

**AGREEMENT  
BETWEEN THE ADMINISTRATIONS OF  
BELGIUM, FRANCE, GERMANY, LUXEMBOURG,  
THE NETHERLANDS AND SWITZERLAND**

**ON FREQUENCY PLANNING AND FREQUENCY  
COORDINATION AT BORDER AREAS FOR  
TERRESTRIAL SYSTEMS CAPABLE OF  
PROVIDING ELECTRONIC COMMUNICATIONS  
SERVICES**

**IN THE FREQUENCY BAND  
790 - 862 MHz**

**Brussels, 22 November 2017**

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## 1. Introduction

The frequency band 790-862 MHz is designated for terrestrial systems capable of providing electronic communications services

- for Belgium, France, Germany, Luxembourg and The Netherlands, according to the Commission Decision of 6 May 2010 on harmonised technical conditions of use in the 790-862 MHz frequency band for terrestrial systems capable of providing electronic communications services in the European Union (2010/267/EU).
- for Switzerland according to the national frequency allocation plan as approved by the Federal Council

The Administrations of Belgium, France, Germany, Luxembourg, The Netherlands and Switzerland have agreed on the following usage and cross-border frequency coordination procedures.

## 2. Principles of frequency usage and frequency coordination in border areas

The concept of equal access probability is a frequency planning principle enabling equitable coverage for two or more networks using the same frequency band with the same or different digital technologies in geographically adjacent areas without coordination. Operation of stations in the respective border area exceeding the specified field strength values after performing traditional frequency coordination would disturb the balance in the respective area and is therefore not desirable.

Furthermore this agreement is based on the principles of frequency usage and frequency coordination according to Recommendation ECC/REC(11)04 (see [www.erodocdb.dk](http://www.erodocdb.dk)).

The field strength values refer to the mean field strength of each cell produced by the base station and are defined inside a reference frequency block of 5 MHz.

In cases of other frequency block sizes  $10 \times \log_{10}$  (frequency block size / 5 MHz) should be added to the field strength values.

## 3. Technical provisions

The FDD (frequency division duplex) mode of operations is considered.

For FDD, the duplex spacing shall be 41 MHz with base station transmission (downlink) located in the lower part of the band (791-821 MHz) and terminal station transmission (uplink) located in the upper part of the band (832-862 MHz)<sup>1</sup>.

3.1 Base stations in border areas may be operated without coordination with the neighbouring country if the produced field strength at a height of 3 m above ground does not exceed the following values:

- a) Usage of preferential PCI<sup>2</sup>:
  - 59 dB $\mu$ V/m/5 MHz at the border line
  - 41 dB $\mu$ V/m/5 MHz at a distance of 6 km beyond the border

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<sup>1</sup> In case of carrier aggregation, the frequency band for the transmission of terminal station may be different.

<sup>2</sup> As defined in ECC/REC(11)04.

- b) Usage of non-preferential PCI:  
41 dB $\mu$ V/m/5 MHz at the border line

- 3.2 In order to improve performance between LTE systems deployed in the border areas, the administrations shall encourage operators to apply PCI coordination and arrange other radio parameters, in accordance with the relevant annexes of ECC/REC(11)04, especially in the case where centre frequencies of LTE signals in border areas are aligned.
- 3.3 If centre frequencies of LTE signals are not aligned, mobile operators can use the field strength values of 3.1.a) for all PCI.

#### **4. Operators arrangements**

The establishment of arrangements between operators shall be allowed to the extent possible, according to the provisions laid down in the "Agreement between the administrations of Belgium, France, Germany, Luxembourg, the Netherlands and Switzerland concerning the approval of arrangements between operators of mobile radio communication networks" done at Brussels on 11<sup>th</sup> October 2011.

#### **5. Prediction of propagation**

For the field strength calculations the tool of the latest version of the HCM Agreement shall be applied. Time probability in all calculations is 10 %.

#### **6. Revision of the agreement**

This agreement may be modified at a request of any of the signatory administrations where such a modification becomes necessary in the light of administrative, regulatory or technical development.

#### **7. Withdrawal from the agreement**

Any Administration may withdraw from this Agreement subject to six months notice.

#### **8. Language of the agreement**

This Agreement has been concluded in English.

One original version of this Agreement is handed over to each Signatory Administration.

#### **9. Date of entry into force**

The date of entry into force of this agreement is subject to individual signature of this agreement.

The application of this agreement is valid between the administrations which both have signed the agreement.

## **10. Abrogation of the Agreement of 11 October 2011**

The Agreement between the administrations of Belgium, France, Germany, Luxembourg, Switzerland and The Netherlands of 11 October 2011 is abrogated.

Existing stations in line with the previous agreement may continue to operate until their switch-off.

## 11. Signature of the agreement

Done at Brussels, 22 November 2017

For BELGIUM

Belgian Institute for Postal  
Services and Telecommunications

On behalf of the BIPT Council,  
Michael Vandroogenbroek

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Date of signature: 22 November 2017

For FRANCE

Agence nationale des fréquences  
Cédric Perros

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Date of signature: 22 November 2017

For GERMANY

Federal Network Agency  
Tobias Schnetzer

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Date of signature: 22 November 2017

For LUXEMBOURG

For the Institut Luxembourgeois  
de Régulation

Jean Gompelmann

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Date of signature:

For THE NETHERLANDS

Agentschap Telecom  
Yvonne Veenstra-Knop

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Date of signature:

For SWITZERLAND

Federal Office of Communications  
Konrad Vonlanthen

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Date of signature: 22 November 2017