EUROPEAN RADIOCOMMUNICATIONS COMMITTEE

ERC Decision
of 24th October 1994
on the frequency band to be designated for the coordinated introduction of the
European Radio Messaging System (ERMES)
(ERC/DEC/(94)02)

EXPLANATORY MEMORANDUM

1. INTRODUCTION

ERMES (European Radio Messaging System) is a pan-European radio paging system.

There are a number of radio paging systems already in existence but, in order to give coverage across Europe, both CEPT and the European Union have been working to define a common standard suitable for cross-border operation. Market research has identified a clear need for such a paging system; research for the European Commission suggested that there would be 13 Million users by the year 2000. While only 5% of these users required international roaming, this figure was considered large enough to justify a European system which would be a future standard for the industry.

2. BACKGROUND

The most popular standard in Europe is the UK POCSAG standard developed in the late seventies and which, in 1982, became CCIR Code Number 1, the first international paging code.

By the end of the eighties, it became apparent that, although the POCSAG code had been very successful, it was inadequate for a modern pan-European system. A group of countries within CEPT began to look at this problem and this work was later taken over by ETSI once it had been set up. The frequencies required for the system that ETSI has now developed from this early work were incorporated in both CEPT Recommendation T/R 25-07 and in a Directive[1] adopted by the Council of the European Communities. This ERC Decision covers the frequencies set out in both the Recommendation and the Directive.

The frequency band and channel arrangement indicated in the CEPT Recommendation and the Council Directive only provided 15 channels. Based on the requirements the frequency band was slightly changed from 169.4-169.8 MHz to 169.4125-169.8125 MHz to allow 16 ERMES-channels.

3. REQUIREMENT FOR AN ERC DECISION

The allocation or designation of frequency bands for use by a service or system under specific conditions in CEPT member countries is laid down by law, regulation or administrative action. The ERC recognises that for ERMES to be introduced successfully throughout Europe, manufacturers and operators must be given the confidence to make the necessary investment in this new pan-European radiocommunication system and service. Therefore ERC believes it is necessary to designate a frequency band to be used by the ERMES system under specified conditions. A commitment by CEPT member countries to implement an ERC Decision will provide a clear indication that the required frequency band will be made available on time and on a Europe-wide basis.

[1] Council Directive on the frequency bands designated for the coordinated introduction of pan-European land-based public radio paging in the Community. (90/544/EEC)

ERC DECISION
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on the frequency band to be designated for the coordinated introduction of the European Radio Messaging System (ERMES)
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The European Conference of Postal and Telecommunications Administrations,

considering

a) that the public radio paging systems currently in use in Europe, and the frequency bands they operate in, vary widely and may not allow the benefits of Europe-wide services or benefit from the economies of scale associated with a truly European market,

b) that the introduction of the more advanced radio paging system known as the European Radio Messaging System (ERMES) will provide an opportunity of establishing a truly pan-European paging service,

c) that ERMES will require frequency channels for the implementation of the system, and also for the expected expansion of the system,

d) that the European Telecommunications Standard Institute (ETSI) has developed the European Telecommunications Standard ETS 300 133 for ERMES operating in the frequency band 169.4125 - 169.8125 MHz,

e) that this frequency band is heavily used by other land mobile systems in CEPT countries, and in neighbouring countries outside CEPT, particularly the lower 200 kHz range,

f) that the channel requirement for the implementation and expansion of ERMES will differ between countries,

g) that in border areas between more than two countries and in the most congested areas the traffic load will probably require up to 16 channels,

h) that since ERMES will employ frequency agile receivers it is not necessary to provide common Europe-wide channels,

i) that in certain parts of Europe the utilisation of ERMES channels is based on the multilateral channel plan included in CEPT Recommendation T/R 25-07,

j) that Member States of the European Union have implemented the Council Directive 90/544/EEC and Council Recommendation 90/543/EEC,

k) that several non-EEA countries have become associate members of the European Union and have expressed their intention to comply with the existing EU legislation,

DECIDES

1. that for the purpose of this Decision, the European Radio Messaging System (ERMES) shall mean a public radio paging system complying with the European Telecommunications Standard ETS 300 133,

2. to designate the frequency band 169.4125 - 169.8125 MHz[1] to ERMES as from 24th October 1994,

3. that within the designated frequency band at least 4 channels shall be available in each country,

4. that within this frequency band on channels selected to satisfy the commercial demand, ERMES shall have priority over other radio systems within the national territory, and shall be protected.

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.

[1] The band limits stated in Decides 2 vary slightly from the limits (169.4 - 169.8 MHz) in EU Council Directive 90/544/EEC. The European Commission has been invited to consider modifying the band limits in the Directive accordingly.

