

# MINUTES

## 1. Opening of the Meeting

Mr Wiktor Segal, Head of the Frequency Resources Management Department opened the meeting, welcomed the participants, gave some organisation information and wished everyone a successful meeting. Mr Dmytro Protsenko and Mr Aleksei Ivashkin thanked for invitation and hosting. All the participants introduced themselves. List of Participants is given in Annex 1.

## 2. Adoption of the Agenda

The Agenda was adopted and is included in Annex 2.

## 3. Broadcasting (BLR – UKR – POL)

### • *Current Situation in each country regarding DVB-T implementation*

Presentation of the DVB-T implementation in each country:

**Republic of Belarus:** The State Program for the Digital television introduction and the program of accelerated introduction are currently available in the Republic of Belarus.

Nowadays it is planned to cover about 70 % of the territory of the Republic of Belarus in 2010 and 100% in 2012.

At present 17 transmitters which operate in the MPEG-4 compression standard are in use in the Republic of Belarus.

The public package consisting of 8 TV and 1 radio program.

**Ukraine:** On 26 November 2008 the Cabinet of Ministers of Ukraine approved the State program of implementation of digital broadcasting in Ukraine, which envisages creation of 81 DVB-T areas, using MPEG-4 standard, until 2015.

On 4 November 2009 the Cabinet of Ministers of Ukraine established the Inter-ministerial Council on coordination of realization of actions for implementation of digital television and sound broadcasting, chaired by a First Prime Minister of Ukraine.

Plan for phased transition of television broadcasting to digital broadcasting standards (approved in November 2007) defines 4 phases, in accordance with which the planning of 4 DVB-T layers is currently carried out in Ukraine.

For the time being TV channels numbers in allotment areas are determined for creation of first layer covering all territory of Ukraine.

Test operation of synchronous DVB-T networks is being carried out in Odesa, Kyiv and Zhytomyr regions.

**Poland:** Inter-ministerial Team for Digital Broadcasting work, concerning new Polish strategy of terrestrial TV digitalization, comes to an end. The project of strategy assumes that regular DVB-T emission will start this autumn.

For transition period in Poland there will be available two national multiplexes. MPEG-4 (AVC/H.264) standard for vision compression was chosen for DVB-T in Poland. Such choice will enable the first multiplex to contain all 7 main programme services which are now available in analogue terrestrial TV system. Frequencies from first multiplex network will be assigned for current “analogue” broadcasters (who distribute above mentioned 7 programme services) without contest as a conversion from “analogue” to “digital” nature of license. Frequencies from the second multiplex network will be given after public contest for distribution of new content.

According to the project of strategy the start of regular DVB-T emissions is planed at the end of October 2009. The full national coverage of DVB-T signals is planned on half of 2011. Complete analogue switch off in Poland is planned till the end of July 2013. Project of strategy assumes that the spectrum band 790-862MHz will be allocated to mobile broadband.

The beauty contest documentation for frequency license for second multiplex is the subject of arrangements between President of UKE and National Broadcasting Council.

President of UKE have granted frequency license to the Public Service Broadcaster (Polish Television) for its own multiplex which will be full available after analogue switch off.

In June 2009 the President of UKE issued frequency license to the INFO-TV-FM for DVB-H multiplex. This operator is looking for a corporation among mobile network operators to sell its service in the wholesale manner. Until the end of 2015 the DVB-H network will be limited to 31 biggest Polish cities. After 2015 it is to be extended to nationwide layer.

On 30 September 2009 the President of UKE has granted general exclusive frequency license for the terrestrial broadcasting digital TV programme services in the first DVB-T multiplex (MUX1) to the entities which broadcast almost all „analogue” TV programme services.

In spite of granting appropriate frequency license the start of digitalization of terrestrial TV is still late because co-owners of MUX1 are not able to agree on choice of MUX1 technical operator (network operator). President of the UKE and Chairman of National Broadcasting Council are taking action to solve this problem. They will probably separate public broadcaster from commercial and move commercial broadcasters to other multiplex.

• ***UHF Band***

**Modification of the GE06 Plan. Bilateral/trilateral coordination DVB-T assignments and allotments**

The technical experts of Belarus, Poland and Ukraine carried out the bilateral meetings on coordination of DVB-T assignments and allotments. Mutually agreed results of the coordination are presented in the annexes to these Minutes according to the list below:

**Administrations**

BLR – POL: Annex 3, Annex 4, Annex 5

UKR – POL: Annex 3, Annex 6

BLR – UKR: Annex 4, Annex 7

Since after the notification to the ITU of agreed modified allotments of Poland the Ge-06 Plan will not reflect the corresponding Remarks R1 and R2, during the conversion of these allotments into assignments the Polish Administration committed to carry out an additional coordination with Belarus and Ukraine in accordance with Remarks R1 and R2 specified in Annex 3.

