

**Regional Workshop on Spectrum Management and Transition
to Digital Terrestrial Television Broadcasting for Europe and
CIS, Budapest, Hungary, 5-7 May 2015**

**REGULATORY AND TECHNICAL ASPECTS OF
DIGITAL TERRESTRIAL TV BROADCASTING
NETWORK PLANNING AND COORDINATION OF
FREQUENCY ASSIGNMENTS AND PROSPECTS
FOR DIGITAL DIVIDEND ALLOCATION IN
KYRGYZ REPUBLIC.**

M. Dzhylyshbaev

State communication agency under the Government of Kyrgyz
Republic

Content

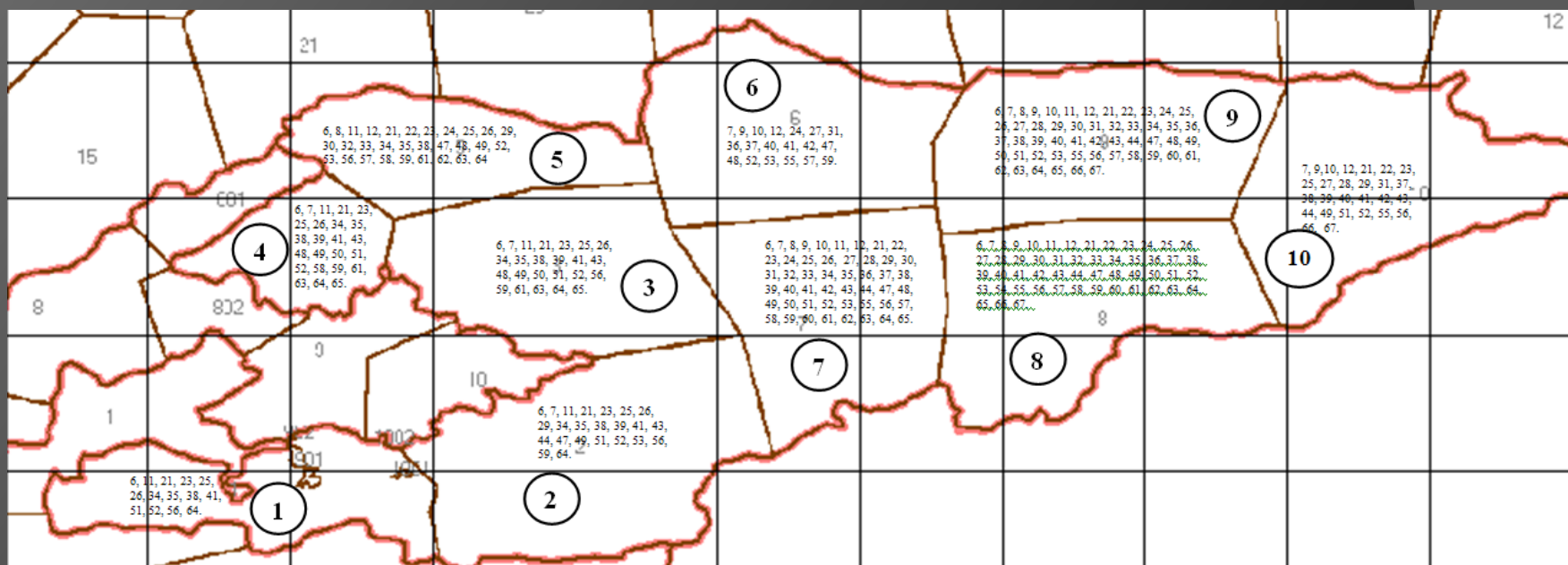
- Digital plan (GE06) for Kyrgyz Republic
- Digital terrestrial television transition
- Digital dividend «1» 790-862 MHz
- Digital dividend «2» 694-790 MHz

Digital plan (GE06)

The Kyrgyz Republic has been divided into **10 zones**

In each zone has at least **15 multiplexes**.

