

Memorandum of Understanding

Concluded Between the Administrations of

France

and the

United Kingdom

for Frequency Co-ordination of specific frequency blocks in the

Bands 380-385 MHz and 390-395MHz

additional to

the Memorandum of Understanding

between the Administrations of Belgium, Germany, France,

Ireland, Luxembourg, The Netherlands, Switzerland, and

The United Kingdom concerning Co-ordination of frequencies in

the frequency bands 380-385 MHz and 390-395 MHz



1 Introduction

- 1.1 This Memorandum of Understanding (MoU) outlines the co-ordination and frequency sharing arrangements for a subset of channels within the frequency bands 380-385 MHz and 390-395 MHz. The channels to which this MoU applies are listed in Annex 1 and Annex 3. In this MoU, the channels listed in Annex 1 shall be referred to as the "Terrestrial Coordination Channels", and the channels listed in Annex 3 shall be referred to as the "Air-Ground-Air Co-ordination Channels". This MoU is additional to the existing MoU in this frequency band¹.
- 1.2 In order to provide the required level of service both France and the United Kingdom have a need to alter the field strength levels laid down in reference¹ on the channels listed in Annex 1 and Annex 3.. This MoU defines the usage of these channels that each Administration agrees to. As the system implementations are different for each coordination channel group, separate definitions are made for the Terrestrial and Air-Ground-Air Co-ordination Channels.
- 1.3 The Terrestrial Co-ordination Channels are used in terrestrial trunked mode networks in both France and the UK. Co-ordination of the Terrestrial Co-ordination Channels is defined in this MoU in Section 2.
- 1.4 The Air-Ground-Air Co-ordination Channels are used in an Air-Ground-Air trunked mode network in the UK. As for France, these channels will be used for ground-to-ground and Air-Ground-Air communications in a direct mode network or a trunked mode network. Due to the differences between the requirements of these networks it is not possible to achieve co-ordination by exchanging site details and channel plans. However, the Administrations of the UK and France require that efficient channel usage be achieved. Co-ordination on the Air-Ground-Air Co-ordination Channels is defined in this MoU in Section 3.
- 1.5 Accordingly, the Administrations of France and the UK agree on the following coordination procedures.

2 Usage of the Terrestrial Coordination Channels

- 2.1 The following procedures apply only to usage of the channels listed in Annex 1.

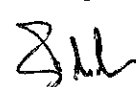
¹ "Memorandum of Understanding between the Administrations of Belgium, Germany, France, Ireland, Luxembourg, The Netherlands, Switzerland, and the United Kingdom concerning Co-ordination of frequencies in the frequency bands 380-385 MHz and 390-395 MHz (Bruxelles, 26th september 1997)".

- 2.2 Operators will make every effort through careful base station planning to ensure that the trigger level of 18 dB μ V/m at 10 m above ground level is respected wherever practical. However, for some base station locations the trigger level may need to be exceeded, and the following procedures will apply.
- 2.3 Where the predicted field strength 20 km inland from the coastline of the opposing country has a value between 18 dB μ V/m and 23 dB μ V/m at 10 m above ground level then details of the proposed or modified base station technical characteristics shall be exchanged between Administrations copy to the operators. Exchange of the technical details shall be in accordance with the format shown in Annex 2.
- 2.4 Should study of these technical characteristics indicate that the level of interference is acceptable no further action is required and agreement will be assumed if no response is received within 45 days.
- 2.5 Should study of these technical characteristics indicate that unacceptable interference would be caused to an existing base station assignment, the Administration shall reply within 45 days outlining their concerns. Operators will then collaborate to the fullest extent possible to reach a mutually acceptable solution. In the event that the operators cannot reach a mutually acceptable solution they will inform their respective administrations.
- 2.6 Where the predicted field strength 20 km inland from the coastline of the opposing country has a value greater than 23 dB μ V/m at 10 m above ground level formal co-ordination as outlined in the main MoU¹ shall be carried out.

3 Usage of the Air-Ground-Air Co-ordination Channels

- 3.1 The channel blocks 3, 8, 76-78, 88, 89, 94-100 shall be allocated into preferential and non-preferential blocks between France and the UK as defined in Annex 3.
- 3.2 The UK and France shall use their respective preferential channels in the blocks defined in Annex 3 anywhere in their country such that their ground-based equipment does not provide field strengths greater than 18 dB μ V/m 10 m above ground level at any point 20 km from the coast of the other country, and such that their airborne equipment may provide field strengths greater than 18 dB μ V/m 10 m above ground level for no more than 0.25% of the time but does not provide field strengths greater than 51 dB μ V/m 10 m above ground level at any point of the coast of the other country.

