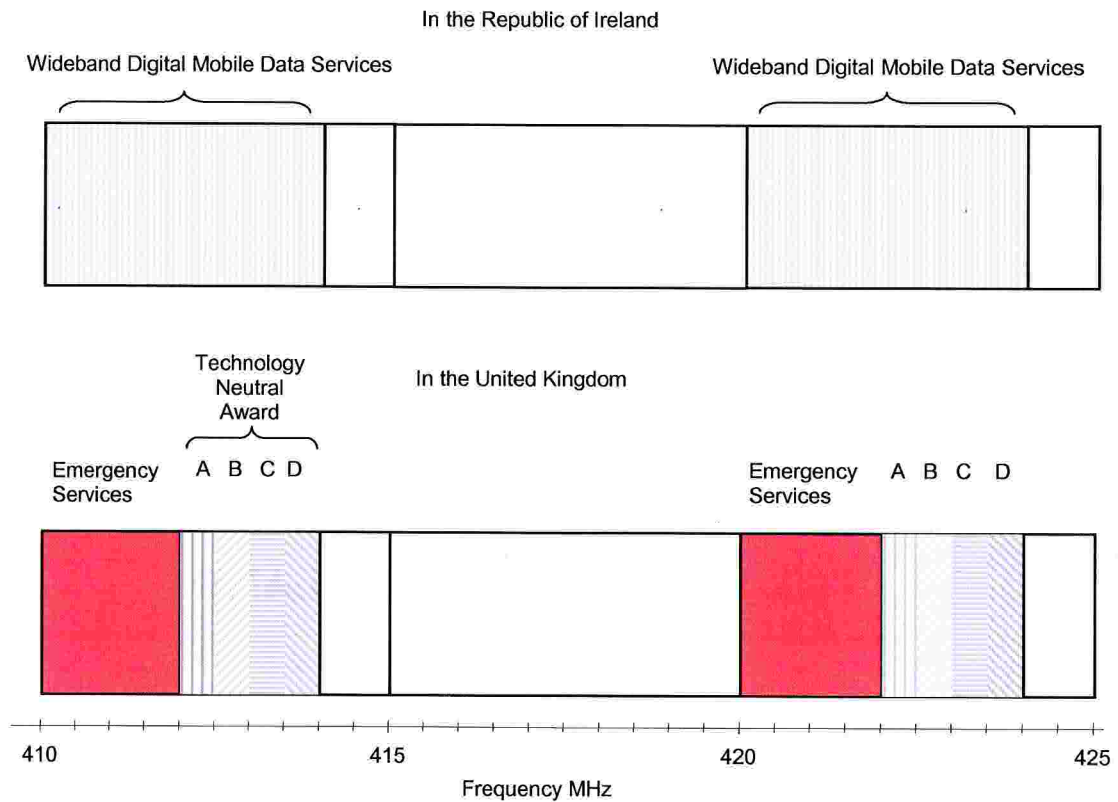




**MEMORANDUM OF UNDERSTANDING ON
FREQUENCY CO-ORDINATION BETWEEN
THE REPUBLIC OF IRELAND
AND
THE UNITED KINGDOM
IN THE FREQUENCY BANDS
410 TO 414 AND 420 TO 424 MHz**

1. INTRODUCTION

- 1.1. This memorandum describes the procedures for the coordination of radio services between the Republic of Ireland (ROI) and the United Kingdom (UK) in the frequency bands 410 to 414 and 420 to 424MHz.
- 1.2. The current use of the frequency band 410 to 414 and 420 to 424MHz in the ROI and the UK is shown in the diagram below.



- 1.3. In the UK the frequency bands 410 to 412 paired with 420 to 422 MHz are designated for Government use and will be used by the Emergency Services. The frequency bands 412 to 414 paired with 422 to 424 MHz are planned to be awarded on a technology neutral basis, in the second half of 2006 according to ¹, 25KHz TETRA technology is anticipated.
- 1.4. In the ROI the frequency bands 410 to 414 paired with 420 to 424 MHz are licensed for Wideband Digital Mobile Data services, according to ECC Decision (04)06, EV-DO CDMA technology is anticipated.
- 1.5. Accordingly, the Administrations of the UK and the ROI have agreed the following co-ordination procedures.

¹ Award of available spectrum 412-414MHz paired with 422-424MHz Ofcom Consultation 13 October 2005.