Kyrgyz Republic has received enough frequency resources for digital broadcasting, except one region, located at the junction of 3 countries (Kyrgyzstan, Tajikistan and Uzbekistan), which has **14 multiplexes**.



Digital terrestrial television transition

National operator got **4 multiplexes** without tender for the construction of a network of digital terrestrial broadcasting on the whole territory of Kyrgyz Republic.

In this case, there is a condition of using **1 multiplex** to broadcast programs of a **social package**.

The plan for digital TV network construction was developed in Kyrgyz Republic that allow **to cover 93.24%** of the territory of the Kyrgyz Republic by digital TV in **4 steps** .

For today according to 1 step - 9 transmitters for digital TV in the **DVB-T2** standard are realized and **cover 58.9%** of the territory of Kyrgyz Republic.

Step 2 is planned to May 2015, and according to second step - 12 transmitters more will be realized. Preliminary analysis shows increasing of the area of coverage of digital TV for **19.5% more**.

Step 3 will increase the area of coverage of digital TV for **7.79% more**.

Step 4 will increase the area of coverage of digital TV for **6,98% more**.

The result of the analysis to identify TV transmitters and low-power analog television repeaters in the border areas that need to be turned off on 17.06.2015:

1 category (TV transmitters need to be turned off until 17.06.2015):

Low-power analog television repeater	TV transmitters of government organization	TV transmitters of private organization
104	73	33

2 category (TV transmitters need to be turned off after 17.06.2015)

Low-power analog television repeater	TV transmitters of government organization	TV transmitters of private organization
271	113	31

- Existing private TV organizations got **2 multiplexes** to broadcast their television programs.
- For **Educational Television - 1 multiplex** reserved for the implementation of the educational TV channel in Kyrgyz Republic

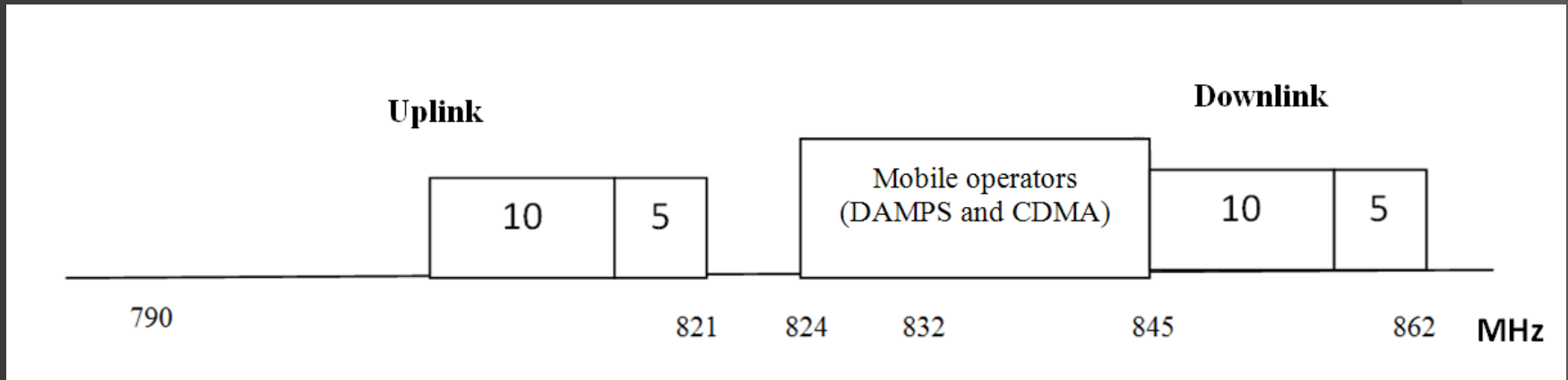
Digital dividend «1» 790-862 MHz

№ Zones	Total number of multiplex	Digital dividend «1» 790-862 MHz		
		Channel	Number of multiplexes	The remaining number of multiplexes after the digital dividend «1»
1	14	64	1	13
2	23	64	1	22
3	24	61, 63, 64, 65	4	20
4	24	61, 63, 64, 65	4	20
5	30	61, 62, 63, 64	4	26
6	19	- - -	0	19
7	49	61, 62, 63, 64, 65.	5	44
8	52	61, 62, 63, 64, 65, 66, 67	7	45
9	51	61, 62, 63, 64, 65, 66, 67	7	44
10	27	66, 67	2	25

