EUROPEAN RADIOCOMMUNICATIONS COMMITTEE

ERC Decision of 30 June 1997 on the harmonised frequency band to be designated for Social Alarm Systems

(ERC/DEC/(97)06)





EXPLANATORY MEMORANDUM

1. INTRODUCTION

The social alarm service is intended to assist elderly or disabled people living at home when they are in a distress situation. It provides less expensive alternatives to hospital and nursing home costs and it is expected to develop significantly in the future.

The great interest of the European Parliament and Council for the long term care of this population was followed by important programmes developed by the European Commission.

A report on the radiocommunications systems used by the social alarm service was produced by the European Radiocommunications Office (ERO) of the European Radiocommunications Committee (ERC) as a Work Requirement for the European Commission (EC) in accordance with EC-ERO Framework Contract No. 48238 of 17 August 1994.

The conclusions of this report were approved by the ERC in 1996 and have provided a basis for this Decision, together with the important work carried out by Project Teams 25 and 26 of the ERC/Frequency Management Working Group, and the resulting Recommendation CEPT/ERC/REC 70-03 on Short Range Devices.

2. BACKGROUND

The social alarm service is an emergency service and the reliability of the telecommunication systems and networks used for its provision is essential. A number of security measures are taken in order to ensure the highest level of reliability as is practically feasible.

Communication between the person in distress at home and the assistance service is generally established via the normal telephone line. Automatic dialing is ensured by a local unit connected to this telephone line which is activated from a small low power portable radio device (trigger) worn by the individual.

Possibilities of interference from other radio systems exist and have been recorded, especially due to other low power systems with continuous transmission (e.g. crane remote control systems) or to the insufficient spacing from high power sources.

Therefore, measures to protect the radio channels used by social alarms systems are necessary. The very low power generally required (less than 10 mW) and the very low duty cycles of these systems make possible the sharing of frequencies with other systems with similar characteristics.

Two possible frequency bands were considered for social alarm systems, 403-404.5 MHz and 868-870 MHz. As a result of studies by project teams FMPT25, FMPT26 and SE24 the Frequency Management Working Group (FMWG) concluded that due to constraints arising from the current and potential use of the 403 MHz band, i.e., sharing with meteorological aids, the band should not at present be designated for use by social alarm systems. Therefore the ERC endorsed the decision of the FMWG that frequencies within the 868-870 MHz should be designated for use by social alarm systems.

Standards have been developed by ETSI for short range devices (I-ETS 300 220) and by CENELEC for alarm systems, and their implementation should be considered in support of the allocation of exclusive radio channels for alarm systems.

3. REQUIREMENT FOR AN ERC DECISION

The allocation or designation of a frequency band for use by a service or system under specified conditions in CEPT member countries is laid down by laws, regulations or administrative acts. The ERC recognises that emergency social alarm systems meet an important social need and should therefore be given appropriate protection and priority including the designation of exclusive frequency bands for their operation.



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The European Conference of Postal and Telecommunications Administrations,

considering:

- a) that the social alarm service for elderly or disabled persons is an emergency service which requires highly reliable telecommunication networks;
- b) that administrations should consider as a matter of priority all technical and regulatory measures which can improve the reliability of these networks;
- c) that the transmission of alarm signals by a portable short range radio terminal can be subject to interference from other transmitters if appropriate protection measures are not taken;
- d) that European harmonisation of these measures will avoid difficulties in border areas;
- e) that the designation of frequencies for the exclusive use of alarm systems, including social alarm systems, would ensure the required level of protection;
- f) that the power radiated by the terminal equipment is generally less than 10 mW;
- g) that radio systems which transmit continuously are an important source of interference to alarm systems;
- h) that harmonised standards for detection, alarm and monitoring systems are developed by CENELEC;
- i) that ETSI has developed standards (I-ETS 300 220) for short range radio (SRD) devices, including social alarm systems;
- j) that the CEPT Recommendation CEPT/ERC/REC 70-03 on Short Range Devices identifies specific frequency bands for short range social alarm devices,

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DECIDES

- 1. that for the purposes of this Decision, social alarm systems shall comply with the European Telecommunications Standard I-ETS 300 220 of October 1993;
- 2. to designate the frequency band 869.20-869.25 MHz for the use of social alarm systems in accordance with CEPT Recommendation CEPT/ERC/REC 70-03 on SRDs;
- 3. to exclude from this frequency band the use of radio equipment which employs continuous transmission;
- 4. that this Decision shall enter into force on 1 October 1997;
- 5. that the CEPT Member Administrations shall communicate the national measures implementing this Decision to the ERC Chairman and the ERO when the Decision is nationally implemented.

Note:

Please check the ERO web site (www.ero.dk) under "Documentation / Implementation" for the up to date position on the implementation of this and other ERC Decisions.