

Transition to Digital Terrestrial Television in Macedonia

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Regional Seminar on Transition to Digital Terrestrial Television
Broadcasting and Digital Dividend

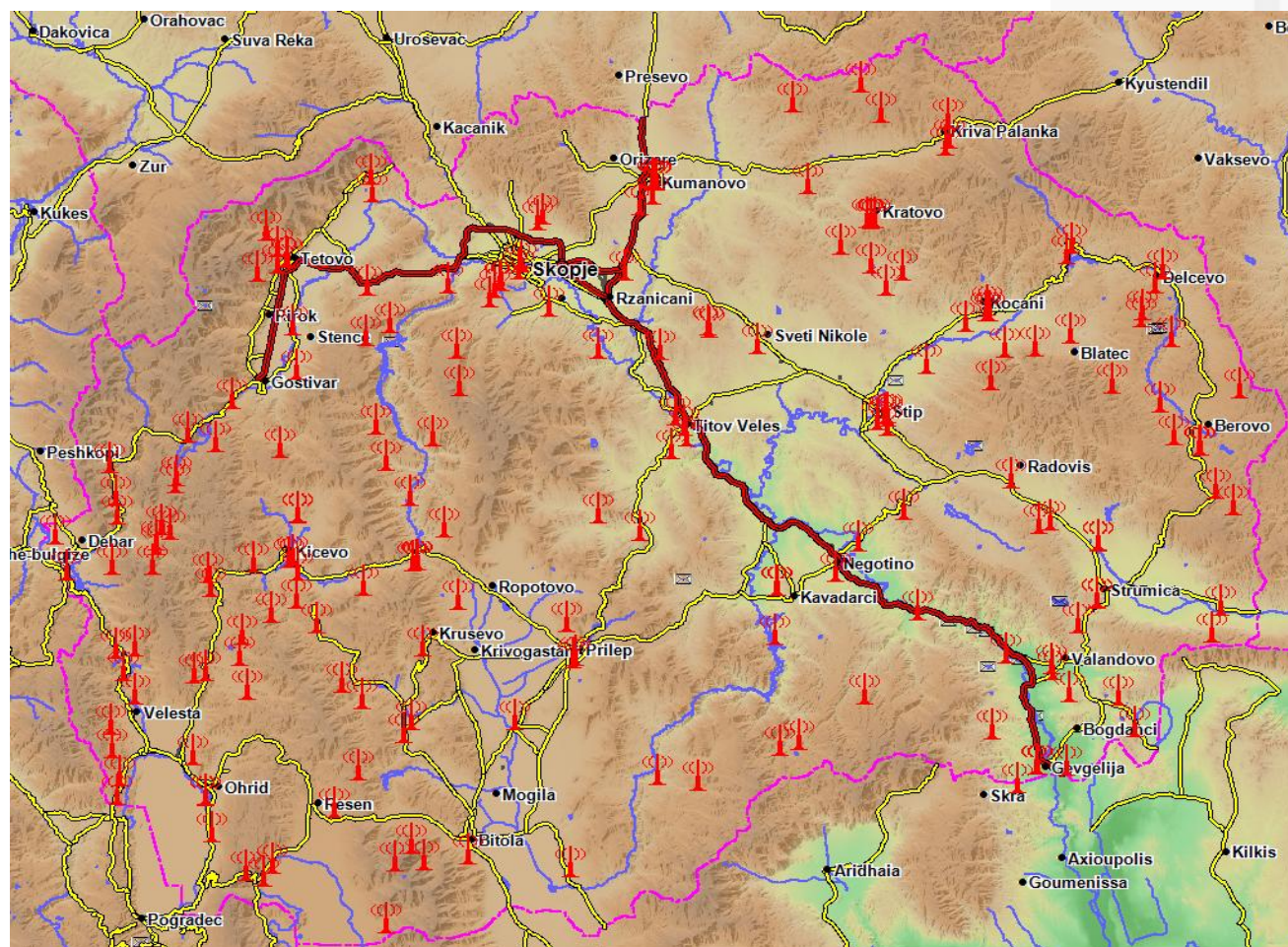
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ASO Goals

