



**[SABER] [Workshop 6]  
Panel 2 "Digital Divide and  
Very High-Speed Services:  
Meeting 2020**




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RD Horizon, R&D

European Commission  
Information Society and Media

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**Outline**

- Digital divide aspects
  - Summary of investment in BB infrastructure in 2007 – 2013
  - Current indicators of IS in Slovenia
- Investments in the regions - financial support from the public sector?
  - Programming documents for 2014 -2020 – what is expected in Slovenia?
  - Possibility of pilot projects
- DAE targets from different point of view in Slovenia - optional
  - Strategic aspects
  - Technological aspects
  - Economic aspects
  - Business and organizational aspects

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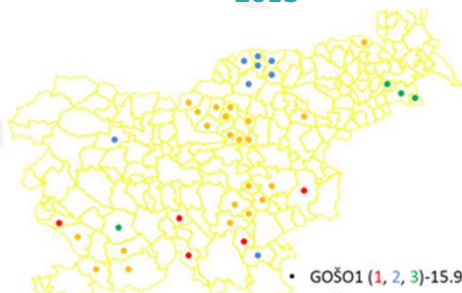
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**Digital divide aspects - Summary of investment in BB infrastructure in 2007 – 2013**



- GOŠO1 (1, 2, 3)-15.921 BL
- GOŠO2 (1)-13.497 BL

GOŠO = Deployment of open BB Networks

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### Summary - Locations of selected projects (2013)

- 2 Open Calls were published with 4 Openings in total value 84.214.247,46 €
- 12 projects (GOŠO1) + 5 projects (GOŠO2) were selected = 17 projects
- 6 companies were selected as private partners: e.g. 3Tel was selected 7 times as a private partner, GVO 4 times
- 44 municipalities were included in the consortia – the number of municipalities in Slovenia = 212
- No. of connection enabled: GOŠO1= 15.921 + GOŠO2= 13.497 = 29.418
- Average price per connection(enabled): 2862.67€
- No. of connections realized (31.12.2012): 9.500
  - GOŠO1 (1, 2, 3)-15.921 BL
  - GOŠO2 (1)-13.497 BL

Geonedia d.o.o.

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cut the digital divide

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### White areas and non-commercial interest – experience from previous period

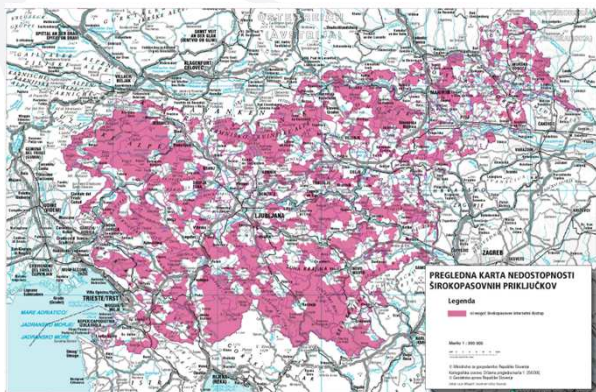
- DEFINITION white areas: Object of the tender is co-construction of open broadband networks in local communities in the so called white areas, which demonstrate the absence of commercial interest for the construction of the network. White areas are for the purpose of this call defined as areas where at the time of submission of tender BB connections are not enabled, or as areas where interested parties have no possibility of obtaining broadband connection although this area already possesses some Broadband connections.
- Lack of commercial interest is recorded in areas where in the next 24 months from the date of publication of the Call operators of electronic communications are not planning construction of broadband network that would facilitate the integration of end Users with a speed of at least 1 Mbps per end-user. Analysis of the business model shows that such a network can't be built and operated without a loss.

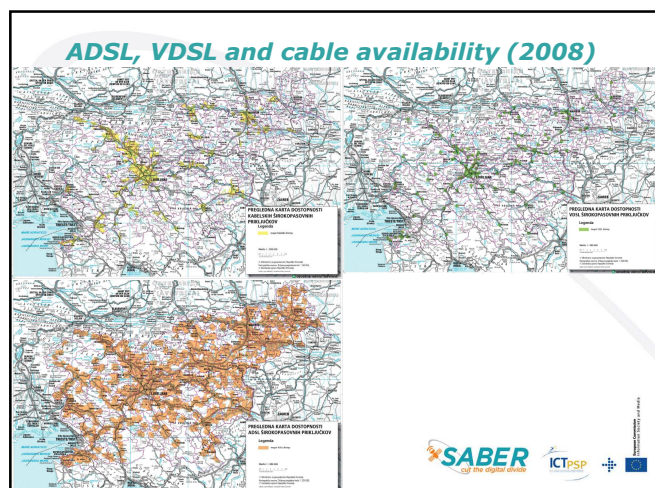
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### White areas with no BB (2008)






