

# **Agreement**

**on the co-ordination of the frequency bands**

**410 – 430 MHz and 440 – 470 MHz**

**concluded between the Administrations of**

**Belgium, France, Germany, Luxembourg,**

**The Netherlands and Switzerland**

**Groningen**

**October 2002**

# AGREEMENT

**on the co-ordination of the frequency bands 410 - 430 MHz and 440 - 470 MHz concluded between the Administrations of Belgium, France, Germany, Luxembourg, The Netherlands and Switzerland.**

## **1 Aim of the Agreement.**

This Agreement allows an equitable access to each of the frequency bands 410 – 430 MHz and 440 - 470 MHz in the border areas between the countries concerned.

This Agreement contains a division of the bands 410 - 430 MHz and 440 - 470 MHz into preferential frequencies as specified in the latest version of the Vienna Agreement.

## **2 Technical parameters**

The following technical parameters have to be used for planning and co-ordination purposes for analogue and digital systems:

### **2.1 410 - 430 MHz**

- mobile station transmit: 410 - 420 MHz
- base station transmit: 420 - 430 MHz
- nominal channelwidth: 12.5 kHz; spectrum use could be made in multiples of 12.5 kHz. Channels using a multiple of 12.5 kHz can only be used as preferential frequencies if they do not exceed the bandwidth of a preferential frequency or a bloc of preferential frequencies as given in Annex 1.
- duplex spacing: 10 MHz

### **2.2 440-450 MHz**

- mobile station transmit: 440-450 MHz
- base station transmit: 440-450 MHz
- nominal channelwidth: 12.5 kHz; spectrum use could be made in multiples of 12.5 kHz. Channels using a multiple of 12.5 kHz can only be used as preferential frequencies if they do not exceed the bandwidth of a preferential frequency or a bloc of preferential frequencies as given in Annex 2.

Administrations shall endeavour to use this band for simplex operation in conformity with the latest version of CEPT recommendation T/R 25-08.

## 2.3 450 - 470 MHz

- in the case of simplex operation:
  - mobile station transmit and base station transmit: 450 - 470 MHz
  - nominal channelwidth: 12.5 kHz; spectrum use could be made in multiples of 12.5 kHz. Channels using a multiple of 12.5 kHz can only be used as preferential frequencies if they do not exceed the bandwidth of a preferential frequency or a bloc of preferential frequencies as given in Annex 3.
- in the case of duplex operation:
  - duplex spacing: 10 MHz
  - mobile station transmit: 450 – 460 MHz
  - base station transmit: 460 - 470 MHz
  - nominal channelwidth: 12.5 kHz; spectrum use could be made in multiples of 12.5 kHz. Channels using a multiple of 12.5 kHz can only be used as preferential frequencies if they do not exceed the bandwidth of a preferential frequency or a bloc of preferential frequencies as given in Annex 3.

Administrations shall endeavour to use this band for duplex operation in conformity with the latest version of CEPT recommendation T/R 25-08.

## 3 Preferential use

The preferential frequencies may be used by the above mentioned administrations in the indicated co-ordination zones without prior co-ordination as long as the field strength at a height of 10 m above ground does not exceed the value of 20 dB $\mu$ V/m at points located for the zones F, G and H at the 60 km line and for the zones A, B, C, D and E at the 40 km line beyond the border. The curves for 10 % of the time shall be used for analogue systems. For digital systems the curves for 1 % of time shall be used

## 4 Non Preferential use

Non preferential frequencies may be used by the above mentioned administrations in the indicated co-ordination zones without prior co-ordination as long as the field strength at a height of 10 m above ground does not exceed the value of 20 dB $\mu$ V/m at points located on their border line. The curves for 10 % of the time shall be used for analogue systems. For digital systems the curves for 1 % of time shall be used.

## 5 Protection of receivers

Receivers can only claim protection as far as the maximum protection range for these receivers is not exceeded.

	Co-ordination zones A – B – C – D – E	Co-ordination zones F – G – H
Permissible fieldstrength	20 dB $\mu$ V/m	20 dB $\mu$ V/m
Maximum protection range for preferential frequencies	40 km	60 km
ERP of the Reference Transmitter	17 dBW	16 dBW

The ERP of the reference transmitter shall be increased by the antenna gain of the receiver in the actual direction.

The maximum protection range is calculated in the same way as the crossborder range.

## 6 Overview of the co-ordination zones

Zone A: 4-country case: BEL-D-F-LUX

Zone B: 3-country case: BEL-D-HOL

Zone C: 2-country case: D-HOL

Zone D: 2-country case: BEL-HOL

Zone E: 2-country case: BEL-F

Zone F: 2-country case: D-F

Zone G: 3-country case: D-F-SUI

Zone H: 2-country case: F-SUI

Annex 4 is giving an indication of the co-ordination zones.

## 7 Revision of the Agreement

With the consent of the other Administrations, 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.

## 8 Withdrawal from the Agreement

Each Administration may withdraw from this Agreement subject to 6 months notice.

## 9 Languages of the Agreement

This Agreement exists in the French and English languages, both texts being equally authoritative.

One original version of this Agreement in both languages is handed over to each signatory administration.

Cases of differences in the provisions of the English and French texts of this Agreement and their interpretation should be discussed between the signatories to this Agreement and should be resolved with the consent of all signatories to this Agreement.

## 10 Date of entry into force

This Agreement replaces the following ones :

- « Agreement on the use of the frequency band 410-430 MHz in the border areas between BEL – D – F – HOL – LUX – SUI, Berlin 1991 »
- « Accord sur le partage et l'utilisation des fréquences de la bande 440-470 MHz en zones frontalières entre les administrations de l'Allemagne, de la Belgique, de la France, du Luxembourg, des Pays-Bas et de la Suisse, Carcassonne 1993 ».

The entry into force of this Agreement is on the date of signature noting that some frequency sub-bands need additional bi- or multilateral agreements according to Annex 5.

Done at GRONINGEN on 24<sup>th</sup> of October 2002

For BELGIUM  
(I. Vander Beken )

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For FRANCE  
(M. Monnot)

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For GERMANY  
(T. Heutmann)

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For LUXEMBOURG  
(J. Gompelmann)

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For THE NETHERLANDS  
(G. van der Schoot)

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For SWITZERLAND  
(K. Vonlanthen)

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