



RADIO
TELEVIZIJA
SLOVENIJA

Launch of DAB+ in Slovenia

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About RTV Slovenija

Public service broadcaster

- 4 national radio programs,
- 3 national TV programs,
- 2 regional radio and TV programs,
- radio and TV programs for minorities,
- web-portal,
- network operator (225 transmitter sites):
 - FM radio,
 - shortwave radio,
 - DVB-T,
 - DVB-S and
 - T-DAB since oktober 2016



Short history

- 1997** first T-DAB pilot project,
- 2006** second attempt,
- 2013** increased activity from public broadcaster and commercial stations,
- 2014** questionnaire from the national regulator - AKOS
- 2015** public tender for T-DAB network licence
- 2016** operational network

Public tender for T-DAB+ licence

- nationwide coverage
- SFN network on channel 10D - 215,072 MHz
- at least 1100 kbit/s net transmission bandwidth
- encoding standard MPEG-4 HE-AAC version 2
- up to 20 radio stations
- required bitrate for min. quality:
 - stereo 48 kbit/s
 - mono 24 kbit/s
- predefined transmitter network with:
 - 7 mandatory sites
 - 7 optional sites
- typical ERP 5 kW
- maximum price of CU/month = 32,10 €

9 months to go

- purchase of equipment:
 - antennas,
 - transmitters,
 - head-end and
 - instruments
- installation of equipmnet

content?

- public tender for content

setup of new services:

- dynamic label,
- slideshow,
- journaline
- *EPG*

receivers?

Impressions from installation



19. september - launch of multiplex R1

ON AIR

- Slo 1 Prvi
- Slo 2 Val 202
- Slo 3 ARS
- Slo Int Radio SI

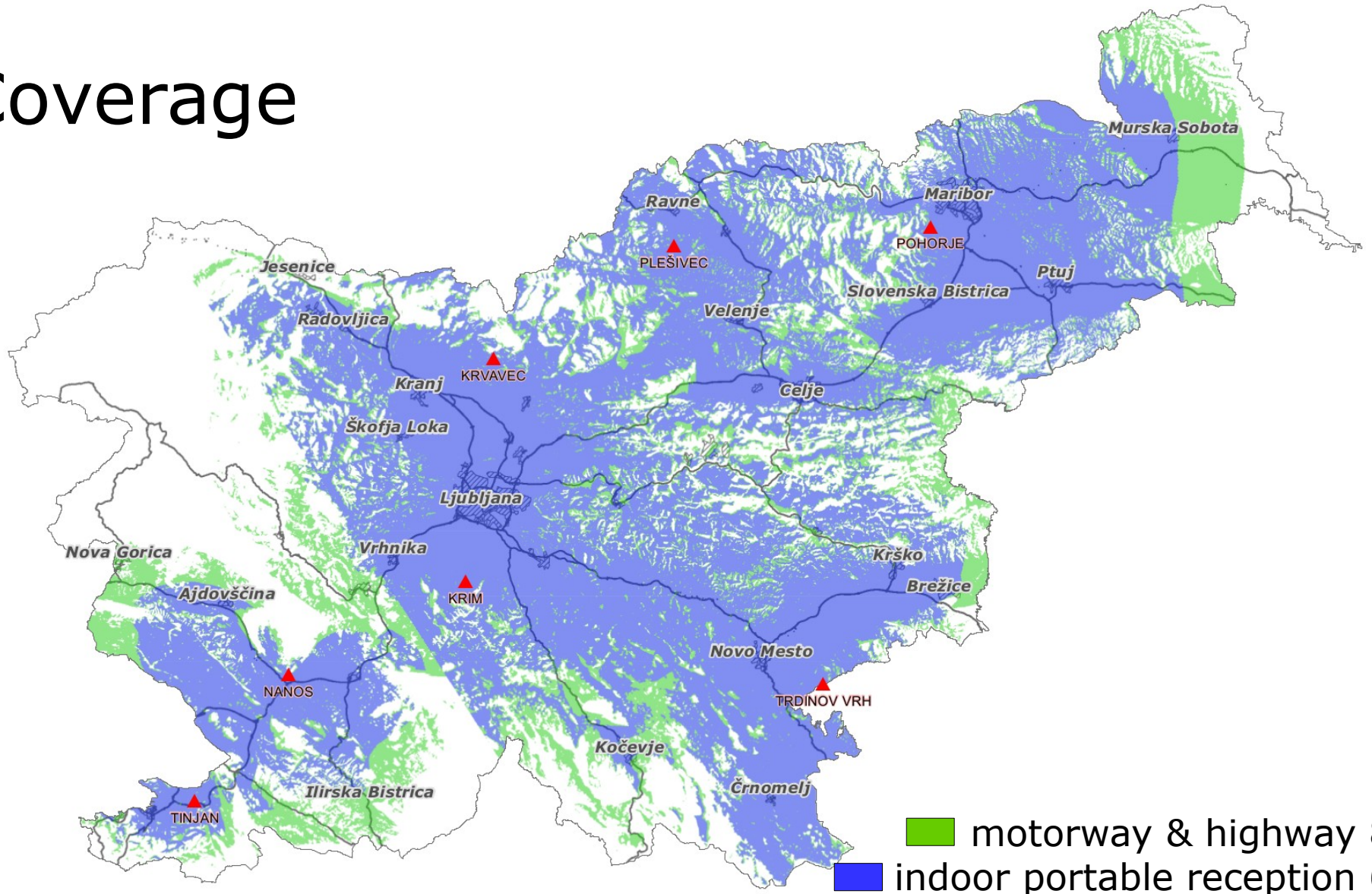
audio 96-112 kbit/s + data

- journaline,
- dynamic label +,
- slideshow

- Rock Radio Slo
- Radio Ognjisce
- Radio Center Slo
- Radio BOB
- Radio Antena
- Radio 2
- Radio 1 DAB
- Glasbeni Radio

audio&data 24-72 kbit/s

Coverage



Financial part

- Multiplex consists of 864 CU (Capacity units),
- business plan for 70% utilization,
- 1 CU = 35,10 €/month

	stereo price per month		mono price per month	
min. quality required by agency (48 kbit/s)	36 CU	1264 €	18 CU (24 kbit/s)	632 €
basic quality ¹ without data (64 kbit/s)	48 CU	1685 €		
RTV Slovenija (4x national public radio stations <i>Prvi, Val202, ARS, Radio SI</i>) (96 kbit/s)	96 CU	3370 €		
Radio Antena, Radio 2, Radio Bob, Glasbeni Radio (24 kbit/s)			12 CU EEP 4-A	421 €
Rock Radio (72 kbit/s)	54 CU	1895 €		
Radio Ognjišče, Radio 1 (32 or 48 kbit/s)	24 CU	842 €	24 CU EEP 4-A	842 €

Experiences and challenges

- FM will not be switched off tomorrow!
- Quality in DAB+ *What is it and what is it not?*
- The interest of private stations
- CU vs. bitrate
- promotional activities
- extend coverage in tunnels and new transmitters
- new DAB+ only content

The future is digital!