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### White areas and non-commercial interest

BUT

- Problems with the mapping
- Accuracy of the data
- Municipalities faced difficulties to obtain relevant data from the providers

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### Current indicators – Information society in general

Some basic indicators of information society						Households' equipment with (ICT)					
Indicators	2009	2010	2011	2012	2013		2009	2010	2011	2012	2013
Number of Internet users per 100 population <sup>1</sup>	69	73	73	73	79	The share of households with:					
Number of regular Internet users per 100 population <sup>2</sup>	64	70	69	70	74	computer	71	70	74	76	76
Use of e-banking (% of regular Internet users)	35	38	42	38	41	access to the Internet	64	68	73	74	76
Use of e-shopping (% of Internet users)	41	45	53	53	56	Share of households with Internet access by type of connection:					
Use of mobile devices to access the Internet, 2013 (%)						ISDN or dial-up access over normal telephone line	9	6	6	1	2
The share of persons <sup>3</sup> who used mobile devices to access the Internet			40			WAP, GPRS	21	21	20	10	17
used mobile phone to access the Internet			32			xDSL (e.g. ADSL, VDSL)	31	34	31	33	29
used portable or tablet computers to access the Internet			20			cable connection	20	21	25	32	32
used other handheld devices to access the Internet			6			3G mobile phone (UMTS, HSDPA)	16	17	20	23	28
						other broadband connection (e.g. optic fiber, WiFi, 3G modem)	6	14	28	35	38
						broadband	56	62	67	73	74
						only narrowband	8	6	5	1	2

Source: Statistical office of the Republic of Slovenia

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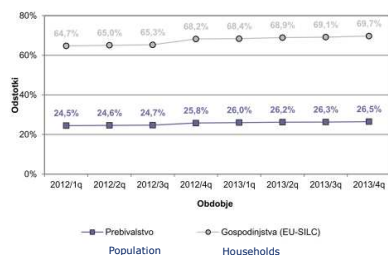
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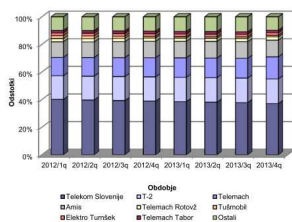
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## Current indicators – Fixed BB penetration



Vir: AKOS, februar 2014

## Current indicators – Fixed BB market share



	2012/1q	2012/2q	2012/3q	2012/4q	2013/1q	2013/2q	2013/3q	2013/4q
Telekom Slovenije	40.1	39.7	39.2	38.6	38.5	38.1	37.8	37.1
T-2	17.1	17.2	17.4	17.6	17.7	17.7	17.8	17.9
Telekom	13.6	13.6	13.7	13.9	14.1	14.2	14.3	14.6
Arnis	11.3	11.3	11.6	11.8	11.9	12.1	12.1	12.2
Telekom Rotov	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.3
Elektro Tumbak	2.0	2.0	1.9	1.9	1.9	1.9	1.9	1.9
Telekom Tabor	1.9	1.9	1.9	1.8	1.8	1.8	1.8	1.8
Telekom	2.1	2.1	1.9	1.7	1.1	1.1	1.1	1.1
Ostali	9.9	10.0	10.3	10.5	10.7	10.8	10.9	9.7

Vir: AKOS, februar 2014

## DAE Scoreboard, Current indicators – technology market shares

Title: Fixed broadband lines - technology market shares

Date: January 2013

Fixed broadband lines - technology market shares, January 2013

an.13	DSL lines % (VDSL included)	Cable modem % (DOCSIS 3.0 included)	Other %	Council order
BE	51%	49%	0%	1
BG	22%	15%	63%	2
CZ	36%	20%	44%	3
DK	54%	27%	19%	4
DE	83%	15%	1%	5
EE	43%	20%	37%	6
EL	100%	0%	0%	7
ES	78%	19%	4%	8
FR	92%	6%	2%	9
IE	64%	27%	8%	10
IT	96%	0%	4%	11
CY	85%	14%	2%	12
LV	33%	6%	62%	13
LT	24%	6%	71%	14
LU	86%	10%	4%	15
HU	35%	47%	19%	16
MT	50%	47%	3%	17
NL	50%	44%	6%	18
AT	68%	30%	2%	19
PL	44%	28%	28%	20
PT	48%	39%	15%	21
RO	28%	13%	59%	22
SI	51%	28%	21%	23
SK	40%	13%	48%	24
FI	65%	18%	17%	25
SE	48%	19%	33%	26
UK	80%	20%	0%	27
EU	74%	17%	9%	28

