

EUROPEAN RADIOCOMMUNICATIONS COMMITTEE

ERC Decision
of 24th October 1994
on the frequency band to be designated for the coordinated
introduction of the
Digital European Cordless Telecommunications system
(ERC/DEC/(94)03)



EXPLANATORY MEMORANDUM

1. INTRODUCTION

The DECT (Digital European Cordless Telecommunications) standard covers cordless communications for voice and data. The intention is for one standard to provide voice and data telecommunications at home, in the office and in the street. The system is intended to allow user densities up to one hundred times those of cellular radio systems. The base stations will have theoretical free-space coverage diameters of up to 500m; normal coverage in the office will be 50-100m. When using the allocated 20 MHz of frequency spectrum, a cell may have a theoretical peak capacity of between 50 to 144 voice channels depending on overlap with other DECT cells. The core technology is intended to be able to support second generation advanced applications with existing installed infrastructure.

DECT system designers will have the advantage of being able to tailor the air interface technology to meet the majority of these applications, and DECT will therefore go a lot further than other cordless standards and could facilitate these more advanced applications.

2. BACKGROUND

The past few years have seen an increasing number of developments in Europe in the field of cordless telephony. Amongst these have been the emergence of new standards including CT1+ as an enhancement of the CEPT CT1 standard, CT2 used primarily for Telepoint applications and DCT 900 for wireless PBX use.

CEPT established a sub-working group to prepare a specification for a Digital European Cordless Telecommunications system, now known as DECT. The DECT specification will define a radio access technique which could be used to replace the fixed wire connection both to the PSTN and the future ISDN. As such it will offer a significantly greater capability to users than a simple cordless telephone system. Since DECT will provide an extension to the PSTN/ISDN, most applications of the fixed network will be able to be supported by DECT. In addition, since a radio link replaces the fixed link, these applications could be mobile.

In 1989, CEPT agreed Recommendation T/R 22-02 which designated the band 1880-1900 MHz for DECT. In 1991, Council of the European Communities adopted a Directive¹ which required member states to designate 1880-1900 MHz for DECT and to ensure that any services remaining in this band do not interfere with any DECT systems that may be established according to commercial demand.

3. REQUIREMENT FOR AN ERC DECISION

The allocation or designation of a frequency band for its use by a service or system under specified conditions in CEPT member countries is laid down by law, regulation or administrative action. The ERC recognises that for DECT 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 DECT 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 band to be designated for the coordinated introduction of digital European cordless telecommunications (DECT) into the Community. (91/287/EEC)

**ERC DECISION
of 24th October 1994**

**on the frequency band to be designated for the coordinated introduction of the
Digital European Cordless Telecommunications system
(ERC/DEC/(94)03)**

The European Conference of Postal and Telecommunications Administrations,

considering

- a) that current cordless telephone systems 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 European implementation of DECT will provide an important opportunity to establish truly European digital cordless telephone facilities,
- c) that the European Telecommunications Standard Institute (ETSI) has developed the European Telecommunications Standards for DECT,
- d) that market studies have indicated that the establishment of DECT on a Europe-wide basis will require the designation of a common 20 MHz frequency band for the time division duplex transmission between the fixed and portable stations,
- e) that this frequency band can be made available progressively in order to satisfy commercial demand,
- f) that Member States of the European Union have implemented the Council Directive (91/287/EEC) and Council Recommendation 91/288/EEC,
- g) that several non-EEA countries have become associate members of the European Union and have expressed their intention to implement the existing EU legislation,

DECIDES

1. that for the purposes of this Decision, the Digital European Cordless Telecommunications (DECT) shall mean equipment complying with the European Telecommunications Standards and the telecommunications systems, both public and private, which directly utilise DECT technology,
2. to designate the frequency band 1880-1900 MHz for DECT from 24th October 1994,
3. that DECT shall have priority over other radio systems in that band, and be protected, in the designated band,
4. that after the date of designation of the frequency band for DECT, existing radio systems may continue in the band, providing that they do not interfere with DECT systems that may be established according to commercial demand.

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.

