

AGREEMENT

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

**ON BORDER CO-ORDINATION OF
UMTS/IMT-2000 SYSTEMS**

**IN THE FREQUENCY BANDS
1900 - 1980 MHz, 2010 - 2025 MHz
AND 2110 - 2170 MHz**

1. INTRODUCTION

The frequency bands 1900 - 1980 MHz, 2010 - 2025 MHz and 2110 - 2170 MHz are designated for pan-European digital land mobile services Universal Mobile Telecommunications System (UMTS) / International Mobile Telecommunications 2000 (IMT-2000) according to ERC/DEC/(97)07 and ERC/DEC/(00)01. The harmonised use of spectrum for terrestrial UMTS within the bands 1900 - 1980 MHz, 2010 - 2025 MHz and 2110 - 2170 MHz is defined in ERC/DEC/(99)25.

Principles of border co-ordination for UMTS/IMT-2000 systems are laid down in ERC/REC/(01)01 (Border Co-ordination of UMTS/IMT-2000 Systems).

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

2. PRINCIPLES OF CO-ORDINATION

In order to assure in border areas equitable access to the spectrum and to enhance the efficiency of spectrum usage the principles of code co-ordination (according to Annexes 1 and 4 to ERC/REC/(01)01) shall be applicable to the UMTS/IMT-2000 frequency bands taking into account the provisions laid down in ERC/REC/(01)01 and in this Agreement.

Preferential use of frequencies as laid down in Annex 3 of ERC/REC/(01)01 shall not be the subject of this Agreement but may be subject to arrangements between operators.

These principles of co-ordination shall be applied in the frequency bands 1900 - 1920 MHz, 2020 - 2025 MHz and 2110 - 2170 MHz.

The band 2010 - 2020 MHz as identified in ERC/DEC(99)25 for self provided applications shall not be subject to this Agreement.

The use of the frequency band 1920 - 1980 MHz for TDD systems shall be subject to additional bilateral Agreements.

3. PROVISION FOR CODE CO-ORDINATION

3.1. ALLOTMENT OF PREFERENTIAL CODES

The division of preferential codes shall be in accordance with Annex 4 to ERC/REC/(01)01. The division relevant to the signatories to this Agreement is given at the Annex to this Agreement.

3.2. TECHNICAL CHARACTERISTICS

For bilateral relations between France and Belgium or where France or Belgium is involved:

- 3.2.1. Frequencies in the band 2110 - 2170 MHz for systems using preferential codes, or not using a CDMA IMT-2000 radio interface, may be used without co-ordination with a neighbouring country if the predicted mean field strength of each carrier produced by the base station does not exceed a value of 45 dB μ V/m/5MHz at a height of 3 m above ground at the border line.
- 3.2.2. In the bands 1900 - 1920 MHz and 2020 - 2025 MHz TDD systems using preferential codes may be used without co-ordination with a neighbouring country if the predicted mean field strength of each carrier produced by the base station does not exceed a value of 36 dB μ V/m/5MHz at a height of 3 m above ground at the border line.
- 3.2.3. Frequencies used at the border for systems using non preferential codes may be used without co-ordination with a neighbouring country if the predicted mean field strength of each carrier produced by the base station does not exceed a value of 21 dB μ V/m/5MHz at a height of 3 m above ground at the border line.

For bilateral relations where neither France nor Belgium is involved:

- 3.2.4. Frequencies in the band 2110 - 2170 MHz for systems using preferential codes, or not using a CDMA IMT-2000 radio interface, may be used without co-ordination with a neighbouring country if the predicted mean field strength of each carrier produced by the base station does not exceed a value of 37 dB μ V/m/5MHz at a height of 3 m above ground on a line at a distance of 6 km inside the neighbouring country.
- 3.2.5. In the bands 1900 - 1920 MHz and 2020 - 2025 MHz TDD systems using preferential codes may be used without co-ordination with a neighbouring country if the predicted mean field strength of each carrier produced by the base station does not exceed a value of 37 dB μ V/m/5MHz at a height of 3 m above ground on a line at a distance of 6 km inside the neighbouring country.
- 3.2.6. Frequencies used at the border for systems using non preferential codes may be used without co-ordination with a neighbouring country if the predicted mean field strength of each carrier produced by the base station does not exceed a value of 37 dB μ V/m/5MHz at a height of 3 m above ground at the border line.

Trilateral cases shall be considered as three bilateral cases.

4. PREDICTION OF PROPAGATION

For the field strength calculations to be used to trigger co-ordination the HCM tool of the Vienna Agreement, which is based on the site general model (see Annex 2 to ERC/REC/(01)01), shall be applied.

This provision for the prediction of propagation shall be revised when the new model contained in Recommendation ITU-R P.1546 (Method for Point-to-Area Predictions for terrestrial Services in the Frequency Range 30 to 3000 MHz) has been incorporated into the HCM program tool.

5. EXCHANGE OF INFORMATION FOR CO-ORDINATION PURPOSES

Exchanges of information for co-ordination purposes shall be in the format set out at Annex 2 to the Vienna Agreement (Berlin 2001).

