

**Agreement
between the Telecommunications Administration of Sweden and the
Telecommunications Administration of the Russian Federation
concerning the use of the frequency band 790–862 MHz for
terrestrial systems**

Moscow, 7th of September 2011

Preamble

According to Article 6 of the Radio Regulations, on behalf of Telecommunications Administration of Sweden represented by Swedish Post and Telecom Agency and the Telecommunications Administration of the Russian Federation represented by Ministry of Telecom and Mass Communications have concluded the present Agreement concerning the use of the frequency band 790-862 MHz with the purpose of avoiding mutual interference and optimising the use of the above-stated frequency band on a mutually coordinated basis.

1 Principles

- 1.1 This Agreement is based on the concept of symmetrical conditions for both Administrations.
- 1.2 This Agreement covers the coordination¹ of land mobile service, fixed service and aeronautical radionavigation service.
- 1.3 The frequency arrangement for land mobile service conforms to the FDD frequency arrangement and parameters of transmission for base stations and user terminals in accordance with ECC/DEC(09)03. TDD frequency arrangement of fixed and land mobile services is not covered by this Agreement.
- 1.4 This Agreement applies to stations of the services listed in 1.2 and brought into use after the date of signing of this agreement.
- 1.5 This Agreement does not include the provisions concerning the use of the frequency band 821-832 MHz.

2 Use of frequencies

- 2.1 Sweden may use the frequency band 790-820 MHz without coordination with the Russian Federation if the following conditions are met:
 - The base station is located within the area limited by coordinates (55N22, 16E13; 56N27,16E16; 56N37,16E24; 56N53,16E34; 57N47, 19E23; 55N22, 19E23) and e.i.r.p. of this base station shall not exceed 57 dBm/1 MHz in the direction to Kaliningrad exclave of the Russian Federation and the effective antenna height of this base station shall not be more than 90 m;
 - The base station is located outside of the above-mentioned area.
- 2.2 Sweden and the Russian Federation may use the frequency band 820-821 MHz without coordination if the predicted field strength produced by a station does not exceed 10 dB ($\mu\text{V}/\text{m}$)/1 MHz at a height of 10 m above the ground at the border.

¹ The term «coordination» should be understood as bilateral coordination between Administrations without involving BR in this process. The Agreement concluded under this bilateral coordination shall be considered by Administrations as an agreement under relevant RR procedure.

- 2.3 The Russian Federation may use the frequency band 790-820 MHz without coordination with Sweden if the following conditions are met:
- The base station is located on the mainland or on the islands which are located at less than 54N27 latitude and more than 55N17 latitude;
 - The base station is located on the islands within 54N27 to 55N17 latitude and e.i.r.p. of this base station shall not exceed 57 dBm / 1 MHz in any direction to the border of Sweden and the effective antenna height of this base station shall not be more than 90 m.
- 2.4 Sweden may use the frequency band 832-862 MHz for user equipment of the land mobile service without coordination with the Russian Federation. Stations of fixed service of Sweden may use this frequency band without coordination with the Russian Federation if the predicted field strength produced by a station does not exceed 10 dB ($\mu\text{V/m}$)/1 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 Sweden. Stations of aeronautical radionavigation service of the Russian Federation may use this frequency band without coordination with Sweden if the predicted field strength produced by a station does not exceed 48 dB ($\mu\text{V/m}$)/5 MHz at a height of 10 m above the ground at the border. Stations of fixed service of the Russian Federation may use this frequency band without coordination with Sweden if the predicted field strength produced by a station does not exceed 10 dB ($\mu\text{V/m}$)/1 MHz at a height of 10 m above the ground at the border.

3 General

- 3.1 The technical parameters related to any new frequency assignment causing the above-mentioned coordination threshold values to be exceeded shall be coordinated.
- 3.2 The coordination procedure shall be performed in accordance with Article 4 of this Agreement.
- 3.3 Preliminary coordination may take place between any land mobile service operators concerned. The results of such preliminary coordination must be approved by the Administrations.
- 3.4 In the presence of interference produced by a station covered by this Agreement, the Report of harmful interference shall be presented in accordance with Appendix 10 of the Radio Regulations. The Administrations shall take all possible measures in order to eliminate the interference as soon as possible.
- 3.5 The field strength specified in the interference report (see Item 3.4) shall be based on the median values of measurements of field strength performed at antenna height stipulated in Article 2 at least in two different points over a range of at least 100 m along the border.
- 3.6 The predicted field strength values in this Agreement calculated with the ITU-R Recommendation P.1546-4 are based on antenna heights corresponding to those in Article 2 of this Agreement with 10% time and 50% locations.

- 3.7 The 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 ground stations and for determination of effective antenna height value.
- 3.8 The 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 airborne station.

4 Coordination procedure

- 4.1 The Administration wishing to initiate use of a frequency assignment to the station covered by this Agreement that does not correspond to the terms specified in Article 2 of this Agreement shall send to the other Administration 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 Administration shall send by fax a covering letter to the affected Administration and to receive a confirmation of its receipt.
- 4.2 The affected Administration 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. Administration that failed to respond within 2 weeks from the date of an urgent reminder receipt shall be deemed agreeing if the Administration, 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 Administration to satisfy the request for coordination the requesting Administration shall provide to the affected Administration results of its calculations, or any new technical characteristics of the assignment.
- 4.4 If no response from the affected Administration 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. Administration 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 Administration objecting to the received request for coordination shall provide 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 Agreement application Administrations shall be governed by provisions and procedures of the Radio Regulations, as well as applicable international and bilateral agreements.

5 Revision and cancellation

- 5.1 This Agreement may be cancelled as desired by one of the Telecommunications Administrations with notice of at least one year. This does not affect the operation of stations already brought into use or coordinated under this Agreement.
- 5.2 After such cancellation, Administrations will exchange the list of stations already brought into use or coordinated under this Agreement.

- 5.3 This Agreement may be revised or cancelled without previous notice, if mutual understanding is reached between the Telecommunications Administrations.
- 5.4 This Agreement shall be confirmed or revised in case the current procedures and frequency allocations of the Radio Regulations for the frequency band 790-862 MHz related to coexistence between mobile service and aeronautical service, mobile service and fixed service are changed. If a cancellation request of the Agreement is not provided within 1 month after the WRC-12 by any Administration the Agreement continues to be valid.

6 Coming into force

- 6.1 This Agreement shall come into force on the date of the signing.

This Agreement has been drawn up in two identical copies, one for Sweden and one for the Russian Federation.

For the Telecommunications
Administration of Sweden

For the Telecommunications
Administration of the
Russian Federation

Mr. Andrey Mukhanov