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- 3.3 The UK and France shall use their respective non-preferential channels in the blocks defined in Annex 3 anywhere in their country such that their ground-based equipment does not provide field strengths greater than 23 dB μ V/m 600 m above ground level at any point of the coast of the other country, and such that their airborne equipment may provide field strengths greater than 23 dB μ V/m 600 m above ground level for no more than 0.25 per cent of the time but does not provide field strengths greater than 51 dB μ V/m 600 m above ground level at any point of the coast of the other country.

4 Review

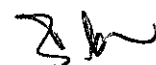
- 4.1 Each Administration may request a review of this MoU. Any part of this MoU may be revised in the light of future developments and experience in the operation of the networks covered by the MoU.

5 Withdrawal

- 5.1 Either country may withdraw from the MoU subject to giving notice six months prior to the date of withdrawal.

6 Language

- 6.1 This MoU exists in the French and English language, each being equally authoritative.
- 6.2 The English original of this MoU will be laid down with the United Kingdom Office of Communications (Ofcom) in London and the French original will be laid down with the Agence Nationale des Fréquences in Maisons-Alfort.



7 Date of entry into force

7.1 This MoU will enter into force on 1st January 2005

7.2 Done at London on 19th November 2004

For FRANCE

A handwritten signature in black ink, appearing to be 'A. Rigole', with a stylized, cursive script.

A. RIGOLE

For the UNITED KINGDOM

A handwritten signature in black ink, appearing to be 'B. A. Last', with a stylized, cursive script.

B. A. LAST

Annex 1: Terrestrial Co-ordination Channels

| 50 kHz Block Reference | Block Centre Frequency in lower band (MHz) | Block Centre Frequency in upper band (MHz) | Preferential Rights |
|------------------------|--|--|---------------------|
| 24 | 381.175 | 391.175 | UK |
| 28 | 381.375 | 391.375 | UK |
| 32 | 381.575 | 391.575 | UK |
| 35 | 381.725 | 391.725 | UK |
| 36 | 381.775 | 391.775 | UK |
| 39 | 381.925 | 391.925 | UK |
| 40 | 381.975 | 391.975 | UK |
| 43 | 382.125 | 392.125 | UK |
| 44 | 382.175 | 392.175 | UK |
| 47 | 382.325 | 392.325 | UK |
| 48 | 382.375 | 392.375 | UK |
| 51 | 382.525 | 392.525 | UK |
| 54 | 382.675 | 392.675 | UK |
| 57 | 382.825 | 392.825 | UK |
| 25 | 381.225 | 391.225 | France |
| 29 | 381.425 | 391.425 | France |
| 33 | 381.625 | 391.625 | France |
| 38 | 381.875 | 391.875 | France |
| 41 | 382.025 | 392.025 | France |
| 45 | 382.225 | 392.225 | France |
| 49 | 382.425 | 392.425 | France |
| 52 | 382.575 | 392.575 | France |
| 58 | 382.875 | 392.875 | France |
| 61 | 383.025 | 393.025 | France |
| 64 | 383.175 | 393.175 | France |
| 67 | 383.325 | 393.325 | France |
| 70 | 383.475 | 393.475 | France |
| 73 | 383.625 | 393.625 | France |

Annex 2: Base Station Characteristics for Lower Co-ordination Channels

| Country | Site Name | Longitude (DMS) | | | | Latitude (DMS) | | | | Antenna Height Above Ground Level (m) | Antenna Used | Azimuth | Power (dBm) |
|---------|-----------|-----------------|--|--|--|----------------|--|--|--|---------------------------------------|--------------|---------|-------------|
| | | | | | | | | | | | | | |




Annex 3: Air-Ground-Air Co-ordination Channels

| 50 kHz Block Reference | Block Centre Frequency in Lower Band (MHz) | Block Centre Frequency in Upper Band (MHz) | Preferential Rights |
|------------------------|--|--|---------------------|
| 3 | 380.125 | 390.125 | France |
| 8 | 380.375 | 390.375 | UK |
| 76A* | 383.775 | 393.775 | France |
| 77A* | 383.825 | 393.825 | France |
| 78A* | 383.875 | 393.875 | France |
| 88A* | 384.375 | 394.375 | France |
| 89A* | 384.425 | 394.425 | France |
| 94A* | 384.675 | 394.675 | UK |
| 95A* | 384.725 | 394.725 | UK |
| 96A* | 384.775 | 394.775 | UK |
| 97 | 384.825 | 394.825 | France |
| 98 | 384.875 | 394.875 | France |
| 99 | 384.925 | 394.925 | UK |
| 100 | 384.975 | 394.975 | UK |

* Suffix "A" denotes the lower 25 kHz of the 50 kHz block. The centre frequency shown refers to the centre frequency of the 50 kHz block. In France's case 10 kHz channels are used, and so it is noted that only the 2 channels completely within the 25 kHz block are preferential. In the UK's case 25 kHz channels are used.

