

20

AGREEMENT ON FREQUENCY COORDINATION
BETWEEN
FRANCE AND THE UNITED KINGDOM
IN THE FREQUENCY BAND
169.4125 - 169.8125 MHz
DESIGNATED FOR
THE EUROPEAN RADIO MESSAGING SYSTEM (ERMES)

1. INTRODUCTION.

1.1 The frequency band 169.4125 - 169.8125 MHz is designated for a pan-European public digital radio messaging system, the "European Radio Messaging System" (ERMES), according to the relevant CEPT Recommendation (T/R 25-07; Madrid, 1992) and EC Directive (90/544/EEC).

1.2 In order to minimise any problems of interference between the systems operating in neighbouring countries, it is necessary to establish agreements for regulatory and technical procedures for frequency coordination. These agreements should be designed to reduce the administrative burden and permit a rapid deployment of ERMES in the countries concerned.

1.3 The Administrations of France and the United Kingdom each intend to licence network operators to operate ERMES in their respective countries.

2. AGREEMENT.

The Administrations of France and the United Kingdom agree to operate the coordination procedure described below.

3. COORDINATION PROCEDURE.

3.1 Preferred channels.

The band 169.4125 - 169.8125 MHz is divided into 16 channels, each with a bandwidth of 25 kHz. The coordination procedure shall be based on the concept of preferred and non-preferred channels. The 16 channels shall be allotted equally between France and the United Kingdom. The allotment plan is contained in Annex A to this agreement.

3.2 Trigger values.

For the preferred and non-preferred channels, "Trigger Values" shall be defined as follows:

Preferred channels	52 dB(μ V/m)
Non-preferred channels	32 dB(μ V/m)

3.3 Field strength prediction

The field strength shall be predicted by the method given in paragraph 3.6 below and shall take into account the percentage of time for which that field strength is expected to be exceeded.

3.4 Use of the preferred channels.

A base station may be established without coordination on a country's preferred channel provided the predicted field strength at all points on the coastline of the other

country does not exceed the higher of the two Trigger Values.

3.5 Use of the non-preferred channels.

A base station may be established without coordination on a non-preferred channel provided the predicted field strength at all points on the coastline of the other country does not exceed the lower of the two Trigger Values. Receivers served by such a base station may not claim protection from interference caused by stations of the neighbouring country respecting the conditions of paragraph 3.4 above.

3.6 Propagation prediction.

The method of field strength prediction shall be based upon CCIR Recommendation 370-5, which shall be applied as follows:

3.6.1 The Propagation Curves used shall be:

- for preferred channels:

50% Time, 50% Locations for land (Rec. 370-5 fig. 1a)

50% Time, 50% Locations for sea (Rec. 370-5 fig. 1b)

- for non-preferred channels:

10% Time, 50% Locations for land (Rec. 370-5 fig. 2a)

10% Time, 50% Locations for cold sea (Rec. 370-5 fig. 2b)

3.6.2 To allow for a receiving antenna contained within a paging receiver, rather than a receiving antenna at 10 metres above ground assumed by CCIR Recommendation 370, a correction factor of 10 dB shall be subtracted from the predicted field strength.

3.6.3 The height above mean terrain shall be determined for the base station in the directions of relevance. If this is less than 37.5 metres it shall be set to 37.5 metres.

3.6.4 Where the height above mean terrain lies between two values for which curves are given in CCIR Recommendation 370, interpolation shall be used to determine the field strength in dB(μ V/m).

3.6.5 Where the path between the base stations and the coast of the neighbouring country contains both land and sea, prediction shall be based on the interpolation method "A" of CCIR Report 239-7.

3.6.6 The effective radiated power used to calculate predicted field strengths shall take into account any antenna gain due to directivity and down-tilt in the directions of relevance.

3.7 Exchange of information.

For all base stations whose field strength, predicted by the agreed method, exceeds a level 5 dB less than the Trigger Values for the appropriate preferred or non-preferred channels, details shall be made available to the administration of the neighbouring country, in accordance with the format given in T/R 25-08 (Lecce 1989 (CR)). These details shall also be made available if the Administration of the neighbouring country considers, after measurements, that the Trigger Values are being exceeded.

3.8 Alternative coordination procedure.

The Administrations of France and the United Kingdom commit themselves to ensuring that their systems respect the Trigger Values given in (3.2) above. However, there might be an occasional need to establish stations such that the field strength at the neighbouring coast line will exceed the Trigger Values. In such cases, administrations may seek coordination according to the procedure described in Paragraph 5 of CEPT Recommendation T/R 25-07 (Madrid 1992) and in accordance with the format given in T/R 25-08 (Lecce 1989 (CR)).

4. COORDINATION IN THE CHANNEL TUNNEL.

Inside the Tunnel, each Administration is at liberty to use its preferred channels in accordance with Annex A; the provisions of paragraphs 3.2 to 3.8 are not applicable.

5. REVIEW.

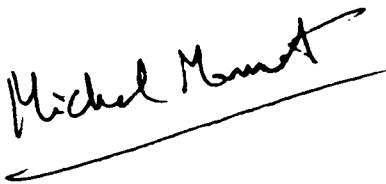
This coordination agreement will be the subject of a progress review in the early part of 1996. The Trigger Values and prediction method defined in this agreement will be reviewed in the light of future developments in prediction methods and experience in the operation of ERMES networks in France and the United Kingdom.

6. ENTRY INTO FORCE OF THE AGREEMENT.

This agreement exists in the French and English languages, both texts being equally authoritative, and shall enter into force on 18 February 1993.

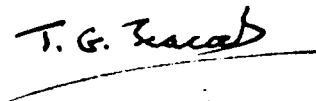
Done at: London, 17 February 1993

For France:

A handwritten signature in black ink, reading "Michel Monnot", written in a cursive style. The signature is underlined with a single horizontal line.

M. MONNOT

For The United Kingdom:

A handwritten signature in black ink, reading "T. G. Jeacock", written in a cursive style. The signature is underlined with a single horizontal line.

T. JEACOCK

The English original of this Frequency Coordination Agreement will be laid down with the United Kingdom Radiocommunications Agency in London, with the French original laid down with the Direction de la Réglementation Générale du Ministère des Postes et Télécommunications in Paris.

ANNEX A:**ALLOTMENT PLAN FOR PREFERRED CHANNELS.**

ERMES Channel Number	Frequency (MHz)	Country
01	169.425	United Kingdom
02	169.450	France
03	169.475	United Kingdom
04	169.500	France
05	169.525	United Kingdom
06	169.550	France
07	169.575	France
08	169.600	France
09	169.625	United Kingdom
10	169.650	France
11	169.675	United Kingdom
12	169.700	United Kingdom
13	169.725	United Kingdom
14	169.750	France
15	169.775	United Kingdom
16	169.800	France