

Agreement

between the Administrations of
Belgium, France, Germany, Luxembourg and The Netherlands

on the frequency co-ordination for systems for the
fixed wireless access (FWA) in the bands

3410 – 3500 MHz and 3500 – 3600 MHz

Berlin, 14. December 2001

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1 Introduction

In the frame of the Vienna Agreement in use, the Administrations of Belgium, France, Germany, Luxembourg and The Netherlands concluded this agreement for the purpose of the frequency co-ordination of systems for the fixed wireless access (FWA) in the bands 3410 – 3500 MHz and with 3500 – 3600 MHz.

2 Principles – Background

The Administrations mentioned above deemed it necessary to conclude an agreement on the division of preferential frequencies for FWA systems in conformity with the CEPT Recommendation CEPT/ERC/REC 14-03. For the Netherlands only Annex A1 of this Recommendation will be applied for the band 3500 – 3580 MHz.

Preferential frequencies are frequencies, which can be assigned by concerned administrations, without prior co-ordination under the terms laid down under item 3.3 of the agreement.

Non-Preferential frequencies are frequencies, which can be assigned by concerned administrations, without prior coordination under the terms laid down under item 3.4 of the agreement.

This agreement is considered to be the basis for the operation of FWA systems and doesn't preclude the use of other systems or services in the band. Non-FWA systems do not fall under the procedures of this agreement.

In order to enable each Administration to decide on its own in which subbands FWA may be introduced and to decide on the number of operators, the entire band was taken into account.

The entire band is divided into a number of subbands in which equal access to the spectrum is ensured for each Administration. This should enable each Administration to provide for adequate operating conditions for each operator.

According to the Recommendations ITU-R F.1399 and F.1401 point-to-multipoint and point-to-point systems are to be considered as FWA systems. The relevant ETSI specifications for the 3.5 GHz band have to be considered.

Operators shall have the possibility to cooperate in order to minimise interference and to seek to use the available spectrum efficiently. Such arrangements between operators shall be subject to confirmation by the Administrations involved.

3 Technical provisions

- 3.1 The division into preferential frequencies is described in Annex 1.
- 3.2 The division of the boundaries of the different zones is described in Annex 2.
- 3.3 Preferential frequencies in the 3.5 GHz band may produce a spectral power flux density (PFD) not exceeding $-122 \text{ dBW} / (\text{MHz} \times \text{m}^2)$ at a distance of 15 km inside the neighbouring country.

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- 3.4 Non-preferential frequencies in the 3.5 GHz band may produce a spectral power flux density not exceeding $-122 \text{ dBW} / (\text{MHz} \times \text{m}^2)$ at the border to the neighbouring country.
- 3.5 The calculation of the interfering spectral power flux density shall be based on the ITU-R Recommendation P.452 for free space propagation taking into account an additional statistical loss of 15 dB to consider the influence of for example topography, morphology, until a HCM program will be available and accepted by the countries concerned.
- 3.6 In case of multiple interferers at any point of the interference contour the resulting interfering signal shall be derived by summing up the contributing PFD values.
- 3.7 For any exchanges of data between Administrations the technical parameters as described in Annex 3 shall be used.

When the transition period in the Vienna Agreement for the Fixed Service will end, the Annex 2 of the Vienna Agreement shall replace the Annex 3 of this agreement.

4 Procedure in case of problems

Whenever problems occur, the Administrations affected shall inform each other and mutually find solutions.

5 Revision of this agreement

This agreement can be modified at the proposal of any signatory Administration with the agreement of the others if this is required in light of administrative, regulatory or technical developments.

6 Withdrawal from this agreement

Any Administration may withdraw from this agreement by the end of a calendar month by giving notice of its intention at least six months before. A declaration to that effect shall be addressed to all Administrations concerned.

7 Language of this agreement

This agreement exist in the English and French languages, each being equally authoritative.

The English original of this agreement will be laid down with the Inspectie Verkeer en Waterstaat, Divisie Telecom, in The Netherlands and the French original laid down with the Agence Nationale des Fréquences in France.

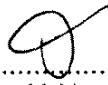
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8 Date of entry into force

This agreement enters into force for each Administration at the date of its signature.

