



# **Analogue Switch-off in Serbia**

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# Presentation overview

- DSO process overview
  - Regulatory framework
  - Transition
- End user assistance
  - Labeling scheme
  - Help scheme
  - Media campaign



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# DSO process overview



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# General information

- DSO ended on 7 June 2015
- Ministry responsible for telecommunications was leading the process
- Other key institutions:
  - Ministry of Culture and Information
  - NRAs: Regulatory Agency for Electronic Communications and Postal Services (RATEL) and Regulatory Authority for Electronic Media (REM)
  - ETV - network operator
  - Public broadcasting services (RTS and RTV), and national, regional and local broadcasters



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# Regulatory framework

- October 2008: Inter-ministerial working group tasked with drawing up the Draft Strategy for Digital Switchover
- December 2008: Conclusion on the extraction of the broadcasting system from RTS and establishing a new company
- July 2009: **Strategy for the Switchover** from Analogue to Digital Broadcasting of Radio and Television Programs in the Republic of Serbia
- October 2009: Decision on the establishment of the public company for operating the broadcasting infrastructure (ETV)
- June 2010: **Law on Electronic Communications**



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# Regulatory framework

- February 2011: **Rulebook on the Switchover** from Analogue to Digital TV Broadcasting and Multiplex Access
- October 2012: Allocation Plan of Radio-Frequency Bands
- August 2014: Set of Media Laws (**Law on Electronic Media**)
- December 2014: Law on Ratification of the Guarantee Agreement (Transition from analogue to digital signal project) between the Republic of Serbia and EBRD
- December 2014: ETV Price List



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# Regulatory framework

- Strategy for the Switchover
  - Broadcasting standard: DVB-T2
  - Compression standard: MPEG-4 p.10
  - SFN network type within allotments
  - Network architecture based on IP/MPLS technology
  - Regional insertion of programs
- Law on Electronic Communications
  - ETV: network and multiplex operator
  - Multiplex access for all the programs with valid license for terrestrial TV broadcasting



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# Regulatory framework

- Rulebook on the Switchover (amended and updated depending on the stage of the switchover process)
  - Frequency channels for 3 MUXs
  - Programs broadcasted in each MUX
  - Switchover Plan
- Law on Electronic Media
  - Coverage area is one or more allotments – local TV stations equal to regional TV stations regarding coverage
- ETV Price list
  - Discount for regional and local TV stations until 1 January 2017





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# Transition

- March 2012: Initial network for testing of digital broadcasting
  - Signal broadcasted from 15 locations, population coverage 15%
- November 2013: Extended initial network
  - Signal broadcasted from 35 locations, population coverage 75%
- 2015: Final network
  - Population coverage over 97%
- 2016: After ASO
  - Population coverage 98%



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# Transition

- Preparation of broadcasting sites
  - Tender carried out by the Ministry
  - Tender carried out by ETV
  - EBRD loan
- Broadcasting and network equipment
  - IPA funds
  - National contribution to IPA project
  - EBRD loan
- Throughout IPA project “Assistance to transition from analogue to digital broadcasting in Serbia”, also expert help was obtained



# Switch-off dates

Allotment	Simulcast		Switch off group
	Start	End	
Vršac	1 September 2014	15 April 2015	1
Subotica – Sombor	1 September 2014	8 May 2015	2
Kikinda	1 September 2014	8 May 2015	2
Čot – Venac	1 September 2014	18 May 2015	3
Avala	1 September 2014	25 May 2015	4
Rudnik – Crni Vrh	1 September 2014	1 June 2015	5
Tupižnica	1 October 2014	1 June 2015	5
Tornik – Ovčar	1 November 2014	1 June 2015	5
Deli Jovan	1 November 2014	1 June 2015	5
Besna Kobila	1 October 2014	7 June 2015	6
Jastrebac	1 November 2014	7 June 2015	6
Kopaonik	1 November 2014	7 June 2015	6
Cer – Maljen	1 November 2014	7 June 2015	6



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End user assistance



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# Labeling scheme

- The Ministry registered warranty trademark “digital TV” in September 2014



- Receivers appropriate for the reception of broadcasted signal in Serbia may be labeled with “digital TV” mark
- Conditions under which the Ministry shall allow the use of the “digital TV” mark, together with digital terrestrial TV receivers characteristics, were set in the General act on warranty trademark
- The Ministry published and updated the list of receivers which can be labeled with “digital TV” mark



# Help scheme

- The Government adopted act defining details of the help scheme for the socially vulnerable citizens in October 2014
- Vouchers for subsidized purchase of STBs were included
- Citizens entitled to obtain vouchers:
  - Beneficiaries of the social aid
  - Beneficiaries of the care assistance
  - Retired people living alone, having income less of the minimal retiring income in the RS
- Application period for citizens for the help scheme was from November 2014 to April 2015



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# Help scheme

- The Ministry also issued public call to identify retailers/stores for the realization of the help scheme
- Vouchers delivered to home addresses, together with the list of stores where they can be used (over 1000 stores all over the country)
- Voucher could be exchanged only for a STB labeled with “digital TV” mark
- Voucher value 3000 RSD (around 24,5 EUR)
- About 164.000 citizens used their vouchers



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# Media campaign

- Main goal: to inform citizens about transition from analogue to digital TV broadcasting
- The campaign started in August 2014
- Led by the Ministry, partners in the campaign were REM, public broadcasting services, national, regional and local broadcasters
- The promotion encompassed electronic media, printed media, Internet portals, social networks, outdoor advertising and contact with citizens
- Web pages dedicated to the digitalization process
- Call center in operation from April to October 2015





**Thank you for your attention!**

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