In the case of sending a coordination request for SFN which is not a conversion of previously coordinated allotment, the Polish and Ukrainian Parties agreed to send the allotment for coordination corresponding to this SFN, together with the coordination request for SFN. In future, in the process of mutual coordination both Parties agreed to protect only test points of the allotment corresponding to SFN.

**Discussion about possibility of usage of TV channels: 45, 46, 54, 55**

The Ukrainian delegation informed that in accordance with Plan of Frequency Use of Ukraine the frequency bands, corresponding to TV channels 45, 46, 54 and 55, are used by special frequency users. The possibility of using these frequency bands for broadcasting service can be provided only after agreement of military authorities of Ukraine. According to previous bilateral agreements between Belarus and Ukraine (Kyiv, 06-10 June 2005) and between Poland and Ukraine (Warsaw, 20-21 June 2005), using of the above TV channels for digital broadcasting requires the carrying out an addition coordination with Ukraine before the taking into operation of the corresponding broadcasting assignment.

Polish military forces do not use these channels for their purposes.

The military forces of Belarus uses the 45 channel very intensively. The separation distance from the Belarus border to the nearest TV station in the neighbouring countries is 420 km. Channel 46 is free for the broadcasting service while 54 and 55 can be used after additional coordination with Belarus.

### **Digital dividend. Discussion about planned analogue switch-off**

The State program of implementation of digital broadcasting in Ukraine stipulates that analogue switch-off shall be ensured until the end of 2015. For the time being there is no decision for digital dividend in Ukraine.

Representatives of Belarus declared that the analogue TV switch off is planned till 17 June 2015 according to GE06 Agreement.

In Poland analogue switch off is planned till the end of July 2013.

- ***VHF Band***

#### **DVB-T in the band III**

All Parties noticed that future use of this band has not been decided yet. Poland is going to announce public consultations about future usage band III.

#### **T-DAB. Bilateral/trilateral coordination T-DAB assignments**

T-DAB assignments which were coordinated between Belarus and Poland during the meeting are presented in Annex 5.

#### **TVA in the band II**

Ukraine uses frequencies from the band II for analogue transmissions intensively. The switch-off of analogue TV in this band is planned after 2015.

Belarus also utilizes mentioned band for analogue TV transmissions and now it is hard to say when switch-off will be possible.

Poland has no TV transmitters in this band.

## **4. Land Mobile Service**

- ***Future utilization of the bands GSM900 and GSM1800***

For the time being there are no plans to use of GSM-900 and GSM-1800 bands by technologies different from GSM in Ukraine. No technologies different from GSM-900 and GSM-1800 for these bands included in Ukrainian Plan of Frequency Use. In order to introduce wideband technologies in mentioned bands in Ukraine redistribution of frequencies between operators is required because of high level of fragmentation, especially in GSM-900 band.

In Poland in the P-GSM band there are three “old” operators who use GSM technology only. Their licenses do not allow to use other than GSM technology.

In the E-GSM band there are two “new” operators using the band on the technology neutral basis, the first using GSM technology, the other UMTS technology.

In the E-GSM the band is divided into 5MHz blocks (each operator has one 5 MHz block) while in the P-GSM band there is an old division with blocks of different width. Poland plans a refarming of the P-GSM band in order to divide it into 5 MHz blocks to enable operators to use other technologies. There will be also necessary to change the general exclusive frequency licenses.

In the 1800 band there are the same three “old” operators and two “new” operators (other than in E-GSM band). All of them use GSM technology but the “new” operators can use the band on the technology neutral basis and have continuous 10 MHz wide frequency blocks. For the “old” operators there will be necessary to refarm their part of the band and reissue licenses to allow technology neutral usage of their band.

• ***Coordination procedure of the frequency bands 452.525-457.000/462.525-467.000 MHz. Possibility of the ECC Report utilization***

The Ukrainian party prepared the proposal of Arrangement concerning frequency co-ordination in the band 450.000 – 460.000/460.000 – 470.000 MHz between the Frequency Management Authorities of Poland and Ukraine based on similar existing Arrangement between Administrations of Hungary, Slovak Republic and Ukraine. After discussion and making necessary changes the final shape of the Arrangement was developed. This Arrangement was signed and included in Annex 8.

• ***Preferential division of frequencies in the bands 876-880/921-925 MHz (GSM-R)***

Polish representatives made a proposal for a preferential division of this band. The Ukrainian party discussed this issue and stated that such proposal needs further consideration due to unknown standpoint of special users of the band in Ukraine. The Ukrainian party will give a response in this matter in three months. The table with Polish proposal of frequency division is included in Annex 9.

• ***Preferential division of frequencies in the bands 880-890/925-935 MHz (E-GSM)***

Ukrainian representatives made a proposal for a preferential division of this band taking into account protection of Ukrainian military radioelectronic facilities. After a discussion the final division was developed and agreed. The division into preferential frequencies is included in Annex 10.