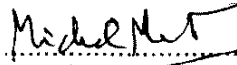
Berlin, 14 December 2001

For Belgium:



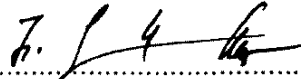
M. Vandroogenbroek

For France:



M. Monnot

For Germany:



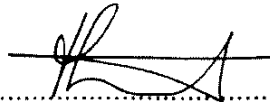
H. Günther

For The Netherlands:



H. Teinsma

For Luxembourg:



R. Thurmes

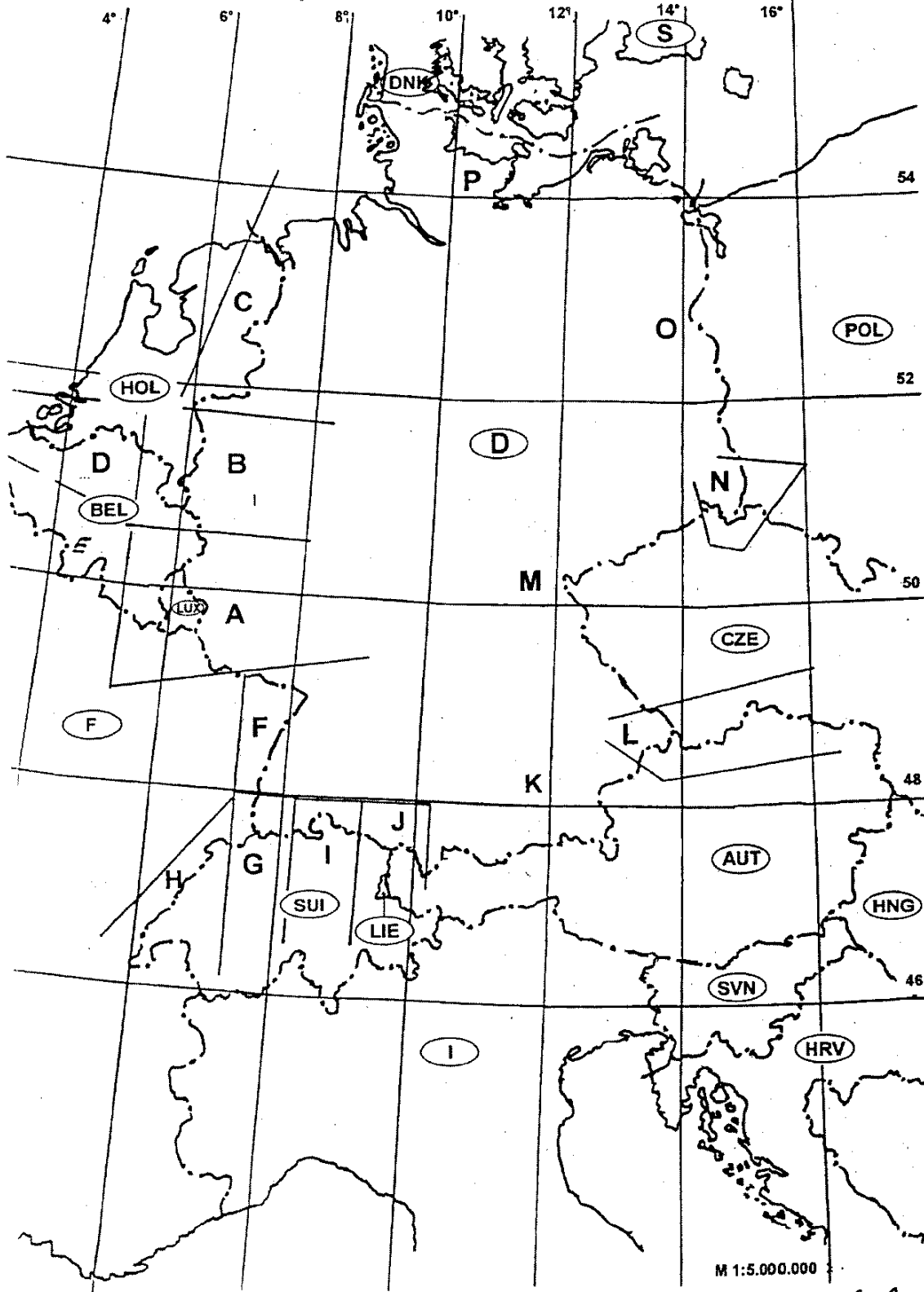
Annex 1

FWA DIVISION IN PREFERENTIAL FREQUENCIES FOR THE 3.5 GHZ BAND										
channel number	center freq. low. B.	center freq. upper B.	Zones							
			A1	A2	A3	B	C	D	E	F
-3		3501.25	-	-	-	HOL	HOL	HOL	-	-
-2		3504.75	-	-	-	HOL	HOL	-	-	-
-1		3508.25	-	-	-	HOL	HOL	-	-	-
1	3411.75	3511.75	F	D	D	D	D	HOL	-	D
2	3415.25	3515.25	F	D	D	D	D	HOL	F	D
3	3418.75	3518.75	LUX	LUX	LUX	D	D	BEL	BEL	F
4	3422.25	3522.25	LUX	LUX	LUX	D	D	BEL	BEL	F
5	3425.75	3525.75	BEL	D	BEL	HOL	HOL	HOL	BEL	D
6	3429.25	3529.25	BEL	D	BEL	HOL	HOL	HOL	BEL	D
