ARRANGEMENT

between the Electronic Communications Office of the Republic of Latvia and the Consumer Protection and Technical Regulatory Authority of the Republic of Estonia concerning the use of the frequency bands 1432-1472 MHz and 1492-1512 MHz for Mobile/Fixed Communications Networks (MFCN) in border areas

1 February 2022

Preamble

According to Article 6 of ITU Radio Regulations, representatives of the Electronic Communications Office of the Republic of Latvia and the Consumer Protection and Technical Regulatory Authority of the Republic of Estonia (hereinafter referred to as the Parties) have concluded this Arrangement concerning the use of the 1432-1472 MHz and 1492-1512 MHz frequency bands for terrestrial systems for Mobile/Fixed Communications Networks (MFCN[1]) (hereinafter referred to as the Arrangement) with the aim of optimizing the use of the frequency bands and avoiding mutual interference on a mutually coordinated basis.

This Arrangement cancels and replaces the "Arrangement between the Electronic Communications Office of the Republic of Latvia and the Consumer Protection and Technical Regulatory Authority of the Republic of Estonia concerning the use of the frequency band 1432-1492 MHz for terrestrial systems in border areas" (Riga, 24 April 2019).

1. Principles

1.1. This Arrangement is based on the concept of coordination field strength levels for base stations, allocation of preferential and non-preferential Physical-layer Cell Identifiers (PCI) for LTE and NR systems as described in ECC Recommendation (15)01 of 13th February 2015 "Cross-border coordination for Mobile/Fixed Communications Networks (MFCN) in the frequency bands: 694-790 MHz, 1427-1518 MHz, 3400-3800 MHz" (amended 14 February 2020) (hereinafter referred to as ECC/REC/(15)01) and on the principle of the equal access to spectrum by both Parties.

1.2. This Arrangement applies to terrestrial MFCN supplemental downlink systems (SDL) in 1432-1472 MHz and 1492-1512 MHz frequency bands. The frequency arrangement for terrestrial MFCN supplemental downlink systems conforms to ECC Decision (13)03 of 8 November 2013 "The harmonised use of the frequency band 1452-1492 MHz for Mobile/Fixed Communications Networks Supplemental Downlink (MFCN SDL)" (amended 2 March 2018) and ECC Decision (17)06 "The harmonised use of the frequency bands 1427-1452 MHz and 1492-1518 MHz for Mobile/Fixed Communications Networks Supplemental Downlink (MFCN SDL) (amended 2 March 2018).

1.3. Allocation of preferential and non-preferential Physical-layer Cell Identifiers (PCI) for LTE and NR systems between Parties is given in Annex of this Arrangement.

1.4. 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.

1.5. This Arrangement covers coordination of base stations.

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

2. Use of frequencies and PCI

2.1. Each Party may use the frequency bands 1432-1472 MHz and 1492-1512 MHz for LTE or NR supplemental downlink systems using its preferential PCIs without coordination with the other Party if the predicted mean field strength produced by the base station cell does not exceed a value of 65 dBµV/m/5 MHz at the border and does not exceed

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

the value of 47 dBμV/m/5 MHz at a distance of 6 km from the border inside the neighbouring country.

2.2. For LTE and NR supplemental downlink systems in the 1432-1472 MHz and 1492-1512 MHz frequency bands each Party may use all PCIs available if the predicted mean field strength produced by the base station cell does not exceed a value of 47 dBμV/m/5 MHz at the border. If the predicted mean field strength produced by the base station cell of LTE or NR supplemental downlink systems exceeds the value of 47 dBμV/m/5 MHz at the border each Party shall use only their own preferential PCIs according to the Annex to this Arrangement.

2.3. If frequency block size is other than 5 MHz, a correction, calculated by the formula $10 \times \log_{10}$ (frequency block size / 5 MHz), dB, shall be added to the field strength values indicated in items 2.1, 2.2.

3. Procedure

3.1. If the predicted mean field strength value 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 format.

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 with 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 as soon as possible.

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 4000 MHz" for 10% of time and 50% of locations.

4. Operators arrangement

4.1. Operators concerned may agree to deviate from field strength levels in item 2.1 by mutual consent, concluding an arrangement between operators with the consent of the Parties concerned. Such operator arrangement shall only be valid as long as all participating operators hold exclusive rights of use of concerned frequencies.

5. Revision and cancellation

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

5.2. 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 six months before.

6. Entry into force

6.1. This Arrangement shall come into force on 1 February 2022.

6.2. This Arrangement has been drawn in English in two identical copies, one for Latvia and one for Estonia.

Signed by correspondence.

On behalf of the Electronic Communications Office of the Republic of Latvia	On behalf of the Consumer Protection and Technical Regulatory Authority of the Republic of Estonia
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Jānis Bārda	Kaur Kajak
Place: Rīgā	Place: Tallinn
Date: 15.12.2021.	Date: 05.01.2021

Annex

Allocation of preferential Physical-layer Cell Identifiers (PCI) for LTE and NR systems in the 1432-1472 MHz and 1492-1512 MHz frequency bands between the Republic of Latvia and the Republic of Estonia[2]

Set	**A**	**B**	**C**	**D**	**E**	**F**
PCI for LTE	0 to 83	84 to 167	168 to 251	252 to 335	336 to 419	420 to 503
PCI for NR	0 to 83 504 to 587	84 to 167 588 to 671	168 to 251 672 to 755	252 to 335 756 to 839	336 to 419 840 to 923	420 to 503 924 to 1007
Set preferential to	LVA[3]	LVA	EST[4]	EST	LVA	EST

[2] According to Annex 4 of ECC/REC/(15)01.
[3] LVA – the Republic of Latvia.
[4] EST – the Republic of Estonia.