- Full digital broadcast of terrestrial television program services in the Republic of Macedonia on 1 June 2013
- All existing broadcasters at national, regional and local level to move from analog to digital broadcast of their television programming services and
- 790-862 MHz frequency band from 1 December 2013 to begin to be used for providing mobile communications services of the Fourth Generation

Analogue TV channels

513 analogue frequencies



Terrestrial Broadcasters

- National level
 - ☐ 3 programs of Public broadcaster (more than half of the assigned frequencies)
 - ☐ 4 programs of commercial broadcasters
- Regional level
 - ☐ 10 programs of commercial broadcasters in the capitol Skopje
- Local level
 - ☐ 46 programs of commercial broadcasters

GE06

Allotment zone	UHF-DVB-T											
	1	2	3	4	5	6	7	8	9	10	11	12
D1 CRN VRV	23	26	28	30	40	47	52	53	61	65		
D2 STRACIN	21	37	41	42	46	50	56	60	64	67		
D3 TURTEL	22	24	32	38	39	43	44	55	58	62	66	
D4 BOSKIJA	21	34	37	41	49	50	54	57	64	68	69	
D5 PELISTER	22	25	29	33	37	38	42	46	58	60	63	67
D6 MALI VLAJ	26	32	36	39	41	44	50	52	61	65	66	69
D7 STOGOVO	21	28	31	35	37	43	47	51	57	59		
D8 POPOVA SAPKA	24	27	34	36	38	41	50	55	56	64	66	
D9 GRAD SKOPJE	25	29	33	37	45	48	51	57	68			

Frequency Plan for DVB-T

	DIGI PLUS MULTIMEDIJA			PUBLIC ENTERPRISE MACEDONIAN BROADCASTING		ONE	
ALLOTMENT ZONE	MUX 1	MUX 2	MUX 3	MUX 4	MUX 5	MUX 6	MUX 7
D1 CRN VRV/SKOPJE	26	28	30	23	52	33	45
D1 CRN VRV/VELES						40	47
D2 STRACIN	21	41	46	37	42	50	56
D3 TURTEL	22	32	43	24	39	38	55
D4 BOSKIJA	21	37	49	34	41	57	54
D5 PELISTER	25	29	33	22	37	38	42
D6 VLAJ	32	39	41	26	36	44	50
D7 STOGOVO	51	57	59	28	43	35	31
D8 POPOVA SAPKA	24	34	38	27	36	41	50
	Pay TV			Free to air		Free to air	
	In 2009 these MUX were awarded through tender procedure to Slovenia Telekom			In the beginning of 2012 these MUX were awarded to Public Enterprise according to the Law (for public TV services)		In November 2012 these MUX were awarded through tender procedure (for commercial TV services)	

ASO

Analogue switch off at the same time throughout the state: Equal treatment of all viewers, most of the population is covered by a digital signal (simulcast period), speed of process (in one day)

01.06.2013 at 00:00

Key factors for success:

- Participation of all stakeholders in the process : Governmental institutions (Ministry of Information Society and Administration, Agency for electronic communications, Broadcasting Council), Broadcasters, Operators ...
- Coordinator of the process
- Funds to support the process
- Timely and appropriate information to viewers (Promotion campaign)
- Subsidies for equipment for the reception

Was ASO successful?

Number of terrestrial TV broadcasters before ASO:

- 3 national TV channels of Public broadcaster
- 4 national TV channels of commercial broadcasters
- 10 regional TV channels of commercial broadcasters
- 46 local TV channels of commercial broadcasters

Number of terrestrial TV broadcasters after ASO:

- 3 national TV channels of Public broadcaster
 - 5 national TV channels of commercial broadcasters
 - 26 regional TV channels of commercial broadcasters
- 27 local + 2 regional TV channels change platform (cable TV)
- 1 regional become national

⇒ **No closed broadcasters**

Future Challenges

One operator for commercial broadcasters (potential monopoly)

Measures taken:

- Broadcasting market definition and analysis (ongoing)
- Designation of SMP operator and appropriate obligations
- Price regulation

Pending issues:

Assignment of the last MUX

DVB-T2 migration

⇒ Development of the strategy document (by the Media Agency)