ANNEX 1

8.6.91

Official Journal of the European Communities

No L 144/45

II

(Acts whose publication is not obligatory)

COUNCIL

COUNCIL DIRECTIVE

of 3 June 1991

on the frequency bands to be designated for the coordinated introduction of digital European cordless telecommunications (DECT) into the Community

(91/287/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 Recommendation 84/549/EEC ⁽⁴⁾ calls for the introduction of services on the basis of a common harmonised approach in the field of telecommunications;

Whereas the Council in its resolution of 30 June 1988 ⁽⁵⁾ on the development of the common market for telecommunications services and equipment calls for the promotion of Europe-wide services according to market requirements;

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

Whereas Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of Member States relating to electromagnetic compatibility ⁽⁶⁾ is applicable, and particular attention should be taken to avoid harmful electromagnetic interference;

Whereas current cordless telephone systems in use in the Community, 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;

Whereas the European Telecommunications Standard Institute (ETSI) is currently developing the European Telecommunications Standard (ETS) or digital European cordless telecommunications (DECT);

Whereas the development of the European Telecommunications Standard (ETS) must take account of the safety of users, and the need for Europe-wide interoperability and enable users provided with a service based on DECT technology in one Member State to gain access to the service in any other Member State, where appropriate;

Whereas the European implementation of DECT will provide an important opportunity to establish truly European digital cordless telephone facilities;

Whereas ETSI has estimated that DECT will require 20 MHz in high density areas;

Whereas the European Conference of Postal and Telecommunications Administrations (CEPT) has recommended the common European frequency band 1880-1900 MHz for DECT, recognising that, subject to the system, development of DECT additional frequency spectrum may be required;

Whereas this should be taken into account in the preparation for the 1992 World Administrative Radio Conference (WARC);

Whereas after the date of designation of the frequency band for DECT, existing services may continue in the band, providing that they do not interfere with DECT systems that may be established according to commercial demand;

Whereas the implementation of Council Recommendation 91/288/EEC of 3 June 1991 on the coordinated introduction of DECT into the Community ⁽¹⁾, will ensure the implementation of DECT by 31 December 1992 at the latest;

Whereas Council Directive 91/263/EEC of 29 April 1991 on the approximation of the laws of the Member States concerning telecommunications terminal equipment, including the mutual recognition of their conformity ⁽²⁾ will allow the rapid establishment of common conformity specifications for DECT;

Whereas the establishment of DECT depends on the allocation and availability of a frequency band in order to transmit and receive between fixed-base stations and mobile stations;

Whereas some flexibility will be needed in order to take account of different frequency requirements in different Member States; it will be necessary to ensure that such flexibility does not slow down the implementation of DECT technology according to commercial demand across the Community;

Whereas the progressive availability of the full range of the frequency band set out above will be indispensable for the establishment of DECT on a Europe-wide basis;

⁽¹⁾ OJ No C 187, 27.7.1990, p. 5.

⁽²⁾ OJ No C 19, 28.1.1991, p. 97 and OJ No C 106, 22.4.1991, p. 78.

⁽³⁾ OJ No C 332, 31.12.1990, p. 172.

⁽⁵⁾ OJ No C 257, 4.10.1988, p. 1.

⁽⁶⁾ OJ No L 139, 23.5.1989, p. 19.

⁽⁷⁾ See page 47 of this Official Journal

(⁴) OJ No L 298, 16. 11. 1984, p. 49.

(⁸) OJ No L 128, 23.5.1991, p. 1.

HAS ADOPTED THIS DIRECTIVE:

Article 1

For the purposes of this Directive, the digital European cordless telecommunications (DECT) system shall mean technology conforming to the European Telecommunications Standard (ETS) for digital cordless telecommunications referred to in Recommendation 91/288/EEC, and the telecommunications systems, both public and private, which directly utilise such technology.

Article 2

Member States shall, in accordance with CEPT Recommendation T/R 22-02 of the European Conference of Postal and Telecommunications Administrations designate the frequency band 1880-1900 MHz for digital European cordless telecommunications (DECT) by 1 January 1992.

In accordance with the CEPT Recommendation, DECT shall have priority over other services in the same band, and be protected in the designated band.

Article 3

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with this Directive by 31 December 1991. They shall forthwith inform the Commission thereof.
2. When Member States adopt these measures, they shall contain a reference to this Directive or shall be accompanied by such reference on the occasion of their official publication. The methods of making such a reference shall be laid down by the Member States.

Article 4

The Commission shall report to the Council on the implementation of this Directive not later than the end of 1995.

Article 5

This Directive is addressed to the Member States.

Done at Luxembourg, 3 June 1991.

For the Council

The President

A. BODRY