- Mandatory vertical separation (tricky, unclear rules about related companies and subsidiaries);
- Municipalities own part of the networks since the building phase (they co-invest the public money);
- Contractual PPP (no new project company);
- BOT model imposed (at the end of the concession period, the ownership of the private part is transferred to the public partner);
- At the moment, OAN are still unregulated by the NRA.

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Final thoughts

- Lack of knowledge and low awareness of the risks on the public partner side may lead to unfortunate situations in the future;
- Fair conditions can enable substantial private co-investments.

- www.ppp4broadband.eu

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Fibre to the people initiative

- Open, inclusive and future oriented Europe needs pervasive, very high speed connectivity for every citizen. Recent trends are showing an alarming intention of the industry to consider European rural areas as less important, deeming any solution is good enough for „those few elder farmers who live there“.
- European rural areas are not only agriculture! Half of EU citizens live in rural areas!
- This means half of those Europeans who pay taxes and have the right to vote!
- We, people who live in rural areas, demand proper, future oriented, fibre broadband connectivity!
- We do not accept any second-choice solution as good-enough, like wireless or similar!
- To those, who argue that it cannot be done, we answer: „If you don‘t know how to do it, this doesn‘t mean it cannot be done. We will do it by ourselves!“.
- **Fibre to the people!**

www.fibretothepeople.org

FIBRE TO THE PEOPLE

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OANTake-up rate in Slovenija

Take-up rate – OAN monthly (3 years)

THE RELATIVE UTILITY OF BROADBAND TO RURAL AREAS IS MUCH BIGGER THAN TO URBAN AREAS!
IT IS CRITICAL TO ASSURE AS MUCH SERVICE PROVIDERS AS POSSIBLE - SERVICE IS THE KEY!
IN RURAL AREAS, COOPERATION WITH LOCAL INHABITANTS AND LOCAL AUTHORITIES IS A MUST!

Občina Sežana	**Ilirska Bistrica, Hrpelje-Kozina, Komen**	**3**	**3535**	**875**	**24,75%**
Občina Pivka	**-**	**1**	**1011**	**200**	**19,78%**
Mozirje	**Gornji Grad, Rečica ob Savinji, Luče, Ljubno, Solčava, Vransko, Prebold, Polzela, Tabor, Apače**	**11**	**2339**	**31**	**1,33%**
Slovenske Konjice	**-**	**1**	**1027**	**177**	**17,23%**
SKUPAJ GOŠO 2		**23**	**13497**	**3168**	**23,47%**

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Wholesale access II

„…The subsidised network must therefore offer access under fair and non-discriminatory conditions to all operators who request it and will provide them with the possibility of effective and full unbundling. Moreover, third-party operators must have access to passive and not only active network infrastructure. Apart from bitstream access and unbundled access to the local loop and sub-loop, **the access obligation should therefore also include the right to use ducts and poles, dark fibre or street cabinets**…“

„…in areas with low population density, where there are limited broadband services, or for small local companies, **the imposition of all types of access products might disproportionately increase investment costs without delivering significant benefits in terms of increased competition**. In such a situation, one may envisage that access products requiring costly interventions on the subsidised infrastructure not otherwise foreseen (e.g. co-location in intermediary distribution points) be offered **only in case of a reasonable demand from a third-party operator**. “

„**Aid to ultra-fast broadband networks:** the subsidised network will be based on an open architecture **operated as a wholesale only network**;“

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