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(Preparatory Acts)

# COMMISSION

# Proposal for a Council recommendation on the coordinated introduction of digital European cordless telecommunications (DECT) in the Community

# COM(90) 139 final - SYN 277

(Submitted by the Commission on 19 June 1990)

(90/C 187/01)

# THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community, and in particular Article 235 thereof,

Having regard to the proposal from the Commission,

Having regard to the opinion of the European Parliament,

Having regard to the opinion of the Economic and Social Committee,

Whereas Council recommendation 84/549/EEC (1) calls for the introduction of services on the basis of a common harmonized approach in the field of telecommunications;

Whereas the Council in its resolution of 30 June 1988 (<sup>2</sup>) on the development of the common market for telecommunication 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 utilized to the full for the economic development of the Community;

Whereas current cordless telephone systems in use in the Community, and the frequency bands they operate in, vary widely and do not allow the benefits of Europe-wide services or benefit from the economies of scale associated with a truly Europe-wide market;

Whereas the European Telecommunications Standard Institute (ETSI) is currently developing the European telecommunications standard (ETS) for digital European cordless telecommunications (DECT); Whereas the development of the ETS must take account of the safety of users, and the need for Europe-wide interoperability;

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

Whereas a coordinated policy for the introduction of DECT will make possible the establishment of a European market in mobile handsets which will be capable of creating, by virtue of their size, service features, and costs, the necessary development conditions to establish a lead in worldwide markets;

Whereas such a future system, offering both voice and data services, is to be based on digital techniques, thereby facilitating compatibility with the general digital environment and the integrated services digital network (ISDN) in the Community in accordance with Council recommendation 86/659/EEC (<sup>3</sup>);

Whereas Council Directive  $\ldots / \ldots / EEC$  on the approximation of the laws of the Member States concerning telecommunications terminal equipment, including the mutual recognition of their conformity (<sup>4</sup>) will allow the rapid establishment of common conformity specifications for DECT;

Whereas consideration should be given to Council Directive 83/189/EEC of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations (<sup>s</sup>), and to Council Decision

<sup>(1)</sup> OJ No L 298, 16. 11. 1984, p. 49.

<sup>(&</sup>lt;sup>2</sup>) OJ No C 257, 4. 10. 1988, p. 1.

<sup>(&</sup>lt;sup>3</sup>) OJ No L 382, 31. 12. 1986, p. 36.

<sup>(4)</sup> OJ No L . . .

<sup>(&</sup>lt;sup>5</sup>) OJ No L 109, 26. 4. 1983, p. 8.

87/95/EEC of 22 December 1986 on standardization in the field of information technology and telecommunications (<sup>1</sup>);

Whereas Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of Member States relating to electromagnetic compatibility (<sup>2</sup>) is applicable, and particular attention should be taken to avoid harmful electromagnetic interference;

Whereas it is necessary to allow unrestricted access to cordless communications and free circulation of DECT equipment throughout the Community;

Whereas it is appropriate to make full use of the potential of the Community's financial instruments in order to promote the development of the Community's telecommunications infrastructure in the Community;

Whereas consideration should be given to Council recommendation 87/371/EEC (<sup>3</sup>) which points out that special attention should be paid to the urgent requirement of certain users for pan-European land-based communications and that the Commission will in future submit other proposals in the field of mobile communications;

Whereas the implementation of such a policy will lead to closer cooperation within Europe between the public telecommunications administrations and the recognized private operating agencies offering public mobile telecommunications services, herein referred to as 'telecommunications administrations';

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

Whereas these measures will allow the economic benefit and rapidly increasing market potential of cordless telephones to be fully realized in the Community;

Whereas the Treaty has not provided the necessary specific powers to this end,

# HEREBY RECOMMENDS:

1. that the telecommunications administrations implement with due respect to the Community law the recommendations as described in the Annex concerning the coordinated introduction of digital European telecommunications cordless (DECT) in the Community. For the purposes of this recommendation, DECT shall mean terminal apparatus conforming to the European telecommunications standard for digital cordless telecommunications based on а multi-carrier/time division multiple access/time division duplex technique, and the telecommunications systems, providing both public and private services, which directly utilize such terminal apparatus, and where users provided with a service in one Member State could also gain access to the service in any other Member State;

- 2. that the telecommunications administrations continue the cooperation within the CEPT and/or ETSI, particularly concerning the objectives and time schedule set out in the Annex for the completion of the specifications and the implementation of the DECT system;
- 3. that the Commission take appropriate initiatives, within the application of existing directives, to encourage the completion of the specifications and the implementation of the DECT system;
- 4. that the Commission develop a long-term strategy, in collaboration and consultation with interested parties, for the evolution of the soon-to-be-introduced pan-European digital cellular and paging systems, and DECT into a universal personal communications system taking account of recent studies and the ETSI work programme;
- 5. that the Community's financial instruments take this recommendation into account within the framework of their interventions, particularly regarding capital investments required for the implementation of the infrastructure for the DECT system;
- 6. that the telecommunications administrations prepare and sign by 30 June 1991 at the latest a memorandum of understanding on the implementation of DECT systems for public services;
- 7. that Member States inform the Commission at the end of each year, from the end of 1990 onwards, of the measures taken and the problems encountered in the course of implementing this recommendation; that the progress of work be examined by the Commission and the senior officials group on telecommunications (SOG-T) which was set up by the Council on 4 November 1983; and that the European Parliament be regularly informed.

