

## **ARRANGEMENT**

**between the Electronic Communications Office of the Republic of  
Latvia and the Telecommunication Administration of the Russian  
Federation concerning use of the frequency band 790-862 MHz  
by terrestrial systems**

**Moscow, 2019**

## Preamble

According to Article 6 of the ITU Radio Regulations, the Electronic Communications Office of the Republic of Latvia and the Telecommunication Administration of the Russian Federation (hereinafter referred to as the Parties) have concluded the present Arrangement concerning the use of the frequency band 790-862 MHz with the purpose of preventing harmful interference and optimising the use of the above-stated frequency band on a mutually coordinated basis.

This Arrangement does not abrogate the fulfillment of protection requirements for broadcasting service stipulated in GE-06 Regional Agreement until TV broadcasting is cancelled in the frequency band 790-862 MHz and the respective administration informs about it.

## 1. Principles

- 1.1. This Arrangement is based on the concept of coordination threshold and the idea of symmetrical conditions for both Parties.
- 1.2. This Arrangement covers the coordination<sup>1</sup> of land mobile service, fixed service and aeronautical radionavigation service.
- 1.3. The frequency arrangement for land mobile service conforms to the FDD<sup>2</sup> frequency arrangement and parameters of transmission for base stations and user equipment are in accordance with ECC/DEC(09)03.
- 1.4. This Arrangement applies to stations of the services listed in item 1.2 and brought into use after the date of signing of this Arrangement.
- 1.5. This Arrangement does not include the provisions concerning the use of the frequency band 821- 832 MHz.
- 1.6. In the context of this Arrangement the term "border" is understood as the international borderline between the countries of the Parties.
- 1.7. The frequency assignments to land mobile service, fixed service and aeronautical radionavigation service stations within the frequency band 790-862 MHz whose coordination has been successfully completed by the Parties shall keep their status after coming into force of this Arrangement.

## 2. Use of frequencies

- 2.1. The Republic of Latvia may use the frequency band 790-820 MHz without coordination with the Russian Federation if the following conditions are met:
  - ♦ if the predicted mean field strength produced by a base station during transmission does not exceed 51 dB( $\mu$ V/m)/1 MHz and 58 dB( $\mu$ V/m)/5 MHz at a height of 10 m above the ground at the border;
  - ♦ if base stations of the land mobile service are located at a distance from the border not less than 10 km;
  - ♦ the e.i.r.p. of the land mobile service base station shall not exceed 55 dBm in the frequency band 5 MHz in any direction towards the border of the Russian Federation. Service radius for base station should not cover areas closer than 2 km from the border;
  - ♦ antenna height of the land mobile service base station located at the distance less than 50 km from the border shall not exceed 70 m;

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<sup>1</sup> The term «coordination» should be understood as bilateral coordination between Parties without involving ITU Radiocommunication Bureau in this process. The Arrangement given under this bilateral coordination shall be considered by administrations as an agreement under relevant ITU Radio Regulations procedure.

<sup>2</sup> FDD - Frequency Division Duplex.

- ♦ deployment density of base stations operating simultaneously in a common frequency band of the land mobile service does not exceed the following values:

a) for the border area below 56°N22' latitude: 1 base station per 100 km<sup>2</sup> in the area of 10-35 km from the border and 10 base stations per 100 km<sup>2</sup> in the area of 35-55 km from the border;

b) for the border area above 56°N22' latitude: 1 base station per 100 km<sup>2</sup> in the area of 10-30 km from the border and 10 base stations per 100 km<sup>2</sup> in the area of 30-50 km from the border;

The reason for limitation of deployment density of base stations is providing due protection to the aeronautical radionavigation service.

2.2. The Russian Federation may use the frequency band 790-820 MHz without coordination with the Republic of Latvia if the following conditions are met:

- ♦ if the predicted mean field strength produced by a base station during transmission does not exceed 51 dB(μV/m)/1 MHz and 58 dB(μV/m)/5 MHz at a height of 10 m above the ground at the border;
- ♦ if the land mobile service base stations are located at a distance from the border not less than 10 km;
- ♦ the e.i.r.p. of the land mobile service base station shall not exceed 55 dBm in the frequency band 5 MHz in any direction towards the border of the Republic of Latvia. Service radius for base station should not cover areas closer than 2 km from the border;
- ♦ antenna height of the land mobile service base station located at the distance less than 50 km from the border shall not exceed 70 m.

2.3. The Republic of Latvia and the Russian Federation may use the frequency band 820-821 MHz without coordination if the predicted mean field strength produced by a station during transmission does not exceed [15] dB(μV/m)/1 MHz and [22] dB(μV/m)/5 MHz at a height of [10] m above the ground at the border.

