MEMORANDUM OF UNDERSTANDING
CONCLUDED BETWEEN
FRANCE AND
THE UNITED KINGDOM
FOR FREQUENCY CO-ORDINATION IN THE
1710-1785 AND 1805-1880 MHz
FREQUENCY BANDS
TO BE APPLIED IN THE AREA INCLUDING THE
CHANNEL ISLANDS AND FRANCE

London, 16th November 2000
1 - INTRODUCTION

1.1 Frequencies in the bands 1710 - 1785 MHz (mobile transmit) and 1805 - 1880 MHz (base transmit) are designated for pan-European digital land mobile services (DCS 1800) according to ERC/DEC/(95)03 and CEPT T/R 22-07 (MONTREUX, 1993).

1.2 The UK Administration is responsible for all relations with France concerning this agreement.

1.3 Both administrations express their will to use the HCM software (Harmonised Calculation Method) as a common tool for coordination purposes as soon as possible.

1.4 The Administration of France has licensed three network operators to operate DCS1800. The Administration of the United Kingdom has licensed one network operator to operate DCS1800 in Jersey and plans to licence one network operator to operate DCS1800 in Guernsey and its main dependencies which are Alderney and Sark.

1.5 Accordingly, the Administrations of the United Kingdom and France have agreed the following coordination procedures.

2 - PROCEDURE FOR FREQUENCY COORDINATION BETWEEN DCS 1800 SYSTEMS

The coordination procedure is based on the concept of preferential frequencies in accordance with CEPT Recommendation T/R 22-07 (Montreux, 1993). The 1710-1785 and 1805-1880 MHz frequency bands will be apportioned as groups of frequencies which can be assigned between the two countries as "preferential bands".

In a preferential band allocated to one country, a base station may be established without prior coordination if the anticipated field strength at all points on the coastline of the neighbouring country does not exceed the trigger value specified in paragraph 2.1.1.

In a non-preferential band assigned to one country, a base station may be established without prior coordination if the anticipated field strength at all points on the coastline of the neighbouring country does not exceed the trigger value specified in paragraph 2.1.2. Neither such a base station nor a mobile served by that station may complain of interference caused by a station in the neighbouring country which complies with the conditions laid down for the use of preferential frequencies.

2.1 - Technical characteristics

2.1.1 - Preferential bands

In a preferential band, the field strength shall not exceed the trigger value of 38 dBµV/m at 3 metres above ground level at all points on the coastline of the neighbouring country.
2.1.2 - Non-preferential bands

In a non-preferential band, the field strength shall not exceed the trigger value of 25 dBµV/m at 3 metres above ground level at all points on the coastline of the neighbouring country.

2.1.3 - Prediction of propagation

The field prediction method shall be based on CEPT Recommendation T/R 22-07 (Montreux, 1993), which shall be applied as follows:

- For preferential channels:

  50% of time, 50% of locations for land (ITU-R Recommendation PN.370-7 curves)

  50% of time, 50% of locations for cold sea (ITU-R Recommendation PN.370-7 curves)

- For non-preferential channels:

  10% of time, 50% of locations for land (ITU-R Recommendation PN.370-7 curves)

  10% of time, 50% of locations for cold sea (ITU-R Recommendation PN.370-7 curves)

  - height of the mobile receiver antenna set at 3 m;
  - average terrain height for the base station in all relevant directions;
  - type of terrain (eg land, sea, mixed path);
  - effective radiated power, taking account of antenna gain, tilt and azimuth.

This method is an interim solution. The agreed objective is that both administrations shall promote the further development of the HCM software, in particular the incorporation of a sea path algorithm.

2.1.4 - Additional interference sources

Where multiple interference sources are present, the simplified algorithm given in Annex 2 of CEPT Recommendation T/R 22-07 shall be applied.

2.2 - Allocation of preferential channels
The division of preferential channels between the two countries shall be in accordance with Annex 1.

3 - EXCHANGE OF INFORMATION

3.1- Exchange of information between Administrations

Details of future base stations shall be made available to the administration of the neighbouring country, in accordance with the format given in Annex 2 to the Vienna Agreement currently in force, if the field strength of these stations, predicted by the agreed method, exceeds a level 5dB less than the trigger values for the preferential or non-preferential bands. These details shall also be made available if the administration of the neighbouring country considers, after taking measurements in accordance with Appendices 2 and 3 of Annex 7 to the current Vienna Agreement, that the trigger values are being exceeded.

3.2- Exchange of information between operators

An agreement between the administrations of France and the United Kingdom concerning the approval of planning arrangements between mobile radiocommunications network operators was signed on the 13th October 1999.

