# 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, 11<sup>th</sup> October 2011

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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 table of frequency allocations as approved by the Federal Council

The Administrations of Belgium, France, Germany, Luxembourg, The Netherlands and Switzerland have agreed on the following coordination procedures.

#### 2. PRINCIPLES OF FREQUENCY PLANNING AND FREQUENCY COORDINATION AT BORDER AREAS

Frequency coordination at border areas is necessary to ensure efficient spectrum use and equal access to spectrum in the border areas. This Agreement is based on the principles of frequency planning and frequency coordination as laid down in ECC Recommendation (11)04.

The following principles apply:

- Frequency coordination with a neighbouring country is not necessary if the mean field strength does not exceed the field strength limits provided in paragraph 3. Coordination of stations exceeding the specified mean field strengths as defined in paragraph 3 would disturb the equal access and is therefore not desirable.
- Field strength values are defined within a reference frequency block of 5 MHz.

## 3. PROVISIONS FOR COORDINATION

The frequency band 790 – 862 MHz is typically used for FDD systems. The duplex spacing shall be 41 MHz. The base station transmissions (downlink) are located in the lower part of the band starting at 791 MHz and finishing at 821 MHz and terminal station transmissions (uplink) are located in the upper part of the band starting at 832 MHz and finishing at 862 MHz.

#### 3.1. Maximum field strength in cases where only FDD systems are used

Base stations of FDD systems may be operated if the produced mean field strength at a height of 3 m above ground does not exceed the value of 59 dB $\mu$ V/m in the reference bandwidth of 5 MHz at the border line, and does not exceed the value of 41 dB $\mu$ V/m in the reference bandwidth of 5 MHz at a line of 6 km beyond the border.

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#### 3.2. Maximum field strength in cases where TDD systems are used

Base stations of TDD systems may be operated if the produced mean field strength at a height of 3 m above ground does not exceed the value of 15 dB $\mu$ V/m in the reference bandwidth of 5 MHz at the border line.

#### 3.3. The use of LTE systems in border areas

In order to ensure the optimum network performance between LTE systems deployed in the border areas, the administrations shall encourage operators to coordinate the use of PCI code groups and other radio parameters, in accordance with ECC Recommendation (11)04, for LTE signals using the same centre frequency in border areas.

# 3.4. Transitional bilateral arrangements with regard to other services used in this frequency band

This arrangement can be found in annex 1.

#### 4. OPERATOR 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. FIELD STRENGHT PREDICTION

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 the request of one of the Signatory Administrations where such a modification becomes necessary in the light of administrative, regulatory or technical developments.

The technical characteristics may be reviewed in the light of practical experience of its application and of the operation of terrestrial systems capable of providing electronic communications services in general.

#### 7. WITHDRAWAL FROM THE AGREEMENT

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

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#### 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 and a copy is submitted to the Managing Administration of the HCM Agreement.

#### 9. DATE OF ENTRY INTO FORCE

For France, Germany and Switzerland, the date of entry into force is the date of signature.

For Belgium, Luxembourg and the Netherlands the entry into force of this agreement is subject to individual confirmations sent to the signing administrations of this agreement.

Until the entry into force of this this agreement for the concerned administrations, the GE06 Agreement is applicable. According to the GE06 Agreement, all stations of terrestrial systems capable of providing electronic communications services producing a field strength (50% of locations and 1% of time) at a height of 10 m above ground exceeding the value of 25 dBµV/m in the reference bandwidth of 8 MHz at the border line of any signing administrations, shall be coordinated with the concerned administration.

Done at Brussels on 11<sup>th</sup> October 2011

For BELGIUM

Belgian Institute for Postal services and Telecommunications

On behalf of the BIPT Council, Michael Vandroogenbroek

For FRANCE Agence nationale des fréquences Antoine Rigole

For GERMANY Bundesnetzagentur

Heinz Hönnekes

#### For LUXEMBOURG

For the Institut Luxembourgeois de Régulation

**Roland Thurmes** 

For THE NETHERLANDS Agentschap Telecom Peter Disseldorp

For SWITZERLAND Federal Office of Communications Konrad Vonlanthen

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#### **ANNEX1**

#### **TRANSITORY PROVISION RELATED TO** THE MILITARY TRAINING CAMP OF BITCHE **APPLICABLE BETWEEN GERMANY AND FRANCE**

Until 1st July 2015, the field strength from any base station transmitting in the frequency band 804,385-830,305 MHz at a height of 1.5 m above ground shall not exceed 28 dBµV/m/MHz at any of the following test points:

- Point 1 : 7°30'29"E 49°05'55"N
- Point 2 : 7°31'45"E 49°06'08"N
- vithdrawnin January 16, 201 Point 3 : 7°32'11"E - 49°05'44"N •
- Point 4 : 7°32'27"E 49°05'28"N
- Point 5 : 7°33'25"E 49°05'01"N .
- Point 6 : 7°33'02"E 49°04'42"N

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