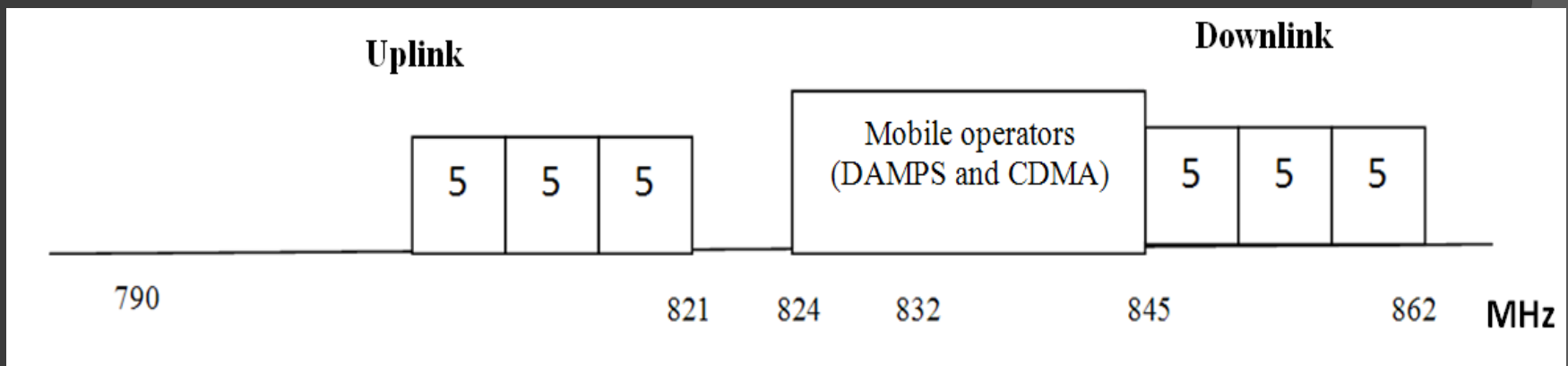
Digital dividend 790-862 MHz - 9 multiplexes (61 to 69 TV channels).
The Kyrgyz Republic will lose 1-7 multiplexes.

Digital dividend «1» 790-862 MHz

1st option



2nd option



Digital dividend «2» 694-790 MHz

№ Zones	Total number of multiplex	Digital dividend «2» 694-790 MHz		
		Channel	Channel	Channel
1	14	51, 52, 56	51, 52, 56	51, 52, 56
2	23	49, 51, 52, 53, 56, 59	49, 51, 52, 53, 56, 59	49, 51, 52, 53, 56, 59
3	24	49, 50, 51, 52, 56, 59	49, 50, 51, 52, 56, 59	49, 50, 51, 52, 56, 59
4	24	49, 50, 51, 52, 58, 59	49, 50, 51, 52, 58, 59	49, 50, 51, 52, 58, 59
5	30	49, 52, 53, 56, 57, 58, 59	49, 52, 53, 56, 57, 58, 59	49, 52, 53, 56, 57, 58, 59
6	19	52, 53, 55, 57, 59	52, 53, 55, 57, 59	52, 53, 55, 57, 59
7	49	49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60	49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60	49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60
8	52	49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60	49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60	49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60
9	51	49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60	49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60	49, 50, 51, 52, 53, 55, 56, 57, 58, 59, 60
10	27	49, 51, 52, 55, 56	49, 51, 52, 55, 56	49, 51, 52, 55, 56

Digital dividend 790-862 MHz - 13 multiplexes (49 to 60 TV channels).
The Kyrgyz Republic will lose 3-12 multiplexes.

