



European Radiocommunications Committee (ERC)
within the European Conference of Postal and Telecommunications Administrations (CEPT)



HARMONISATION OF FREQUENCY BANDS TO BE DESIGNATED FOR LOW POWER DEVICES (LPD)

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Reports are being issued from time to time by the European Radiocommunications Committee (ERC) of CEPT to inform industry, operators, users and other interested parties of the work in hand, provisional conclusions and future activities in specific areas of radio frequency management. Such Reports give more details than is normally possible in a Recommendation and allow an opportunity for comment to be made on the work carried out so far. In most cases, it would be hoped that a formal CEPT Recommendation could be issued on the subject of the Report in due course, taking into consideration any comments received on the Report.

Reports are formally approved by, and issued in the name of, the Committee itself. In general the detailed preparation of Reports, and further work on the subject, will be done by Working Groups or Project Teams. Thus, any reference in the Reports to the ERC should be taken to include the whole framework of the ERC, including its Working Groups, Project Teams, etc.

MICHAEL GODDARD
Chairman
European Radiocommunications Committee (ERC)

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1. INTRODUCTION

With development of technology and reduction in cost, the demand for LPDs has increased. In Europe, today, there are more than 5 million LPDs covering various types of applications such as garage door openers, car alarms and remote control locking, industrial and domestic security systems, personal security systems, baby alarms, intercoms, etc. To meet this demand national administrations have made available frequencies spread over various frequency bands. It is becoming increasingly apparent, from Administrations, manufacturers and users that there is a need to harmonise the operating frequencies and the power limits for these devices in order to improve the efficient use of the spectrum within Europe.

2. GENERAL APPROACH

CEPT has agreed on the need to provide frequencies for LPDs and has considered all frequency bands which are utilised for these devices in each country. Many efforts have been made to arrive at a common solution to the problem of frequency harmonisation. This has proved very difficult because each country has already developed its own guidelines and administrative procedures.

3. BACKGROUND

CEPT has studied the problem, with the support of ETSI which is involved in writing the Technical Standard for LPDs. The problem has not been fully resolved but some progress has been made. CEPT has reached the conclusion that, for the present, frequency bands designated in the Radio Regulations as ISM bands should form the major part of the harmonised frequency bands for LPDs. It is recognised that other frequency bands, for example ones between 140 MHz - 470 MHz, are required and that these will need to be made available.

Frequency bands should be chosen so as to avoid interference to other services, in particular distress and safety, radio navigation, radio astronomy and emergency services. Various options have been discussed, and frequencies in the ISM bands were preferred.

It is recognised that the CEPT should carry out further studies to find other frequency bands, for example:

- frequency bands below 30 MHz,
- a frequency band around 400 MHz,
- in the Fixed-Satellite Service bands (Earth-space),
- in the 900 MHz band (see T/R 75-02 E),
- near the ISM bands (± 100 kHz).

4. CONCLUSION

CEPT has prepared a Recommendation for LPDs which need no licence or require a general licence subject to requirements of Administrations.