2. PROCEDURE FOR COORDINATION

- 2.1. The co-ordination procedure, shall be based on the principle of equitable access to the spectrum resource
- 2.2. Within the frequency bands 410 to 414 MHz and 420 to 424 MHz, a station may be established without co-ordination, provided that the predicted power spectral density (PSD) produced by the station, at a height of 10m above ground at all locations beyond a line 15km inside the border or coast line of the neighbouring country does not exceed -140 dBW in a bandwidth of 25 kHz.

3. PREDICTION OF PROPAGATION

The field prediction method shall be according to the current version of Recommendation ITU-R P.1546 -2² which shall be applied as follows:

- 10% of the time and 50% of locations for land
- 10% of the time and 50% of locations for cold sea

Taking account of:

- Height of the mobile receiver antenna set at 10 m above ground.
- Average terrain height for the base station in all main directions
- Type of terrain (e.g. land, sea, mixed path)
- Effective radiated field strength
- Antenna tilt and azimuth
- Terrain clearance angle.

4. EXCHANGE OF INFORMATION

An MoU between the administrations of the ROI and the UK, which enables co-ordination between operators, subject to agreement of the Administrations, was signed on the 22 November 2000.³ This principle shall be extended to operators of systems for the frequency bands identified in this MOU.

At the request of one of the operators, details of existing and future base stations shall be made available by the other operator(s). Where interference is believed to be caused by another operator the respective operators shall exchange information with a view to resolving the difficulty. A copy of the interference details shall also be sent to both administrations.

² Recommendation ITU-R P.1546, Method for point-to-area predictions for terrestrial services in the frequency range 30 MHz to 3 000 MHz

³ Agreement between the administrations of United Kingdom/Ireland concerning the approval of planning arrangements between operators of mobile radio communication networks 22 November 2000

The Administrations of the ROI and the UK agree to facilitate this exchange of information between operators and to intervene should operators not be able to resolve cases of interference by mutual agreement.

Exchange of information for co-ordination purposes shall be in the format given Annex 1 to this agreement.

5. CO-ORDINATION PROCEDURE

The Administration of the ROI and the UK are committed to ensuring that the licensees covered by this Memorandum of Understanding, respect the limits for establishment of base stations without co-ordination, given in 2 above. However, there might be an occasional need to establish stations such that the PSD will exceed the limits given in 2 above. In such cases, each administration may seek co-ordination according to the procedure described in Annex 1.

6. REVIEW ARRANGEMENTS

The limits and prediction methods defined in this Memorandum of Understanding may be reviewed in the light of experience of operation of networks in both countries and future prediction developments.

7. TERMINATION OF THE MEMORANDUM OF UNDERSTANDING

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

8. DATE OF ENTRY INTO FORCE

This Memorandum of Understanding shall enter into force on 1 October 2006.

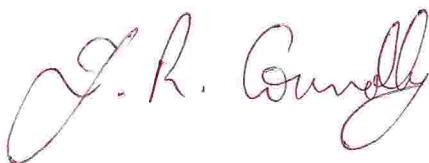
For the UNITED KINGDOM administration.



P BURY

Signed at London on 1 September 2006

For the administration of the REPUBLIC OF IRELAND



J CONNOLLY

Signed at Dublin on 19 September 2006

ANNEX 1

CO-ORDINATION PROCEDURE APPLICABLE TO RELATIONS BETWEEN THE UNITED KINGDOM AND

1. - An Administration wishing to bring a station into service must submit a request for co-ordination with the other Administration by way of notice. As a minimum, the following characteristics should be forwarded:

- a) Frequency in MHz
- b) Name of transmitter station
- c) Country of location of transmitter station
- d) Geographical co-ordinates
- e) Effective antenna height
- f) Antenna polarisation
- g) Antenna azimuth
- h) Directivity in antenna systems
- i) Effective radiated power
- j) Channel bandwidth
- k) Expected coverage zone
- l) Date of entry into service
- m) Antenna tilt

The Administration affected shall evaluate the request for co-ordination and shall within 60 days notify the result of the evaluation to the Administration requesting co-ordination.

If in the course of the co-ordination procedure the Administration affected requires additional information, it may request such information.

An Administration not having responded within 60 days following receipt of a coordination request shall be deemed to have given its consent and the station may be put into use with the characteristics given in the request for co-ordination.