ANNEX 1

No L 310/28 Official Journal of the European Communities 9.11.90

COUNCIL DIRECTIVE

of 9 October 1990

on the frequency bands designated for the coordinated introduction of pan-European land-based public radio paging in the Community

(90/544/EEC)

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100a thereof;

Having regard to the proposal from the Commission ([1]);

In cooperation with the European Parliament ([2]);

Having regard to the opinion of the Economic and Social Committee ([3]);

Whereas, by Recommendation 84/549/EEC ([4]), the Council calls for the introduction of services on the basis of a common harmonised approach in the field of telecommunications;

Whereas the resources offered by modern telecommunications networks should be utilised to the full for the economic development of the Community;

Whereas radio paging services depend on the allocation and availability of appropriate frequencies in order to transmit and receive between fixed-base stations and radio paging receivers respectively;

Whereas the frequencies and land-based public radio paging systems currently in use in the Community vary widely and do not allow all users on the move to reap the benefits of European-wide services and European-wide markets;

Whereas the introduction of the more advanced radio paging system code named European Radio Messaging System (ERMES) being specified by the European Telecommunications Standards Institute (ETSI) will provide a unique opportunity of establishing a truly pan-European radio paging service;

Whereas the European Conference of Postal and Telecommunications Administrations (CEPT) has identified the unpaired frequency band 169,4-169,8 MHz as the most suitable band for public radio paging; whereas that choice is in accordance with the provisions of International Telecommunication Union (ITU) Radio Regulations;

Whereas CEPT Recommendation T/R 25-07 on the coordination of frequencies for the European Radio Messaging System has designated the European channels for the ERMES system;

Whereas parts of the frequency band are being used or are intended for use by certain Member States for other radio services;

Whereas the progressive availability of the requisite part of the frequency band set out above will be indispensable for the establishment of a truly pan-European paging service;

Whereas some flexibility will be needed in order to take account of different frequency requirements in different Member States; whereas it will be necessary to ensure that such flexibility does not slow down the expansion of a pan-European system;

Whereas coordination procedures will have to be established between neighbouring countries as required;

Whereas the implementation of Council Recommendation 90/543/EEC of 9 October 1990 on the coordinated introduction of pan-European land-based public radio paging in the Community ([5]), will ensure the start of a pan-European system by 31 December 1992 at the latest;

Whereas on the basis of present technological and market trends, it appears realistic to envisage the designation of the 169,4-169,8 MHz frequency band as the band from which frequencies are selected in accordance with commercial requirements for the implementation and expansion of a pan-European radio paging system;

Whereas Council Directive 86/361/EEC of 24 July 1986 on the initial stage of the mutual recognition of type approval for telecommunications terminal equipment ([6]) will allow the rapid establishment of common conformity specifications for the pan-European land-based public radio paging system;

Whereas the report on public mobile communications drawn up by the Analysis and Forecasting Group (GAP) for the Senior Officials Group for Telecommunications (SOG-T) strongly recommends that telecommunications administrations reach an agreement to use the same radio frequencies for radio paging;

Whereas favourable opinions on this report have been delivered by the telecommunications administrations, by the European Conference of Postal and Telecommunications Administrations (CEPT) and by telecommunications equipment manufacturers in the Member States;

Whereas radio paging is a particularly spectrum-efficient communications method for alerting and/or sending messages to users on the move;

([1]) OJ No C 43, 23.2.1990, p. 6.
([2]) OJ No C 15, 22.1.1990, p. 84 and OJ No C 231, 17.9.1990, p. 86.
([3]) OJ No C 298, 27.11.1989, p. 27.
([4]) OJ No L 298, 16.11.1984, p. 49.
([5]) See page 23 of this Official Journal
([6]) OJ No L 217, 5.8.1986, p. 21.

HAS ADOPTED THIS DIRECTIVE:

Article 1

For the purposes of this Directive, pan-European land-based public radio paging service shall mean a public radio paging service based on a terrestrial infrastructure in the Member States in accordance with a common specification which allows persons wishing to do so to send and/or to receive alert and/or numeric or alphanumeric messages anywhere within the coverage of the service in the Community.

Article 2

1. Member States shall, in accordance with CEPT Recommendation T/R 25-07 designate in the 169,4 to 169,8 MHz waveband four channels which shall have priority and be protected, and preferably be:

   Ä 169, 6 MHz,
   Ä 169, 65 MHz,
   Ä 169, 7 MHz,
   Ä 169, 75 MHz,

   for the pan-European land-based public radio paging service by 31 December 1992 at the latest.

2. Member States shall ensure that plans are prepared as quickly as possible to enable the pan-European public radio paging service to occupy the whole of the band 169,4 to 169,8 MHz according to commercial demand.

Article 3

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive no later than 18 October 1991. They shall forthwith inform the Commission thereof.

2. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive.

Article 4

The Commission shall report to the Council on the implementation of this Directive not later than the end of 1996.

Article 5

This Directive is addressed to the Member States.

Done at Luxembourg, 9 October 1990.

For the Council

The President

P. ROMITA