7	3432.75	3532.75	LUX	LUX	LUX	HOL	HOL	HOL	F	F
8	3436.25	3536.25	LUX	LUX	LUX	HOL	HOL	HOL	F	F
9	3439.75	3539.75	F	F	D	HOL	D	HOL	F	D
10	3443.25	3543.25	F	F	D	BEL	D	HOL	F	D
11	3446.75	3546.75	LUX	LUX	LUX	BEL	D	HOL	BEL	D
12	3450.25	3550.25	LUX	LUX	LUX	HOL	HOL	HOL	BEL	D
13	3453.75	3553.75	BEL	D	BEL	D	D	BEL	F	F
14	3457.25	3557.25	BEL	D	BEL	D	D	BEL	F	F
15	3460.75	3560.75	BEL	D	D	D	D	HOL	F	F
16	3464.25	3564.25	BEL	D	D	D	D	HOL	BEL	F
17	3467.75	3567.75	F	F	D	BEL	HOL	BEL	BEL	D*)
18	3471.25	3571.25	F	F	D	BEL	HOL	BEL	BEL	D*)
19	3474.75	3574.75	LUX	LUX	LUX	HOL	HOL	BEL	F	F*)
20	3478.25	3578.25	LUX	LUX	LUX	HOL	HOL	BEL	F	F*)
21	3481.75	3581.75	F	F	BEL	BEL	HOL	BEL	BEL	D
22	3485.25	3585.25	F	F	BEL	BEL	HOL	BEL	BEL	D
23	3488.75	3588.75	F	F	BEL	BEL	HOL	BEL	F	F
24	3492.25	3592.25	BEL	F	BEL	BEL	HOL	BEL	F	F
25	3495.75	3595.75	BEL	LUX	LUX	-	HOL	BEL	BEL	-

