

**Technical criteria and principles concerning the use of the frequency bands
2500-2570/2620-2690 MHz for terrestrial MFCN systems agreed between the Office
of Electronic Communications of the Republic of Poland and the State Supervisory
Department for Telecommunications of the Ministry of Telecommunications and
Informatization of the Republic of Belarus**

Nida, 22th June 2012

Preamble

According to Article 6 of the Radio Regulations, the representatives of the Office of Electronic Communications of the Republic of Poland and the State Supervisory Department for Telecommunications of the Ministry of Telecommunications and Informatization of the Republic of Belarus (hereinafter referred to as Parties) have agreed the present Technical criteria and principles concerning the use of the paired frequency band 2500-2570/2620-2690 MHz by mobile/fixed communication network (MFCN) systems with the purpose of avoiding mutual interference and optimising the use of the above-stated frequency bands on a mutually coordinated basis.

1 Principles

- 1.1 These Technical criteria and principles are based on the concept of coordination threshold as described in ECC Recommendation (11)05 and the idea of symmetrical conditions for both Parties.
- 1.2 These Technical criteria and principles cover the coordination¹ between MFCN systems capable of providing electronic communication services in the frequency band 2500-2570/2620-2690 MHz.
- 1.3 The frequency arrangement for MFCN systems conforms to the FDD frequency arrangement and parameters of transmission for base and user stations in accordance with ECC/DEC(05)05.
- 1.4 TDD frequency arrangement for MFCN systems in the 2570-2620 MHz band is not covered by these Technical criteria and principles.
- 1.5 These Technical criteria and principles apply to stations of MFCN systems as indicated in item 1.2 and brought into use after the date mentioned in Article 6 of these Technical criteria and principles.

2 Use of frequencies

- 2.1 The Republic of Poland may use the frequency bands 2500-2570/2620-2690 MHz for LTE-systems without coordination with the Republic of Belarus when the following conditions are met:
 - the predicted mean field strength produced by the cell (all transmitters within the sector) does not exceed 65 dB(μ V/m)/5 MHz, 68 dB(μ V/m)/10 MHz, 69.8 dB(μ V/m)/15 MHz and 71 dB(μ V/m)/20 MHz at a height of 3 m above the ground at the borderline;
 - the predicted mean field strength produced by the cell (all transmitters within the sector) does not exceed 49 dB(μ V/m)/5 MHz, 52 dB(μ V/m)/10 MHz, 53.8 dB(μ V/m)/15 MHz and 55 dB(μ V/m)/20 MHz at a height of 3 m above the ground at the distance of 6 km inside the territory of the Republic of Belarus.

¹ The term «coordination» should be understood as bilateral coordination between Parties without involving ITU BR in this process. The document given under this bilateral coordination shall be considered by Parties as agreed under relevant RR procedure.

- 2.2 The Republic of Poland may use the PCI sets such as A (0...83), E (336...419) and F (420...503) at the distance of 6 km inside the territory of the Republic of Belarus in case of exceeding of the levels, stipulated in item 2.1, and all the rest of PCI's are available away from the border.
- 2.3 The Republic of Belarus may use the frequency bands 2500-2570/2620-2690 MHz for LTE-systems without coordination with the Republic of Poland when the following conditions are met:
- the predicted mean field strength produced by the cell (all transmitters within the sector) does not exceed 65 dB(μ V/m)/5 MHz, 68 dB(μ V/m)/10 MHz, 69.8 dB(μ V/m)/15 MHz and 71 dB(μ V/m)/20 MHz at a height of 3 m above the ground at the borderline;
 - the predicted mean field strength produced by the cell (all transmitters within the sector) does not exceed 49 dB(μ V/m)/5 MHz, 52 dB(μ V/m)/10 MHz, 53.8 dB(μ V/m)/15 MHz and 55 dB(μ V/m)/20 MHz at a height of 3 m above the ground at the distance of 6 km inside the territory of the Republic of Poland.
- 2.4 The Republic of Belarus may use the PCI sets such as B (84...167), C (168...251) and D (252...335) at the distance of 6 km inside the territory of the Republic of Poland in case of exceeding of the levels, stipulated in item 2.3, and all the rest of PCI's are available away from the border.
- 2.5 In general case of FDD systems the Republic of Poland and the Republic of Belarus may use the frequency bands 2500-2570/2620-2690 MHz without coordination if mean field strength produced by the cell does not exceed the values provided in the Table below.

