

## **ARRANGEMENT**

between

the State Supervisory Department for Telecommunications of the Republic of Belarus

and the Electronic Communications Office of the Republic of Latvia

on shared use of the frequency band

453.000-457.475/ 463.000-467.475 MHz

by CDMA Public Land Mobile Service systems in the border area

Vilnius, 24 October 2008

## 1. Introduction

The State Supervisory Department for Telecommunications of the Republic of Belarus and the Electronic Communications Office of the Republic of Latvia (hereinafter referred to as Parties) in accordance with Article 6 of ITU Radio Regulations have concluded this Arrangement on implementing the code division principle for mutually advantageous shared use of the frequency band 453.00 -457.475 MHz / 463.00 -467.475 MHz in the area of the international border between the Republic of Belarus and the Republic of Latvia by Public Land Mobile Service systems using CDMA technology.

## 2. General

- 2.1. The Arrangement allocates different sets of codes to each party's base stations with the intention of interference-free frequency sharing in many cases eliminating the need for frequency coordination when deploying new base stations on either side of the border, at the same time clarifying the frequency coordination criteria and procedure in cases when frequency coordination does apply.
- 2.2. The Arrangement is based on the provisions of the latest version of ECC Report 108 „Border Code Coordination between CDMA2000 systems in 450 MHz band” utilising the principle of preferential and non-preferential codes, also known as offset indices, and does not use the principle of preferential and non-preferential frequencies.
- 2.3. The Arrangement does not apply to the inside of a circular area 30 km in radius centered on the junction of the Belarusian, Latvian and Lithuanian state borders.
- 2.4. The Arrangement extends solely to CDMA2000 systems with coinciding (aligned) channel central frequencies. In other cases guidelines set in ERC Recommendation T/R 25-08 “Planning Criteria and Coordination of Frequencies in the Land Mobile Service in the range 29.7-921 MHz” should be followed.
- 2.5. The Parties agree that the principal CDMA channel parameters are derived from the 3GPP Specification “C.S0010-A, Recommended Minimum Performance Standards for cdma2000 Spread Spectrum Base Stations”, channel width is 1.25 MHz and preferable channel numbers are 160, 210 and 260. Central frequencies of preferable channels are given in the Annex 1.

### **3. The code groups**

Each base station shall use a unique time offset of the pilot pseudonoise (PN) sequence to identify a forward CDMA channel. This time offset is identified by offset indices or codes (0 through 511 inclusive). As stipulated in ECC Report 108 „Border Code Coordination between CDMA2000 systems in 450 MHz band”, the codes are divided into six code groups and are distributed equally between Belarus and Latvia ensuring each country three preferential sets of code indices (see Annex 2).

### **4. Frequency usage**

- 4.1. Each Party may use CDMA channels with preferential codes allocated to that Party without coordination with the other Party if the field strength value of its base station carrier does not exceed 26.5 dB $\mu$ V/m measured in a bandwidth of 25 kHz or 43.5 dB $\mu$ V/m measured in a bandwidth of 1.25 MHz at a height of 3 m above ground level in 50% of time at the border line between the two countries.
- 4.2. Each Party may use CDMA channels with non-preferential codes without coordination with the other Party if the field strength value of the base station carrier does not exceed 23 dB $\mu$ V/m measured in a bandwidth of 25 kHz or 40 dB $\mu$ V/m measured in a bandwidth of 1.25 MHz at a height of 3 m above ground level in 50% of time at the border line between the two countries.
- 4.3. The propagation model to be used to determine the interference field-strength should be the method for point-to-area predictions for Terrestrial Services taken from the latest version of the relevant ITU-R Recommendation.
- 4.4. If the field strength value of a base station carrier exceeds the level stated in clause 4.1. and 4.2., the frequency assignment shall be coordinated with other Party.
- 4.5. The period of coordination shall not exceed 60 days from the date of the receipt of the request and 15 days after the reminder. If no reply is received after 75 days from the date of the receipt of the request, then the frequency assignment shall be considered as coordinated.
- 4.6. Interference claims shall be submitted in accordance with Appendix 10 of ITU Radio Regulations. The Parties shall take all possible measures in order to eliminate the interference.

## **5. Revision of the Arrangement**

5.1. The Arrangement may be revised at any time on the initiative of any Party with the consent of other Party.

5.2. The Arrangement may be cancelled by a mutual decision of both Parties on terms and conditions adopted by these Parties.

## **6. Coming into force**

6.1. The Arrangement comes into force on the 1<sup>st</sup> December 2008.

6.2. The Arrangement is drawn up in English on six pages in two copies.

Vilnius, 24 October 2008

For the State Supervisory Department for  
Telecommunications of the Republic of  
Belarus:

For the Electronic Communications Office  
of the Republic of Latvia:

**Annex 1**

Central frequencies of preferable channels according to the 3GPP Specification “C.S0010-A, Recommended Minimum Performance Standards for cdma2000 Spread Spectrum Base Stations”

	preferable CDMA channel numbers		
	160	210	260
Uplink, MHz	453.9750	455.2250	456.4750
Downlink, MHz	463.9750	465.2250	466.4750

**Annex 2**

Distribution of preferential sets of code groups between Belarus and Latvia

<b>Set</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>
Code indices	2...83	88...168	173...253	258...338	343...423	428...509
Set preferential to	LVA	LVA	BLR	BLR	LVA	BLR