<sup>(&</sup>lt;sup>1</sup>) OJ No L 36, 7. 2. 1987, p. 31.

<sup>(&</sup>lt;sup>2</sup>) OJ No L 139, 23. 5. 1989, p. 19.

<sup>(&</sup>lt;sup>3</sup>) OJ No L 196, 17. 7. 1987, p. 81.

#### ANNEX

#### DETAILED REQUIREMENTS ON THE COORDINATED INTRODUCTION OF DIGITAL EUROPEAN CORDLESS TELECOMMUNICATIONS IN THE COMMUNITY

#### 1. GENERAL REQUIREMENTS

The future DECT system should be developed in accordance with the ETS being developed by ETSI and should comply with the following general requirements:

- be suitable for operation over the frequency bands 1 880 to 1 900 MHz to be made available for DECT in the Community,
- provide a means, using cordless technology, for meeting user requirements on an interoperable basis in respect
  of the following applications:
  - a residential service that will interconnect to ISDN/PSTN,
  - a business cordless telecommunications service that combines the features of a PBX with the mobility of cordless telecommunications for both voice and non-voice application,
  - a telepoint service that offers public network access to a handset through a public, or privately owned, base station,
  - a service that provides a radio means of extending public and private networks into customer user premises,
- provide the user with a voice transmission quality approximately equal to existing fixed systems,
- permit easy access to and from the ISDN/PSTN,
- permit simultaneous operation of two or more independent systems in the same geographical area.

# 2. CHOICE OF TRANSMISSION SYSTEM

The detailed specification of the DECT transmission characteristics should be completed by October 1991 and should take account of the relevant international guidelines on limiting exposure to electromagnetic fields, and Council Directive 89/336/EEC of 3 May 1989 on the approximation of the laws of Member States relating to electromagnetic compatibility. The system must be able to support geographically co-located DECT systems.

#### 3. NETWORK ARCHITECTURE

The standard for the network structure and the definition and allocation of functions between the various system components should be defined by October 1991. In the course of this work, the appropriate interfaces between the various system components should be completely specified for all OSI layers applicable to the relevant services, and for all applications using those interfaces (call processing functions, maintenance, etc.).

#### 4. SYSTEM SPECIFICATION AND IMPLEMENTATION

Telecommunications administrations and operators should be responsible for the establishment of public services using DECT in their countries. The majority of traffic on each national system will be national, but implementation should support full roaming. Furthermore, the system specification should enable economic implementation in areas of both low and very high traffic density. To enable DECT to be introduced in 1992, the system specification should be completed by October 1991.

#### 5. SYSTEM FEATURES

The services and facilities specification should be completed by October 1991, and should fall into two categories: minimum and additional.

#### Minimum service capabilitities and facilities

Minimum services and facilities should define the minimum features available for each application.

Minimum services for generic capability and for each potential DECT application should include the following:

Generic capability:

- interface with ISDN,
- equivalent functions to a wired telephone directly or indirectly (e.g. via PABX) connected to ISDN/PSTN,
- signalling capacity to support standard telephony features,
- dialling and calling security,
- emergency services,
- compatibility between residential, business, and telepoint applications.

#### Additional services and facilities

The additional services should be provided by open competition taking into account the national conditions for the implementation of these services. The non-provision of an additional service or facility should not affect in any way the functioning of DECT. The provision of an additional service or facility on one national system should not increase the cost of the minimum service on that system, or require an increase in functionality or an increase in cost on any other national system.

## 6. SIGNALLING

User access signalling (customer signalling) should be defined according to the principles included in ETSI standards for ISDN, and should enable the supplementary services of ISDN/PSTN to be provided.

Network and inter-network signalling processes should be defined in the framework of the SS NO 7 in such a way that international roaming and hand-over facilities, where provided, are safeguarded.

#### 7. TARIFF CONSIDERATIONS

On the basis that the DECT service in the Community will utilize radio, a scarce resource, and furthermore that the trend is away from charging on the basis of distance, since the transmission costs for long distance telephone calls represent a relatively small part of the total, the DECT public service charge should mainly depend on the duration of the radio channel use.

The basic tariff principles for such matters as the charging for the Community service and cross charging between national operators for the handling of roaming traffic, should be identified by June 1991 so that the network implications can be identified and resolved in a timely manner.

## 8. GEOGRAPHICAL COVERAGE

DECT should be introduced in the Community from the end of 1992 at the latest. The DECT telepoint service should be widely available in major urban areas by 1995 at the latest.

Furthermore, telecommunications administrations and operators should jointly study mutual priorities for coverage in order to stimulate the maximum Europe-wide traffic as early as possible. This should take into account the needs of users at major European road, rail and air transport centres.