At the request of any operator, details of existing and future base stations shall be made available by an operator in the neighbouring country.

The geographical areas, and the stations concerned are:

- all the Channel Islands DCS1800 stations,
- the French DCS1800 stations located within a 25 km wide area along French coast between St Brieuc and Cherbourg

4 - PROCEDURE AND EXCHANGES OF INFORMATION FOR COORDINATION PURPOSES

Exchanges of information for co-ordination purposes shall be in the format specified in Annex 2 to the Vienna Agreement currently in force and in accordance with the procedures described in Annex 2 to the present MoU.

5 - REVIEW AND FOLLOW UP OF THE MEMORANDUM OF UNDERSTANDING

Page 5 / 8
Either 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.

6 – WITHDRAWAL FROM THE MEMORANDUM OF UNDERSTANDING

Either Administration may withdraw from this Memorandum of Understanding subject to 6 months notice.

7 - LANGUAGE OF THE MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding is drafted in the French and English languages, both languages having equal authority.

The original version in French is laid down with the Agence Nationale des Fréquences in Maisons-Alfort, the original version in English is laid down with the United Kingdom Radiocommunications Agency in London.

8 - DATE OF ENTRY INTO FORCE

This Memorandum of Understanding will enter into force on 16th November 2000.

Done at London on 16th November 2000

For FRANCE

[Signature]
M. MONNOT

For the UNITED KINGDOM

[Signature]
B. LAST
ANNEX 1

ALLOCATION OF PREFERENTIAL CHANNELS BETWEEN THE CHANNEL ISLANDS AND FRANCE

<table>
<thead>
<tr>
<th>DCS 1800 CHANNEL</th>
<th>COUNTRY</th>
</tr>
</thead>
<tbody>
<tr>
<td>512-561</td>
<td>France</td>
</tr>
<tr>
<td>562-593</td>
<td>Channel Islands</td>
</tr>
<tr>
<td>594-632</td>
<td>France</td>
</tr>
<tr>
<td>633-688</td>
<td>Channel Islands</td>
</tr>
<tr>
<td>689-727</td>
<td>France</td>
</tr>
<tr>
<td>728-752</td>
<td>Channel Islands</td>
</tr>
<tr>
<td>753-768</td>
<td>France</td>
</tr>
<tr>
<td>769-784</td>
<td>Channel Islands</td>
</tr>
<tr>
<td>785-800</td>
<td>France</td>
</tr>
<tr>
<td>801-824</td>
<td>Channel Islands</td>
</tr>
<tr>
<td>825-885</td>
<td>France</td>
</tr>
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</table>
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ANNEX 2
COORDINATION PROCEDURE APPLICABLE TO RELATIONS BETWEEN
FRANCE AND THE UNITED KINGDOM

1.- Frequencies must be co-ordinated in accordance with the conditions defined in the current Vienna Agreement.

2.- An Administration wishing to bring a radio station into service must lodge a request for co-ordination with the other Administration by way of notice. This request must include at least the characteristics described in Annex 2 of CETF Recommendation T/R 25-06 (Vienna 1999).

3.- If, following a technical evaluation of the request for co-ordination, the Administration concerned requires information which is missing or which needs amplification, it shall request this information within 20 days following receipt of the request for co-ordination.

4.- Once it has received all the information regarding this request for co-ordination, the Administration concerned shall evaluate the information as specified in this Agreement. It shall notify the requesting Administration of the result of the evaluation within 45 days.

5.- If the Administration which initiated the co-ordination procedure has not received a reply within 45 days, it shall send a reminder letter. the Administration concerned must reply to this reminder within 30 days.

6.- If the Administration concerned has still not replied within the period specified in point 5, it shall be deemed to have given its agreement and the radio station shall be deemed to have been co-ordinated.

7.- Any frequency assignment made after positive co-ordination shall be notified to the Administration concerned within 180 days after agreement has been received. This notification of assignment shall require the frequency to be entered on the Frequency Register. If no assignment is granted within 180 days, the Administration concerned shall send a reminder to the Administration which requested the co-ordination. If there is no notification within a further 30 days the request for co-ordination shall be deemed null and void.

8.- An Administration wishing to modify the technical characteristics relating to stations entered on the Frequency Register shall notify the Administration concerned to that effect. If such modification increases the likelihood of interference in the neighbouring country, co-ordination is required. If the interference position is unchanged or improved, the modification need simply be brought to the notice of the Administration concerned. The entry in the Frequency Register shall be amended accordingly.