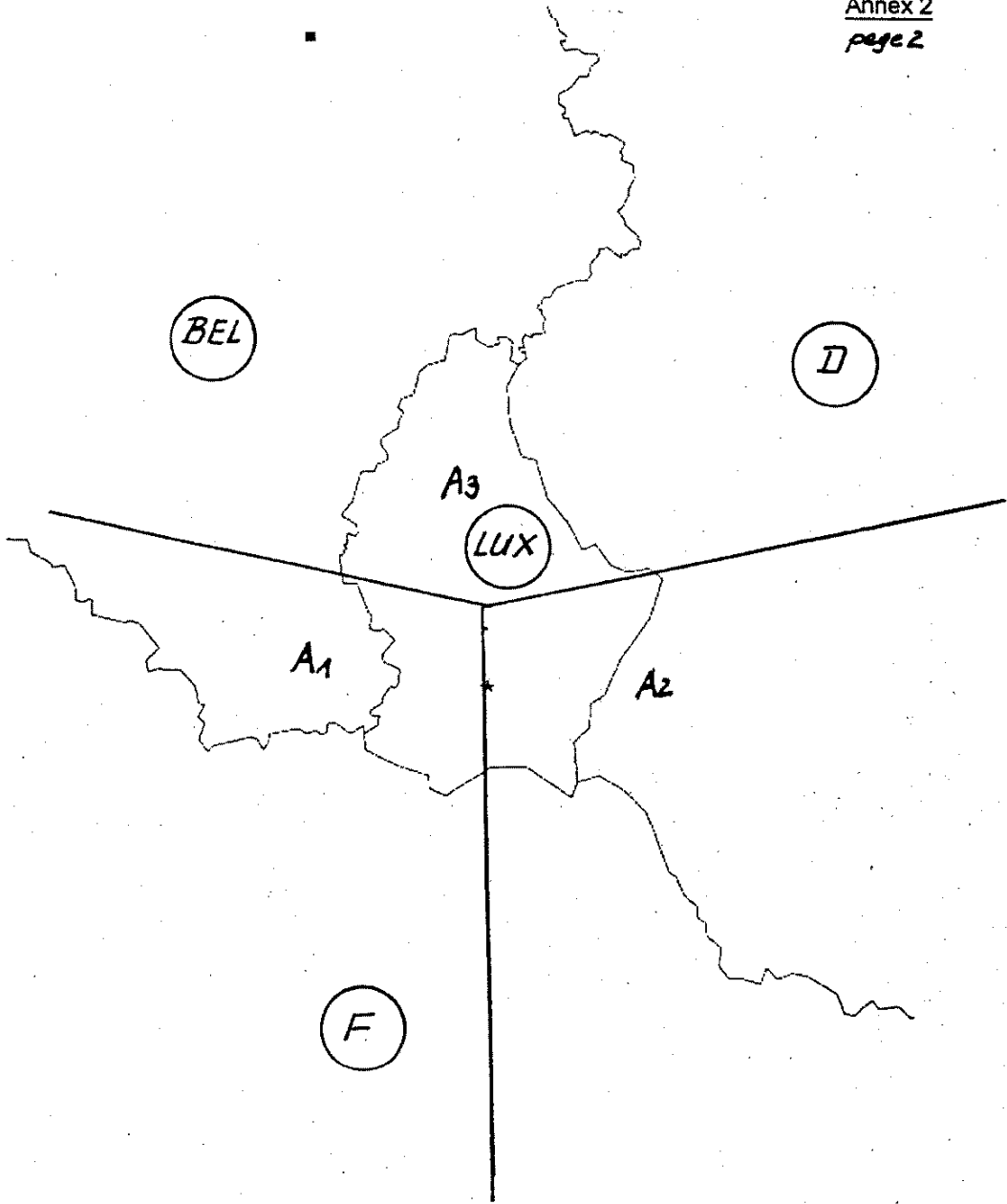
*) For the channels 17, 18, 19 and 20, the division in preferential frequencies is not valid in the area between the points 07E5734 / 48N4306 and 08E1357 / 48N5759 along the common border. Consequently, frequencies shall be coordinated under the provisions of paragraph 3 (technical provisions)

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Zones for preferential channel division for fixed service



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Annex 3

TECHNICAL PARAMETERS FOR
RADIO STATIONS IN FWA SYSTEMS IN THE 3.5 GHZ BAND

Field identification	Field name
1A	Transmitter frequency
1A1	Receiver frequency
2C	Date of bringing into use
4A	Name of station
4B	Country
4C	Geographical coordinates
4Z	Height of the site
7A	Designation of emission
8A	Power delivered to the antenna
8B	Maximum radiated power
9	Directivity of antenna
9A	Azimuth of maximum radiation
9B	Elevation angle of maximum radiation
9C	Angular width of the radiation main lobe
9D	Polarisation
9G	Maximum antenna gain
9Y	Height of the antenna above ground
13	Remarks

For the fields listed above:

- The definitions as given in Annex 1A of the Appendix S4 of the Radio Regulations have to be used.
- The format has to be in line with the ITU-R form T11

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