

ARRANGEMENT

**between
the Electronic Communications Office of the Republic of Latvia
and the Estonian Technical Regulatory Authority**

**concerning the use of the frequency bands
880-915 MHz / 925-960 MHz
for stations of land mobile service (GSM 900) in border areas**

19 December 2014

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 frequency bands 880-915 MHz / 925-960 MHz for stations of land mobile service (GSM 900 and E-GSM 900) in border¹ areas (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 "Agreement GSM frequency co-ordination between Estonia and Latvia" (Bucharest, 4 December 1997), the „Modification of the Agreement between Estonian National Communications Board and Latvia Telecommunication State Inspection concerning the use of the frequency bands 890-915 / 935-960 MHz for stations of Land Mobile Service (GSM-900) in border areas" (Tallinn, January 17, 2003) and "Agreement between the Telecommunication Administrations of Estonia and Latvia concerning use of the frequency band 880-890 / 925-935 MHz for the Land Mobile Service in the border area" (Tallinn, 17.05.2007).

1. Principles

- 1.1. This Arrangement is based on the concept of coordination field strength levels for base stations and allocation of preferential and non-preferential GSM channels. The coordination field strength values for GSM systems agreed by Parties differ from the recommended values given in ECC Recommendation (05)08 (edition 1 February 2006) "Frequency planning and frequency coordination for the GSM 900, GSM 1800, E-GSM and GSM-R land mobile systems (Except direct mode operation (DMO) channels)" (hereinafter referred to as ECC Recommendation (05)08), but are in line with HCM Agreement².
- 1.2. The following frequency arrangement is presumed: FDD³ mobile stations transmit and receive in the frequency bands 880-915 MHz / 925-960 MHz respectively, FDD base stations transmit and receive in the frequency bands 925-960 MHz / 880-915 MHz respectively.
- 1.3. The Parties agreed to use a channel plan for GSM based on a 200 kHz grid. Carrier frequencies (radio frequency channels) and channel numbers shall be derived according to ETSI standard EN 301 087⁴.
- 1.4. Field strength values in this Arrangement are based on a receiving antenna height of 10 m above ground for 10 % of time and 50 % of locations.
- 1.5. This Arrangement covers coordination of base stations.

¹ In the context of this Arrangement the term "border" is understood as the international borderline between the countries of the Parties.

² Agreement between the Administrations of Austria, Belgium, the Czech Republic, Germany, France, Hungary, the Netherlands, Croatia, Italy, Liechtenstein, Lithuania, Luxembourg, Poland, Romania, the Slovak Republic, Slovenia and Switzerland on the co-ordination of frequencies between 29.7 MHz and 43.5 GHz for the fixed service and the land mobile service (agreed by correspondence in 2014).

³ FDD - Frequency Division Duplex.

⁴ Digital cellular telecommunications system (Phase 2 & Phase 2+); Base Station System (BSS) equipment specification; Radio aspects.

2. Use of frequencies

- 2.1. Each Party may use its preferential GSM channels without prior coordination with the other Party if the field strength of each carrier produced by the base station does not exceed a value of 26 dB μ V/m/200kHz at a distance of 30 km inside the other country.
- 2.2. Each Party may use its non-preferential GSM channels without prior coordination with the other Party if the field strength of each carrier produced by the base station does not exceed a value of 26 dB μ V/m/200kHz at the border.
- 2.3. Allocation of preferential and non-preferential GSM channels between Parties is given in Annex.

3. Procedure

- 3.1. If the predicted mean field strength value of any carrier produced by the base station exceeds the levels indicated in items 2.1 and 2.2 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 ECC Recommendation (05)08 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 10 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 six months before.

5. Entry into force

- 5.1. This Arrangement shall come into force on the date of signing it by both Parties.
- 5.2. This Arrangement has been drawn in two identical copies, one for the Republic of Latvia and one for the Republic of Estonia.

Tallinn, 19 December 2014

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

On behalf of the Estonian
Technical Regulatory Authority

Allocation of preferential GSM channels in the 880-915 MHz / 925-960 MHz frequency bands between the Republic of Latvia and the Republic of Estonia

1 EST (24) 24	25 LVA (21) 45	46 EST (11) 56	57 LVA (20) 76	77 EST (14) 90	91 LVA (19) 109	110 EST (11) 120	121 LVA (2) 122	123 EST (2) 124
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Summary:

LVA⁵ - 62 channels

EST⁶ - 62 channels

975 LVA (9) 983	984 EST (12) 995	996 LVA (8) 1003	1004 EST (8) 1011	1012 LVA (8) 1019	1020 EST (5) 1024
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Summary:

LVA - 25 channels

EST - 25 channels

⁵ LVA - the Republic of Latvia.

⁶ EST - the Republic of Estonia.