Note: Field strength thresholds proposed by the Russian Federation in 2.3 were not agreed by both administrations by signing of this Arrangement. Parties agreed that further studies were needed and the decision was postponed until solution acceptable for both parties is found. Until approval of agreed decision the Parties will follow the provisions of the ITU Radio Regulations.

2.4. The Republic of Latvia may use the frequency band 832-862 MHz for user equipment of the land mobile service without coordination with the Russian Federation if compliance with 2.1 is ensured. Fixed stations of the Republic of Latvia may use this frequency band without coordination with the Russian Federation, if the predicted mean field strength produced by a station during transmission does not exceed 42 dB(μV/m)/1 MHz and 49 dB(μV/m)/5 MHz at a height of 10 m above the ground at the border.

2.5. The Russian Federation may use the frequency band 832-862 MHz for user equipment of the land mobile service without coordination with the Republic of Latvia if compliance with 2.2 is ensured. Fixed or aeronautical radionavigation stations of the Russian Federation may use this frequency band without coordination with the Republic of Latvia, if the predicted mean field strength produced by a station during transmission does not exceed 42 dB(μV/m)/1 MHz and 49 dB(μV/m)/5 MHz at a height of 10 m above the ground at the border.



### 3. General

- 3.1. If the field strength of a station exceeds the level in items 2.1-2.5 of this Arrangement, as appropriate, the frequency assignment in question must be coordinated with the other Party.
- 3.2. The coordination procedure shall be performed in accordance with Article 4 of this Arrangement.
- 3.3. Preliminary coordination may take place between the land mobile service operators concerned. The results of such preliminary coordination must be approved by the Parties.
- 3.4. In the presence of interference produced by a station covered by this Arrangement, the Report of harmful interference shall be presented in accordance with Appendix 10 of the ITU Radio Regulations. The Party with jurisdiction over such station shall, after receipt of a harmful interference report, take immediate action required to eliminate the interference and inform the other Party accordingly.
- 3.5. The field strength specified in the interference report (see item 3.4) shall be based on median values of the field strength measured at antenna height stipulated in Article 2 at least in two different points over a distance of at least 100 m along the border.
- 3.6. The predicted field strength values in this Arrangement are calculated according to the ITU-R Recommendation P.1546-4 for 10% time and 50% locations.
- 3.7. 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 a ground station.
- 3.8. ITU-R Recommendation P.525-2 "Calculation of free space attenuation" shall be used for calculations of the field strength value produced by or to an airborne station.

### 4. Coordination procedure

- 4.1. The Party wishing to initiate use of a frequency assignment to the station covered by this Arrangement that does not correspond to the terms specified in Article 2 of this Arrangement 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 10 weeks from the date of the request receipt. If no feedback was received, an urgent reminder shall be sent. Party that failed to respond within 2 weeks 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 a request for coordination 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 in Item 4.3 was received within 10 weeks from the date of proposals receipt, an urgent reminder shall be sent. Party that failed to respond within 2 weeks 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 this Arrangement applying Parties shall be governed by provisions and procedures of the ITU Radio Regulations, as well as applicable International and bilateral Agreements.

## **5. Revision and cancellation**

- 5.1. This Arrangement may be cancelled as desired by one of the Party with a notice of at least one year. This does not affect the operation of stations already brought into use or coordinated under this Arrangement.
- 5.2. After such cancellation, Parties will exchange the list of stations already brought into use or coordinated under this Arrangement.
- 5.3. This Arrangement may be revised or cancelled without previous notice, if mutual understanding is reached between the Parties.
- 5.4. This Arrangement is subject to be revised in case one of the Parties decides to suspend the use of the frequency band 790-862 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 ITU Radio Regulations for the frequency band 790-862 MHz are changed this Arrangement shall be confirmed or revised.
- 5.6. In case the study results concerning the usage of the frequency band 790-862 MHz by radio services indicated in item 1.2 agreed by both Parties are obtained this Arrangement should be confirmed or revised taking into account these results.

## **6. Coming into force**

- 6.1. This Arrangement shall come into force from the date of approval by the Telecommunication Administration of the Russian Federation.
- 6.2. By entry into force of this Arrangement, the "Agreement between the Telecommunications Administration of the Republic of Latvia and the Telecommunications Administration of the Russian Federation concerning the use of the frequency band 790-862 MHz for terrestrial systems", signed in Moscow on August 12, 2011, shall cease to be in force.
- 6.3. This Arrangement has been drawn up in two identical copies, one for the Republic of Latvia and one for the Russian Federation.

Moscow, 17 October 2019

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

On behalf  
of the Telecommunication Administration  
of the Russian Federation

Jānis Bārda

Vladimir Rodionov