



ERC Decision (98)25

The harmonised frequency band to be designated for
analogue PMR 446

Approved 23 November 1998

Amended 1 June 2012

EXPLANATORY MEMORANDUM

1 INTRODUCTION

The free circulation of radio communication products and the provision of equipment in Europe for radio communications are only achievable if there are common regulations throughout Europe regarding the availability of frequency bands, harmonised technical conditions and border crossing procedures. The main requirements for fulfilling these objectives for PMR 446 radio equipment are the Europe-wide availability of a suitable frequency band, harmonised technical conditions and the implementation of national regulations based on the Harmonised European Standard EN 300 296-2.

PMR 446 is intended to operate on collective frequencies shared by many users on an uncoordinated basis.

The equipment uses integral antennas only in order to maximise sharing and minimise interference. PMR 446 is intended for voice communications.

This ECC Decision provides the necessary mechanism for CEPT administrations to continue their commitment to the frequency band 446.000-446.100 MHz for analogue PMR 446 radio equipment. The Decision was initiated in 1996 with a request from industry and manufacturers to open up spectrum for such an application.

Due to the requirement for free circulation and cross border operation it became indispensable to identify a harmonised band for PMR 446.

In order to introduce this category of equipment within CEPT, the ERC decided that harmonised conditions should be developed, as far as possible.

This ECC Decision was reviewed by CEPT in 2011 and the mandatory requirement for all equipment to have reception capability and a specified reception period was added.

2 BACKGROUND

The PMR 446 radio application is intended for radio communications with transmission and reception taking place on the same channel (single frequency, simplex traffic). The radio equipment is designed to be used without the need to have any technical qualifications.

PMR 446 radio equipment is exempted from individual licensing and anyone can use the radio equipment without any prior individual permission from the administration.

The designation of a harmonised band has formed the basis for the free circulation and use of PMR 446 within Europe and has also facilitated the mutual recognition of conformity assessment.

3 REQUIREMENT FOR AN ECC DECISION

The allocation or designation of frequency bands for use by a service or system under specified conditions in CEPT administrations is laid down by law, regulation or administrative action. ECC Decisions are required to deal with the radio spectrum related matters and for free circulation and use of equipment throughout Europe. The free circulation and use of radio equipment and the provision of Pan European services will be greatly assisted when all CEPT administrations exempt the same categories of radio equipment from licensing and apply -to achieve that- the same criteria.

The harmonisation on a European basis supports the Directive 1999/5/EC of the European Parliament and of the Council of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity. A commitment by CEPT administrations to implement this ECC Decision will provide a clear indication that the required frequency bands are available on a European-wide basis.

ERC DECISION OF 23 NOVEMBER 1998 ON THE HARMONISED FREQUENCY BAND TO BE DESIGNATED FOR ANALOGUE PMR 446 (ERC/DEC/(98)25)**AMENDED 1 JUNE 2012**

“The European Conference of Postal and Telecommunications Administrations,

considering

- a) that there is an industry and user requirement for harmonised usage conditions for PMR 446 radio equipment throughout Europe;
- b) that it would be desirable for administrations to have common regulations at their disposal in order to control free circulation and use of PMR 446 radio equipment throughout Europe;
- c) that the European Telecommunications Standards Institute (ETSI) has developed the Harmonised European Standard EN 300 296-2 that can be used for state-of-the-art PMR 446 radio equipment;
- d) that EN 300 296-2 describes radio equipment using integral antennas intended primarily for analogue voice communications;
- e) that signaling systems such as CTCSS (Continuous Tone Coded Squelch System), DCS (Digital Coded Squelch) and Selcall (Selective calling) may be used on PMR446 equipment;
- f) that it is not recommended that applications requiring encrypted speech should be used with PMR 446 radio equipment;
- g) that PMR 446 radio equipment complying to ETSI EN 300 296-2 also fulfill the recommended limits identified in ERC Recommendation 74-01 on unwanted emissions in the spurious domain which is considered important for compatible spectrum usage of PMR 446 radio equipment in the UHF frequency band as well as avoidance of interference to broadcast services in the adjacent UHF spectrum;
- h) that in the EU/ EFTA countries the radio equipment that is under the scope of this Decision shall comply with the R&TTE Directive. Conformity with the essential requirements of the R&TTE Directive may be demonstrated by compliance with the applicable Harmonised European Standard(s) or by using the other conformity assessment procedures set out in the R&TTE Directive;
- i) that when implementing this Decision CEPT administrations shall consider the need for transitional arrangements.

DECIDES

1. that the purpose of this decision is to harmonise the usage conditions for PMR 446 radio equipment throughout Europe;
2. that CEPT administrations shall designate the band 446.000-446.100 MHz for the use of PMR 446 with a channel plan based on 12.5 kHz spacing where the lowest carrier frequency is 446.00625 MHz;
3. that subject to decides 5, 6 and 7 below, CEPT administrations shall permit free circulation and use of PMR 446 radio equipment;
4. that CEPT administrations shall exempt PMR 446 radio equipment covered by the present Decision from individual licensing;
5. that the equipment shall use only integral antenna and an effective radiated power not exceeding 500 mW;
6. that the following technical characteristics shall be applied for PMR 446 applications in order to reduce the risk of harmful interference:
 - a) all PMR 446 radio equipment shall have reception capability;
 - b) PMR 446 radio equipment having Push-To-Talk (PTT) functionality capable of being latched ‘on’ shall apply a 180 seconds maximum transmitter time-out;

- c) PMR 446 radio equipment having no Push-To-Talk (PTT) functionality shall apply a 180 seconds maximum transmitter time-out and VOX (Voice activation exchange) control;
7. that compliance of PMR 446 radio equipment with all technical requirements shall be demonstrated with the Harmonised European Standard EN 300 296-2 or equivalent specifications;
8. that this Decision replaces ERC/DEC/(98)26 and ERCDEC/(98)27 which are withdrawn;
9. that this Decision enters into force by 1 June 2012;
10. that the preferred date for implementation of this ERC Decision shall be 1 September 2012;
11. that administrations shall communicate the national measures implementing this Decision to the ECC Chairman and the ECO when the Decision is nationally implemented.”

Note:

Please check the Office documentation database <http://www.ecodocdb.dk> for the up to date position on the implementation of this and other ECC Decisions.