Reference bandwidth	Field strength at 3 m height
5 MHz	65.0 dB μ V/m/5MHz @0km 37.0 dB μ V/m/5MHz @6km
10 MHz	68.0 dB μ V/m/10MHz @0km 40.0 dB μ V/m/10MHz @6km
15 MHz	69.8 dB μ V/m/15MHz @0km 41.8 dB μ V/m/15MHz @6km
20 MHz	71.0 dB μ V/m/20MHz @0km 43.0 dB μ V/m/20MHz @6km

3 General

- 3.1 A new frequency assignment exceeding the above-mentioned coordination threshold values shall be coordinated with the other Party.
- 3.2 The coordination procedure shall be performed in accordance with Article 4 of these Technical criteria and principles.
- 3.3 In the presence of interference produced by a station covered by this document, 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 as soon as possible.

- 3.4 The field strength specified in the interference report (see Item 3.3) shall be based on the median values of measurements of field strength performed at antenna height stipulated in Article 2 at least in two different points over a range of at least 100 m along the border.
- 3.5 The predicted field strength values in these Technical criteria and principles are calculated according to the ITU-R Recommendation P.1546-4 for 10% time and 50% locations.
- 3.6 The ITU-R Recommendation P.1546-4 "Method for point-to-area predictions for terrestrial services in the frequency range 30-3000 MHz" shall be used for calculations of the field strength value produced by terrestrial stations.

4 Coordination procedure

- 4.1 The Party wishing to initiate the use of a frequency assignment to the station covered by these Technical criteria and principles that does not correspond to the terms specified in Article 2 of this document shall send to the other Party a request to coordinate such frequency assignment. A request can be sent by mail, fax or e-mail. In case if a request is sent by e-mail the requesting Party shall send by fax a covering letter to the affected Party and to receive a confirmation of its receipt.
- 4.2 The affected Party shall provide a feedback in respect of the request to coordinate assignments within 60 days from the date of the request receipt. If no feedback was received, an urgent reminder shall be sent. Parties that failed to respond within 30 days from the date of an urgent reminder receipt shall be deemed agreeing if the Party, a consent of which is sought, did not ask for extra time needed to coordinate the request review.
- 4.3 In case of a refusal of the affected Party to satisfy the request for coordination the affected Party shall inform the requesting Party about its disagreement and provide appropriate information regarding its frequency assignments justified given disagreement. The requesting Party shall provide to the affected Party results of its calculations, or any new technical characteristics of the assignment.
- 4.4 If no response from the affected Party to the proposals provided by requesting Party in item 4.3 was received within 30 days from the date of proposals receipt, an urgent reminder shall be sent. Parties that failed to respond within 15 days from the date of receipt of an urgent reminder shall be deemed agreed to the provided proposals on coordination.
- 4.5 The Party objecting to the received request for coordination shall provide results of its calculations and a proposal for reasonable changing of the request that shall not only provide for adequate protection for its available and planned services, but to the maximal possible extent shall preserve an initial objective of the request for coordination.
- 4.6 In case of controversies originating from applying of these Technical criteria and principles Parties shall be governed by provisions and procedures of the Radio Regulations, as well as applicable International and bilateral Agreements.

5 Revision and cancellation

- 5.1 This document may be cancelled as desired by one of the Parties with a notice of at least one year. This does not affect the operation of stations already brought into use or coordinated under these Technical criteria and principles.
- 5.2 After such cancellation, Parties will exchange the list of stations already brought into use or coordinated under these Technical criteria and principles.
- 5.3 This document may be revised or cancelled without preliminary notice, if mutual understanding is reached between the Parties.
- 5.4 This document is subject to be revised in case one of the Parties decides to suspend the use of the frequency band 2500-2570/2620-2690 MHz in the border area by any service indicated in item 1.2.
- 5.5 In case the current procedures and frequency allocations of the Radio Regulations for the frequency band 2500-2570/2620-2690 MHz are changed these Technical criteria and principles shall be confirmed or revised.
- 5.6 In case the study results on the usage of the frequency band 2500-2570/2620-2690 MHz by radio services indicated in item 1.2 are agreed by both Parties these Technical criteria and principles can be revised taking into account these results.

6 Coming into force

This technical criteria and principles shall come into force on the date of signing.

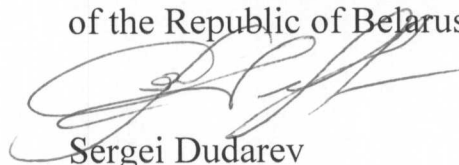
This document has been drawn up in two identical copies in English, one for the Republic of Poland and one for the Republic of Belarus.

For the Office of Electronic
Communications of the Republic of
Poland



Wiktor Segal

For State Supervisory Department for
Telecommunications of the Ministry of
Telecommunications and Informatization
of the Republic of Belarus



Sergei Dudarev