

ARRANGEMENT

**between the Electronic Communications Office of the Republic
of Latvia and the Estonian Technical Regulatory Authority
concerning the use of the frequency band 3400-3800 MHz for
terrestrial Mobile/Fixed Communications Networks (MFCN) in
border areas**

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reg.nr.

Bucharest, 17 November 2017

Preamble

According to Article 6 of the ITU Radio Regulations, representatives of the Electronic Communications Office of the Republic of Latvia and the Estonian Technical Regulatory Authority (hereinafter referred to as the Parties) have concluded this Arrangement concerning the use of the 3400-3800 MHz frequency band for terrestrial mobile/fixed communications networks (MFCN)¹ in border² areas (hereinafter referred to as the Arrangement) with the aim of optimizing the use of the frequency band and avoiding mutual interference on a mutually coordinated basis.

This Arrangement cancels and replaces the "Arrangement between the Estonian National Communications Board and the Electronic Communications Office of Latvia on the coordinated use of the frequency bands 3410-3600 MHz and 3600-3800 MHz by the Wireless Access Systems in the border areas" (Galway, Ireland, 5th July 2006) on 1st January 2018. During the transition period (01.01.2018 – 01.01.2019) the Estonian Party shall notify the Latvian Party concerning the beginning of use of MFCN systems in the frequency band 3400-3800 MHz in border areas indicating the frequency bands or channels concerned. In case of notifying by Latvian Party of harmful interference during the transition period to Latvian WAS³ stations from Estonian MFCN stations in the band, the Estonian Party shall take all needed measures to minimize such harmful interference and notify the Latvian Party thereof.

1. Principles

- 1.1. This Arrangement is based on the concept of coordination field strength levels for base stations as described in ECC Recommendation (15)01 of 13th February 2015 (Amended 5 February 2016) "Cross-border coordination for mobile/fixed communications networks (MFCN) in the frequency bands: 694-790 MHz, 1452-1492 MHz, 3400-3600 MHz and 3600-3800 MHz" (hereinafter referred to as ECC/REC/(15)01) and on the principle of the equal access to spectrum by both Parties.
- 1.2. The following frequency arrangement for terrestrial MFCN systems presumes: FDD⁴ mobile stations (user equipment or terminals) transmit and receive respectively in the frequency bands 3410-3490 MHz / 3510-3590 MHz, FDD base stations transmit and receive respectively in the bands 3510-3590 MHz / 3410-3490 MHz and TDD⁵ mode is used in the frequency band 3400-3800 MHz. The frequency arrangements conform to ECC Decision (11)06 of 9th December 2011 (amended in 14th March 2014) "Harmonised frequency arrangements for mobile/fixed communications networks (MFCN) operating in the bands 3400-3600 MHz and 3600-3800 MHz".
- 1.3. Field strength values in this Arrangement are based on a receiving antenna height of 3 m above ground for 10 % of time and 50 % of locations.

¹ Mobile/fixed communications networks (MFCN) includes IMT and other communications networks in the mobile and fixed services.

² In the context of this Arrangement the term "border" is understood as the international borderline between the countries of the Parties.

³ WAS - Wireless Access Systems.

⁴ FDD - Frequency Division Duplex.

⁵ TDD - Time Division Duplex.

- 1.4. This Arrangement covers coordination of base stations. Parties agree that coordination of mobile stations in mobile and fixed services is not necessary for 3400-3800 MHz frequency band.

2. Use of frequencies

- 2.1. Each Party may use the 3400-3800 MHz frequency band for MFCN systems (in TDD or FDD mode) without coordination with the other Party if the predicted mean field strength produced by the cell (all transmitters within the base station sector) does not exceed the value of 32 dB μ V/m/5MHz at the border.
- 2.2. If frequency block size is other than 5 MHz, a correction, calculated by the formula $10 \times \lg(\text{frequency block size, MHz} / 5)$, dB, shall be added to the field strength values indicated in item 2.1.

3. Procedure

- 3.1. If the predicted mean field strength value of any cell produced by the base station exceeds the levels indicated in item 2.1 the frequency assignment shall be coordinated with the other Party.
- 3.2. The period of coordination shall not exceed 45 days from the date of receiving the request and 20 days after the reminder. If no reply is received within 65 days the frequency assignment shall be considered as coordinated. The exchange of coordination information shall take place by e-mail or other electronic means.
- 3.3. Coordination requests shall be drawn up according to Annex 3 of ECC/REC/(15)01 in the appropriate ITU electronic formats.
- 3.4. Complaints of harmful interference shall be based on the median value of measurements of field strength, performed at a receiving antenna height of 3 m above ground at least in two different points over a distance of at least 100 m along the border.
- 3.5. Reports of harmful interference shall be presented in accordance to Appendix 10 of the ITU Radio Regulations and processed according to Article 15 of the ITU Radio Regulations. The Parties shall take all possible measures in order to eliminate harmful interference.
- 3.6. For field strength calculations the Parties shall use the latest version of Recommendation ITU-R P.1546 "Method for point-to-area predictions for terrestrial services in the frequency range 30 MHz to 3000 MHz".

4. Revision and cancellation

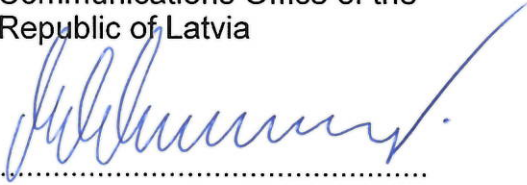
- 4.1. This Arrangement may be revised at any time on the initiative of any Party with the consent of the other Party.
- 4.2. This Arrangement may be cancelled by a mutual decision of both Parties on terms and conditions adopted by the Parties or by a decision of one Party notifying the other Party on its intention at least at least twelve months before.

5. Entry into force

- 5.1. This Arrangement will come into force on the 1st January 2018.
- 5.2. This Arrangement has been drawn in two identical copies, one for the Republic of Latvia and one for the Republic of Estonia.

Bucharest, 17 November 2017

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

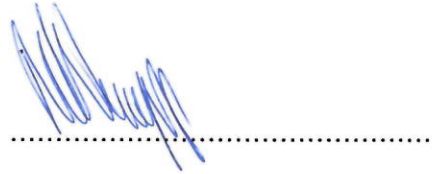


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Māris Aleksandrovs

Director of Technical
Department

On behalf of the Estonian Technical
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Margus Krupp

Deputy Director General / Head of
Electronic Communications Division