The notification in conformity with paragraph 4.5.4 of the Vienna Agreement (Berlin 2001) is not required.

6. ARRANGEMENTS BETWEEN OPERATORS

The establishment of arrangements between operators shall be encouraged to the extent possible.

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 communications networks" done at Saint-Dié on 17th October 2001 shall be applicable to the UMTS/IMT-2000 frequency bands.

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.

ERC/REC/(01)01 may be reviewed within 2 years of its adoption in the light of practical experience of its application and the operation of UMTS/IMT-2000 systems (recommends 11). The consequences for this agreement of such a review and of possible amendments to ERC/REC/(01)01 shall be discussed between the signatories to this Agreement.

8. CO-ORDINATION BETWEEN UMTS/IMT-2000 SYSTEMS AND OTHER TERRESTRIAL SERVICES

The co-ordination of frequencies between UMTS/IMT-2000 systems and other terrestrial services shall be based on additional bilateral agreements. These bilateral agreements should take into account the provisions of this Agreement.

9. WITHDRAWAL FROM THE AGREEMENT

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

10. LANGUAGES OF THE AGREEMENT

This Agreement exists in the French and English language, both text 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.

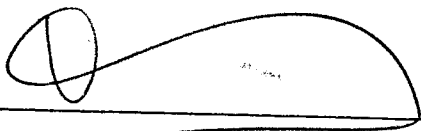
11. DATE OF ENTRY INTO FORCE

The entry into force of this Agreement shall be subject to the signing of additional bi- or trilateral Agreement(s) within which the detailed implementation of the provisions of this Agreement in the bi- or trilateral relations is laid down.

Withdrawn in March 15, 2010

Done at Brussels on 30th November 2001

For BELGIUM
(M. Vandroogenbroek)



For FRANCE
(M. Monnot)

Michel Monnot

For GERMANY
(T. Heutmann)

Thomas Heutmann

For LUXEMBOURG
(R. Thurmes)



For THE NETHERLANDS
(G. van der Schoot)



For SWITZERLAND
(K. Vonlanthen)

K. Vonlanthen

Withdrawn in March 15, 2010

ANNEX

Preferential codes for UTRA

Type country 1: BEL, SUI

Type country 2: D

Type country 3: F, HOL

Type country 4: LUX

For each type of country, the following tables show the sharing of the codes with its neighbouring countries, with the following conventions of writing:

	Preferential code
	non-preferential code

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1. FDD case:

For the FDD mode ; 3GPP TS 25.213 defines 64 « scrambling code groups » in §5.2.3, numbered {0..63}.

	Set A	Set B	Set C	Set D	Set E	Set F
Country 1	0..10	11..20	21..31	32..42	43..52	53..63
Border 1-2						
Zone 1-2-3						
Border 1-3						
Zone 1-2-4						
Border 1-4						
Zone 1-3-4						

	Set A	Set B	Set C	Set D	Set E	Set F
Country 2	0..10	11..20	21..31	32..42	43..52	53..63
Border 2-1						
Zone 2-3-1						
Border 2-3						
Zone 2-1-4						
Border 2-4						
Zone 2-3-4						

	Set A	Set B	Set C	Set D	Set E	Set F
Country 3	0..10	11..20	21..31	32..42	43..52	53..63
Border 3-2						
Zone 3-1-2						
Border 3-1						
Zone 3-1-4						
Border 3-4						
Zone 3-2-4						

	Set A	Set B	Set C	Set D	Set E	Set F
Country 4	0..10	11..20	21..31	32..42	43..52	53..63
Border 4-1						
Zone 4-1-2						
Border 4-2						
Zone 4-2-3						
Border 4-3						
Zone 4-3-1						

2. TDD case:

For the TDD mode, 3GPP TS 25.223 defines 32 « scrambling code groups » in §7.3, numbered {0..31}.

	Set A	Set B	Set C	Set D	Set E	Set F
Country 1	0..4	5..10	11..15	16..20	21..26	27..31
Border 1-2						
Zone 1-2-3						
Border 1-3						
Zone 1-2-4						
Border 1-4						
Zone 1-3-4						

	Set A	Set B	Set C	Set D	Set E	Set F
Country 2	0..4	5..10	11..15	16..20	21..26	27..31
Border 2-1						
Zone 2-3-1						
Border 2-3						
Zone 2-1-4						
Border 2-4						
Zone 2-3-4						

	Set A	Set B	Set C	Set D	Set E	Set F
Country 3	0..4	5..10	11..15	16..20	21..26	27..31
Border 3-2						
Zone 3-1-2						
Border 3-1						
Zone 3-1-4						
Border 3-4						
Zone 3-2-4						

	Set A	Set B	Set C	Set D	Set E	Set F
Country 4	0..4	5..10	11..15	16..20	21..26	27..31
Border 4-1						
Zone 4-1-2						
Border 4-2						
Zone 4-2-3						
Border 4-3						
Zone 4-3-1						