• ***Modification of the bilateral agreement on the preferential division of frequencies in the bands 1710-1730/1805-1825 MHz designated for the GSM1800 system.***

Polish representatives made a proposal for the modification of preferential division in this band. The Ukrainian party declined such proposal. In Ukraine GSM1800 operators obtain permissions for usage of cellular base station on all channels from licenses with specification of number of channels which may be used on the base station. Due to the large number of base stations in POL-UKR border area with issued permissions Ukrainian party would not like to revise existing preferential division but may be willing to discuss this matter again as soon as the licenses expire or other possibilities would appear. The Polish proposal is included in Annex 11 for future consideration.

• ***Coordination issues resulted from the IMT Advanced allocation in the 790-862 MHz band***

The Administration of Belarus informed that Belarus is not planning to use any TV transmissions in the channels above 60 after analogue TV switch-off. Moreover Belarus considers to introduce mobile services in this band in the TDD technology (only in sub-band 790-830 MHz). It is important that this band is intensively used in Belarus for military purposes. The date of releasing this band by military users for civil application is hard to determine at the moment.

Poland is going to designate this band for wideband data transmission in accordance with the EU plans. However there are military applications in this band at the moment (till 2015/2017), terrestrial digital TV (till half of 2013) and a commercial mobile telecommunication operator using CDMA2000 and UMTS technologies (till 2018).

Similar applications (services) operate in Ukraine. It is used for military purposes, broadcasting services and CDMA technology. There are no plans for changing usage of this band in the future.

Detailed information about usage of the 790 – 862 MHz band:

BLR:

Channel: 61 – DVB-T  
Channel: 62, 63 – ARNS  
Channel: 64, 65 – not used  
Channel: 66, 67, 68, 69 – ARNS

UKR:

Channel: 61, 62, 63 – ARNS  
Channel: 64 – analogue TV, DVB-T  
Channel: 65, 66, 67 – CDMA, ARNS  
Channel: 68, 69 – ARNS

POL:

Channel: 61, 62, 63 – ARNS

Channel: 64 – DVB-T

Channel: 65 – CDMA2000, UMTS

Channel: 66, 67, 68, 69 – ARNS


## **5. Any Other Business**

Poland and Belarus discussed technical criteria for coordination of the mobile applications in the band 2.50 – 2.69 GHz. Belarus proposed an approach based on the CEPT Report No 19. Further considerations will be continued by correspondence.

## **6. Closure of the meeting**

Mr Wiktor Sega thanked all the participants for their fruitful cooperation and constructive work, wished them Happy New Year, Merry Christmas and safe journey home and closed the meeting. Heads of delegations thanked Polish Administration for hospitality and good organisation.

**For Belarus**

  
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Sergei DUDAREV

**For Ukraine**

  
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Dmytro PROTSENKO

**For Poland**

  
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Wiktor SEGÅ

**Allocation of preferential radio channels in the frequency bands  
880 - 890 / 925 - 935 MHz  
(E-GSM) between Telecommunication Administrations of Poland  
and Ukraine**

	Channel number	Frequency		Preferential for
		RX	TX	
		880,000	925,000	
1	975	880,2	925,2	UKR
2	976	880,4	925,4	UKR
3	977	880,6	925,6	UKR
4	978	880,8	925,8	UKR
5	979	881,0	926,0	UKR
6	980	881,2	926,2	UKR
7	981	881,4	926,4	UKR
8	982	881,6	926,6	UKR
9	983	881,8	926,8	UKR
10	984	882,0	927,0	UKR
11	985	882,2	927,2	UKR
12	986	882,4	927,4	POL
13	987	882,6	927,6	POL
14	988	882,8	927,8	POL
15	989	883,0	928,0	POL
16	990	883,2	928,2	POL
17	991	883,4	928,4	POL
18	992	883,6	928,6	POL
19	993	883,8	928,8	POL
20	994	884,0	929,0	POL
21	995	884,2	929,2	UKR
22	996	884,4	929,4	UKR
23	997	884,6	929,6	UKR
24	998	884,8	929,8	UKR
25	999	885,0	930,0	UKR
26	1000	885,2	930,2	POL
27	1001	885,4	930,4	UKR
28	1002	885,6	930,6	UKR
29	1003	885,8	930,8	UKR
30	1004	886,0	931,0	UKR
31	1005	886,2	931,2	UKR
32	1006	886,4	931,4	UKR
33	1007	886,6	931,6	UKR
34	1008	886,8	931,8	UKR
35	1009	887,0	932,0	UKR
36	1010	887,2	932,2	POL
37	1011	887,4	932,4	POL
38	1012	887,6	932,6	POL
39	1013	887,8	932,8	POL



40	1014	888,0	933,0	POL
41	1015	888,2	933,2	POL
42	1016	888,4	933,4	POL
43	1017	888,6	933,6	POL
44	1018	888,8	933,8	POL
45	1019	889,0	934,0	POL
46	1020	889,2	934,2	POL
47	1021	889,4	934,4	POL
48	1022	889,6	934,6	POL
49	1023	889,8	934,8	POL
50	0	890,0	935,0	POL
			<b>UKR</b>	<b>25</b>
			<b>POL</b>	<b>25</b>