## DAE Scoreboard, Current indicators – fixed BB lines by speed

Title: Fixed broadband lines by speed				
Date: January 2013				
Full title: Fixed broadband lines by speed, January 2013				
	Above 144 Kbps and below 2 Mbps	2 Mbps and above and below 10 Mbps	10 Mbps and above	Council order
BE	1.1%	20.3%	78.7%	4
BG	0.4%	7.4%	92.2%	2
CZ	2.9%	53.3%	46.6%	3
DK	2.7%	22.6%	74.7%	4
DE	7.4%	53.3%	39.3%	5
EE	27.3%	50.7%	22.0%	6
EL	0.0%	42.3%	57.7%	7
ES	2.8%	43.0%	54.2%	8
FR	2.3%	8.6%	89.1%	1
IE	0.0%	60.6%	31.4%	10
IT	2.1%	63.7%	14.2%	11
CY	0.3%	87.7%	12.0%	12
LV	3.1%	33.2%	63.7%	13
LT	0.5%	34.4%	65.1%	14
LU	0.3%	57.5%	42.1%	15
HU	8.8%	30.2%	61.0%	16
MT	0.2%	25.3%	74.5%	17
NL	1.9%	31.8%	66.3%	18
PT	1.4%	54.7%	43.9%	19
PL	19.2%	46.9%	34.9%	20
PT	2.1%	14.8%	83.1%	21
RO	2.0%	24.8%	73.3%	22
SI	10.5%	47.4%	36.1%	23
SK	6.4%	55.7%	37.9%	24
FI	7.3%	33.0%	59.6%	25
SE	2.6%	31.1%	66.3%	26
UK	0.0%	21.7%	78.3%	27
EU	3.9%	37.1%	59.0%	28

## Programming for the next period 2014 -2020

- Slovenia's Development Strategy 2014 – 2020 (Draft, December 2012)
- Ensure coverage of broadband throughout the country and prepare the optimal regional co-financing scheme of construction of broadband.
- The Programme of development priorities and investments of the Republic of Slovenia for the period 2014 - 2017 ( Draft, march 2013)
- 4<sup>th</sup> development priority and investment area: Entrepreneurial ambition
- We will support investment in broadband networks GOŠO3 through open wireless broadband networks (long term evolution LTE – Open Base Station) with the use of the available frequency spectrum of 800 MHz (upgrade of existing base stations), construction of new wireless broadband networks, using existing VDSL networks by shortening the copper loop, the construction of mobile broadband networks, upgrade existing cable networks and building new FTTH (fiber to the home) and FTTN (fiber to the node neighborhood) broadband networks.

## Programming for the next period 2014 -2020

- Partnership Agreement (PA) - draft

Despite these investments in the past, in Slovenia basic broadband infrastructure is still not available approximately to one third of the population, or 260,000 households, which are almost entirely in rural areas. Therefore, it is necessary to ensure public as well as private funds, which will improve the viability of the business models of private investors for future investments in these areas.

In addition to mapping of availability of broadband connections, on the basis of which we determine exactly the areas in which operators don't provide broadband connections and have no commercial interest, Slovenia is preparing a new strategy for electronic communications, which will give an ambitious plan to all households in the country to provide broadband Internet access speed of at least 100 Mb/s by the end of 2020.

Funds: ERDF, EAFRD

- Operational Programme (OP) for the Implementation of the European Cohesion Policy - draft

No BB infrastructure



### ***Pilot actions?***

- **National authorities – is it too late?**
- To influence the programming process on national level it's necessary to address political stakeholders - on high political and operational level as well (Ministry of economic development and technology, Ministry of infrastructure and spatial planning)
- **Regional actors**
- To influence regional actors – mainly municipalities (possible through association of municipalities) and RDA's which will be responsible for the preparation of the projects. The process of the preparation of the Regional development plans is nearly finished.
- **Possible pilots**
- Awareness raising actions – satellite technology was not considered as an option in period 2007 – 2013.
- Open issue: financing of pilots if deployment is considered



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### ***DAE targets from different point of view in Slovenia - Strategic aspects***



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### ***DAE targets from different point of view in Slovenia - Technological aspects***



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***DAE targets from different point of view in  
Slovenia - Economic aspects***

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***DAE targets from different point of view in  
Slovenia -  
Business and organizational aspects***

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