

COORDINATION PRINCIPLES AND CHANNEL ARRANGEMENT

**concerning the use of the preferential and non-preferential channels
of GSM-R system in the border areas
within the frequency bands 876-880 MHz / 921-925 MHz**

between

the State Supervisory Department for Telecommunications of the Republic of Belarus,
the Electronic Communications Office of the Republic of Latvia and
the Communications Regulatory Authority of the Republic of Lithuania

Vilnius
23rd September 2005

1. Introduction

- 1.1. According to the ITU Radio Regulations the representatives of the State Supervisory Department for Telecommunications of the Republic of Belarus, the Electronic Communications Office of the Republic of Latvia and the Communications Regulatory Authority of the Republic of Lithuania (hereinafter referred to as Parties) have agreed the present Coordination principles and channel arrangement concerning the use of the preferential and non-preferential channels of GSM-R system in the border areas within the frequency bands 876-880 MHz / 921-925 MHz (hereinafter referred to as Coordination principles).
- 1.2. The Parties noted that in accordance with the CEPT ECC Decision (02)05 frequency band 876-880 MHz paired with 921-925 MHz will be used for GSM-R networks for railway purposes.

2. General

- 2.1. The coordination of the frequency assignments shall be performed under the provisions of these Coordination principles together with the provisions laid down in "Agreement 2003"ⁱ with the exception of the field strength calculation methodology contained therein.
- 2.2. ITU-R Recommendation P.1546 should be used for the field strength calculation.
- 2.3. The provisions of these Coordination principles take priority over the provisions of "Agreement 2003".
- 2.4. In the presence of harmful interference the claims shall be submitted in accordance with Appendix 10 of the Radio Regulations. The Parties shall take all possible measures in order to eliminate the harmful interference.
- 2.5. The Parties decided to divide the frequency band 876-880 MHz paired with 921-925 MHz into the three-lateral preferential frequencies in view of equal number of duplex channels for each Party, as described in the Annex 1.
- 2.6. Coordination principles shall be applied for the stations situated in the circular area of 30 km radius around the point of Belarusian-Latvian-Lithuanian borders junction.
- 2.7. The usage of channel No. 1 and channel No. 20 is subject to future coordination.

3. Frequencies

- 3.1. The Parties agreed to use in frequency band 876-880 MHz paired with 921-925 MHz a channelling plan, based on the 200 kHz grid, with central frequencies calculated as follows:

$$F_{ML} = 876.000 \text{ MHz} + (N \times 0.200 \text{ MHz}) \text{ for mobile stations and}$$

$$F_{FB} = 921.000 \text{ MHz} + (N \times 0.200 \text{ MHz}) \text{ for base stations,}$$

where channel number $N = 1, 2, \dots, 20$.

ⁱ Agreement between the Administrations of Austria, Belgium, the Czech Republic, Germany, France, Hungary, the Netherlands, Croatia, Italy, Liechtenstein, Lithuania, Luxembourg, Poland, Romania, the Slovak Republic, Slovenia and Switzerland on the coordination of frequencies between 29.7 MHz and 39.5 GHz for the fixed service and the land mobile service. Berlin, 28 November 2003

4. Technical provisions

- 4.1. Each Party may use its three-lateral preferential channels without prior coordination with the neighbouring country if the field strength value from the interfering station at a distance of 30 km from the border line inland of the neighbouring country at 10 m antenna height above the ground level does not exceed 26 dB μ V/m for 10% of the time and 50% of the locations.
- 4.2. Each Party may use its three-lateral non-preferential channels if at least one of the following statements is met:
 - 4.2.1. field strength value from the interfering station at the border line at 10 m antenna height above the ground level does not exceed 26 dB μ V/m for 10% of the time and 50% of the locations;
 - 4.2.2. channel usage conditions laid down in the two relevant bilateral agreements are met for two neighbouring countries at once. In that case bilateral channel arrangement as well as other provisions of the relevant bilateral agreements should be applied.

5. Revision of the Coordination principles

- 5.1. These Coordination principles may be revised at any time on the initiative of any Party subject to approval by the other Parties.
- 5.2. The Party may withdraw these Coordination principles notifying the other Parties on its intention at least one year before.

6. Language of the Coordination principles

- 6.1. These Coordination principles are agreed and executed in the English language in three copies – one copy for the each Party.

7. Entry into force

- 7.1. These Coordination principles shall enter into force at the first day of the month following the date of the signing.

On behalf of the
State Supervisory
Department for
Telecommunications
of the Republic of Belarus

On behalf of the
Electronic Communications
Office
of the Republic of Latvia

On behalf of the
Communications Regulatory
Authority
of the Republic of Lithuania

N	F _{ML} , MHz	F _{BS} , MHz	BLR	LVA	LTU
1.	876.200	921.200	C	C	C
2.	876.400	921.400			LTU
3.	876.600	921.600			LTU
4.	876.800	921.800			LTU
5.	877.000	922.000			LTU
6.	877.200	922.200	BLR		
7.	877.400	922.400	BLR		
8.	877.600	922.600		LVA	
9.	877.800	922.800		LVA	
10.	878.000	923.000		LVA	
11.	878.200	923.200		LVA	
12.	878.400	923.400		LVA	
13.	878.600	923.600		LVA	
14.	878.800	923.800			LTU
15.	879.000	924.000			LTU
16.	879.200	924.200	BLR		
17.	879.400	924.400	BLR		
18.	879.600	924.600	BLR		
19.	879.800	924.800	BLR		
20.	880.000	925.000	C	C	C
sum:			6	6	6