

**Agreement between the Technical Regulatory Authority of Estonia
and the Finnish Communications Regulatory Authority concerning
the use of the 800 MHz band (791-862 MHz) for terrestrial
systems**

2016

1. Principles and definitions

- 1.1. The 800 MHz-band, as referred to in this agreement, covers the frequencies from 791 MHz to 862 MHz.
- 1.2. The use of the band shall be in accordance with the Commission Decision 2010/267/EU of 6 May 2010, based on the Block Edge Mask spectrum description, with the Frequency Division Duplex (FDD) arrangement. The use of other arrangements such as Time Division Duplex (TDD) is not covered in this agreement.
- 1.3. This agreement is based on the concept of field strength levels indicated in ECC Recommendation (11)04 and in the case when LTE systems are used preferential PCIs as defined in Annex 1.
- 1.4. This agreement covers the co-ordination of the base stations. The user equipments, or terminals, are allowed to be used on non interfering basis, in accordance with ITU RR 4.4.
- 1.5. For the purpose of this agreement the Zones referred to in the following paragraphs are defined in Annex 2.

2. Use of frequencies without co-ordination

- 2.1. Estonia may use the band 791 - 821 MHz without co-ordination with Finland, if the predicted mean field strength produced by a base station does not exceed **55 dB(μ V/m)/5 MHz** at a height of 3 m above the surface at Zone F or beyond.
- 2.2. Finland may use the band 791 - 821 MHz without co-ordination with Estonia, if the predicted mean field strength produced by a base station does not exceed **55 dB(μ V/m)/5 MHz** at a height of 3 m above the surface at Zone E or beyond.
- 2.3. If the bandwidth of the signal is not 5 MHz, then $10 \times \log(\text{bandwidth}/5 \text{ MHz})$ should be added to the field strength threshold values in 2.1 and 2.2.

3. Co-ordination procedure

- 3.1. If a frequency assignment has to be co-ordinated, the period of co-ordination shall not exceed 45 days from the date of the receipt of the request and 20 days after the reminder. A request may be sent by e-mail to the administration's official e-mail address. If no reply is

received after 65 days the frequency assignment shall be considered as co-ordinated.

- 3.2. The exchange of the co-ordination information shall be in electronic form and sent by e-mail or by other electronic means as appropriate.
- 3.3. Preliminary co-ordination may take place between the operators concerned. The results of such preliminary co-ordination must be approved by the administrations.

4. General

- 4.1. A complaint in case of harmful interference shall be based on the median values of measurements of field strength, performed at 3 meter of receiving antenna height at least on two different occasions over a range of at least 100 m along the zone.
- 4.2. In the presence of interference, the report of harmful interference shall be presented in accordance with Appendix 10 of the Radio Regulations. The other administration shall take all possible steps in order to eliminate the interference.
- 4.3. The field strength values in this agreement are based on a receiving antenna height of 3 m, 10% of the time and 50% of the locations.
- 4.4. The latest version of ITU-R P.1546 " Method for point-to area predictions for terrestrial services in the frequency range 30-3000 MHz" shall be used.

5. Revision and cancellation

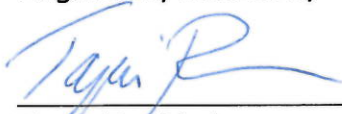
- 5.1. This Agreement may be revised upon mutual agreement of the two administrations.
- 5.2. This agreement may be revised or cancelled as desired by one of the administrations with a notice of twelve months.

6. Entry into force

- 6.1. This agreement shall come into effect from date of signature.
- 6.2. This agreement has been drawn in two identical copies, one for Estonia and one for Finland.
- 6.3. This Agreement, when in force, replaces the previous Agreement between the Estonian Technical Surveillance Authority and the Finnish Communications Regulatory Authority concerning the use of the 800 MHz-band (790-862 MHz) for terrestrial systems (Tallinn, 2011).

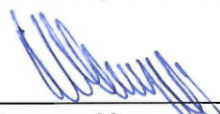
Helsinki
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For the Finnish Communications
Regulatory Authority



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ANNEX 1

ASSIGNMENT¹ OF PREFERENTIAL CODE GROUPS BETWEEN ESTONIA AND FINLAND

LTE²:

PCI	Set A 0 to 83	Set B 84 to 167	Set C 168 to 251	Set D 252 to 335	Set E 336 to 419	Set F 420 to 503
Country	Finland	Finland	Estonia	Estonia	Estonia	Finland

Table 1: Preferential Physical-Layer Cell Identities (PCI) for LTE

¹ The assignment is based on ECC/REC/(11)04 Annex 5.

² ETSI TS 136 211 defines 168 unique physical cell-identity groups numbered 0..167, hereafter called "PCI groups". Within each PCI group there are three separate PCIs giving 504 PCIs in total

DEFINITION OF PROTECTED ZONES

In Estonia

Zone E

The Estonian coast including the following islands: Saaremaa, Hiiumaa, Vormsi, Naissaar and Prangli

In Finland

Zone F

The South Coast of Finland described by a line drawn between the following islands (coordinates WGS 84):

Jurmo (59° 48' 56" N, 21° 33' 48" E), Russarö (59° 45' 54" N, 22° 56' 51" E), Rönnskär (59° 55' 54" N, 24° 23' 32" E), Isosaari (60° 05' 43" N, 25° 02' 40" E), Pirttisaari (60° 09' 30" N, 25° 26' 29" E) and Haapasaari (60° 17' 10" N, 27° 11' 42" E)