## AGREEMENT

between the Telecommunications Administrations of Lithuania and Poland on the use of the frequency bands 1900-1980 MHz, 2010-2025 MHz and 2110-2170 MHz for stations of UMTS system of the land mobile service in the border areas

#### Introduction

According to Article 6 of the Radio Regulations the representatives of the Telecommunications Administrations of Lithuania and Poland (hereinafter referred to as Parties) have agreed the present Agreement for radio electronic facilities of UMTS system in the land mobile service in the border areas in the 1900-1980 MHz, 2010-2025 MHz and 2110-2170 MHz frequency.

In order to eliminate the possible disagreements at the coordination of the frequency assignments (codes) to stations in the land mobile service the Parties will be guided by the CEPT ERC Recommendation (01)01, and CEPT ECC Decision (06)01.

This Agreement is based on the concept of the preferential and non-preferential code groups.

## 1. Operational frequencies

The frequency band 1920-1980 MHz has been paired with the 2110-2170 MHz band to be used for FDD operation in which the lower band shall be used for transmissions of mobile stations and in the upper band for the transmissions of the base stations.

The 1900-1920 MHz and 2010-2025 MHz frequency bands shall be used for TDD mode.

## 2. Conditions for the use of the frequency bands

- 2.1. The code groups allocated as preferential between the Parties within frequency bands 1900-1980 MHz, 2010-2025 MHz and 2110-2170 MHz are listed in the Annex.
- 2.2. Coordination between the UMTS FDD systems in border areas is based on the following concept:
- 2.2.1. Each Party may use without coordination with another Party the UMTS FDD channels if one of the below given conditions have been fulfilled:
  - if the preferential codes with the aligned centre frequencies are used;
  - if the UMTS centre frequencies are not aligned;
  - if the systems other than IMT-2000/UMTS<sup>1</sup> are used.

The predicted average field strength value of each carrier produced by a base station shall not exceed  $37~dB\mu V/m/5~MHz$  at 3 m antenna height above the ground level at a distance of 6 km inland the territory of a neighbouring country and 65  $dB\mu V/m/5~MHz$  at 3 m antenna height above the ground level at the border line and in the territory of a neighbouring country.

- 2.2.2. Each Party may use without coordination with another Party the UMTS FDD channels with the use of non-preferential codes with the aligned centre frequencies if the predicted average field strength value of each carrier produced by a base station does not exceed 37 dB $\mu$ V/m/5 MHz at 3 m antenna height above the ground level at the border line.
- 2.3. Coordination between the UMTS TDD systems in border areas is based on the following concept:
- 2.3.1. Each Party may use without coordination with another Party the UMTS TDD channels if one of the below given conditions have been met:
  - if the preferential codes with the aligned centre frequencies are used;
  - if the UMTS centre frequencies are not aligned;

<sup>&</sup>lt;sup>1</sup> The systems other than IMT-2000 ones are implied to be wide band systems. The example is given for the frequency band about 5 MHz.

Also the predicted average field strength value of each carrier produced by a base station shall not exceed 37 dB $\mu$ V/m/5 MHz at 3 m antenna height above the ground level at the border line and in the territory of a neighbouring country.

- 2.3.2. Each Party may use without coordination with another Party the UMTS TDD channels with the use of non-preferential codes with the aligned centre frequencies if the predicted average field strength value of each carrier produced by a base station does not exceed 21 dBµV/m/5 MHz at 3 m antenna height above the ground level at the border line and in the territory of a neighbouring country.
- 2.4. The frequency assignments to the UMTS station shall be coordinated with another Party if a field strength produced by this station exceeds the levels stated in Items 2.2. and 2.3. The coordination procedure and also form and volume of the information submitted for coordination of a frequency assignment (code) should meet the HCM Agreement 2008.
- 2.5. The field strength values given in this Agreement shall be calculated for 10% of the time and 50% of locations. The Parties shall use the ITU-R Recommendation P.1546 "Method for point-to-area predictions for terrestrial services in the frequency range 30 MHz to 3000 MHz" to evaluate the necessity to carry out the coordination.
- 2.6. In the presence of interference, the Report of harmful interference shall be presented in accordance with Appendix 10 of the Radio Regulations. The Parties shall take all possible measures in order to eliminate the interference.

## 3. Revision and cancellation of the Agreement

- 3.1. The provisions of this Agreement take priority over the provisions of "HCM Agreement" and supersede the conflicting provisions of "Coordination principles and technical criteria for terrestrial UMTS systems at the border areas in the frequency bands 1900-1980 MHz, 2020-2025 and 2110-2170 MHz between the Telecommunications Administration of the Republic of Belarus, the Republic of Lithuania and the Republic of Poland" (Nida, 26 August 2004) related to the conditions for the use of frequencies by the Administrations of the Republic of Lithuania and the Republic of Poland.
- 3.2. This Agreement may be extended, supplemented or revised at any time as desired by one Party subject to the agreement of another Party.
- 3.3. This Agreement may be cancelled by mutual decision of both Parties or by a decision of one Party notifying another Party on its intention at least six months in Advance.

#### 4. Entry into force

- 4.1. The present Agreement enters into force at the first day of the month following the date of the signing.
- 4.2. This Agreement has been drawn up in two identical copies: one for each Party.

On behalf of the Telecommunications

Administration of the

Republic of Lithuania

Romualdas Leonavičius

On behalf of the Telecommunications

Administration of the Republic of Poland

Wiktor Sega

# Assignment<sup>1</sup> of preferential code groups between the Republic of Lithuania and the Republic of Poland

#### FDD case:

Set A	Set B	Set C	Set D	Set E	Set F
010	1120	2131	3242	4352	5363
LTU	LTU	LTU	POL	POL	POL

### 2. TDD case:

Set A	Set B	Set C	Set D	Set E	Set F
04	510	1115	1620	2126	2731
LTU	LTU	LTU	POL	POL	POL

# Explanation:

For the FDD mode the code groups from 0 to 31 inclusive are preferential for the Republic of Lithuania.

For the FDD mode the code groups from 32 to 63 inclusive are preferential for the Republic of Poland.

For the TDD mode the code groups from 0 to 15 inclusive are preferential for the Republic of Lithuania.

For the TDD mode the code groups from 16 to 31 inclusive are preferential for the Republic of Poland.

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