COMMISSION OF THE EUROPEAN COMMUNITIES

COM(90) 32 final - SYN 193

Brussels, 7 February 1990

Revised proposal for a

COUNCIL RECOMMENDATION COM(90) 32 final

on the coordinated introduction of pan-European land-based public radio paging in the Community

and

Revised proposal for a

COUNCIL DIRECTIVE COM(90) 32 final - SYN 193

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

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(presented by the Commission pursuant to the third paragraph of Article 149 of the EEC Treaty)

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Revised proposal for a

COUNCIL RECOMMENDATION

ON THE COORDINATED INTRODUCTION OF PAN-EUROPEAN LAND-BASED PUBLIC RADIO PAGING IN THE COMMUNITY.

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 [1],

Having regard to the opinion of the European Parliament [2],

Having regard to the opinion of the Economic and Social Committee [3],

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[1] .....

[2] .....

[3] .....

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

Whereas paging services are the only low cost means of alerting and/or sending messages to people on the move;

Whereas the land-based public paging systems currently in use in the Community do not in general allow people on the move throughout the Community, to reap the benefits of European-wide paging services and European-wide markets;

Whereas the European Conference of Postal and Telecommunications administrations (CEPT) set up a special Sub-Working Group referred to as Radio Equipment Specifications Sub-Working Group 4 (RES-4) since transfered to the European Telecommunication Standards Institute (ETSI) for planning all system aspects of a more advanced public display paging system named European Radio MEssaging System (ERMES);

Whereas the change to a truly advanced paging system named ERMES being specified by the CEPT, will provide a unique opportunity of establishing a truly pan-European paging service;

Whereas a coordinated policy for the introduction of a pan-European land-based public display paging service will make possible the establishment of a European market in mobile terminals (paging receivers) which will be capable of creating, by virtue of its size, service features and costs, the necessary development conditions to enable undertakings to maintain and improve their presence in world markets;

Whereas it is essential to ensure that all paging receivers are the frequency agile type;

Whereas it is necessary to allow unrestricted access to paging services and free circulation of paging receivers throughout the Community;

Whereas in this context the Community Law and in particular the competition rules should be respected;

Whereas the implementation of Council Directive 86/361/EEC of 24 July 1986 on the initial stage of the mutual recognition of type approval for telecommunications terminal equipment [5] will make an important contribution towards this goal;

[4] OJ No L 298, 16.11.1984, p. 49.

[5] OJ No L 217, 5.8.1986, p. 21.

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 [6] and to Council Decision 87/95/EEC of 22 December 1986 on standardisation in the field of information technology and telecommunications [7];

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

Whereas consideration should be given to Council Recommendation 87/371/EEC (8), 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 the future submit other proposals in the field of mobile communications, including radiopaging systems [8];

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

Whereas a favourable opinion has been delivered by the Senior Officials Group on Telecommunications (SOG-T), on the basis of the detailed recommendations drawn up by the Analysis and Forecasting Group (GAP) which provide a strategic basis for the development of public mobile communications in the Community with a view to enabling European users on the move to communicate efficiently and economically [9];

Whereas on the basis of the detailed recommendations drawn up by the SOG-T, the Commission recommended that CEPT should reach an agreement by 1990, related to a more advanced code and a common radio interface in order to introduce a European service as soon as possible afterwards;

[6] OJ No L 109, 26.4.1983, p. 8.

[7] OJ No L 36, 7.2.1987, p. 31.

[8] OJ No L 196/81, 17.7.1987, p. 81.

[9] Proposals by the Analysis and Forecasting Group (GAP) for the Coordination Introduction of Public Mobile Communications in the Community-5.12.85.

Whereas favourable opinions on these recommendations have been delivered by the telecommunications administrations, and by CEPT;

Whereas the envisaged measures will allow the economic benefit and rapidly increasing market potential of public display paging to be fully realised in the Community;

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

HEREBY RECOMMENDS:

1. that the telecommunications administrations implement with due respect to the Community Law the detailed recommendations as described in the Annex concerning the coordinated introduction of pan-European land-based pan-European radio paging service in the Community. For the purposes of this Recommendation, a pan-European land-based public radio paging service shall mean a public radio paging service based on terrestrial infrastructure, provided in each of the Member States to a common specification which allows persons wishing to send and/or to receive an alert and/or numeric or alphanumeric messages anywhere within the coverage of the service in the Community;

2. that the telecommunications administrations continue the cooperation within the CEPT and ETSI, particularly concerning the objectives and time schedule set out in the Annex for the completion of the specifications and service implementation of the pan-European land-based public radio paging system;

3. that the telecommunications administrations plan for a gradual evolution from existing public paging systems to the pan-European land-based public radio paging system so as to ensure a transition which meets the needs of users, telecommunications administrations and manufacturers;

4. that Member State Governments and telecommunications administrations complete the technical arrangements for the implementation of the means of call routing and processing, so that tone, numeric and alphanumeric messages can be sent from anywhere in the Community, to a paging receiver anywhere in the geographical coverage of the ERMES service by **January 1992**;

5. that the Commission takes appropriate initiatives, within the application of existing Directives, to encourage the completion of the specifications and the implementation of the pan-European land-based public radio paging system, within the time schedule set out in the Annex;

6. that the Community's financial instruments take this Recommendation into account within the framework of their interventions, particularly as regards capital investments required for the implementation of the infrastructure for the pan-European land-based public radio paging system, and that the Community's technological research and development programmes do likewise as regards the development of the required technological base;

7. that the telecommunications administrations prepare and sign by **January 1990** at the latest

a memorandum of understanding on the implementation of pan-European land-based public radio paging;

8. that Member State Governments inform the Commission at the end of each year, from the **end of 1989** onwards, of the measures taken and problems encountered in the course of implementing this Recommendation. The progress of work will be examined by the Commission and the Senior Officials Group on Telecommunications (SOG-T) set up by the Council on 4 November 1983; *and that the European Parliament be regularly informed.*

Done at Brussels .....

For the Council

The President

ANNEX TO THE RECOMMENDATION

DETAILED REQUIREMENTS ON THE COORDINATED INTRODUCTION OF PAN-EUROPEAN LAND-BASED PUBLIC RADIO PAGING IN THE COMMUNITY

TABLE OF CONTENTS

1. **GENERAL REQUIREMENTS**

The future pan-European public radio paging system should fulfill the following general requirements :-

- be suitable for operation in the frequency band 169MHz to 170 MHz with 25KHz radio channels;
- permit an increase in the number of paging users which can be supported per paging area per unit of spectrum and for the same grade of service compared to systems based on CCIR radiopaging code N°1 (POCSAG), assuming the same mix of tone, numeric and alphanumeric pagers;
- permit easy access via PSTN, PSS, Videotex terminals, telex and other forms of direct access such as via ISDN.
- permit simultaneous operation of two or more independent systems in the same geographic area and permit several independent systems in areas where several national boundaries meet.

The cost of the system should be considered in terms of the cost of the fixed infrastructure, met by the network operator, and the cost of the paging receiver, met by the users. Both costs should be within affordable limits and should not exceed current costs. The cost of using the home paging service should not be more than the costs of current home paging services.

Access facilities should be provided for a calling party to initiate a paging request from service areas anywhere in the Community in the most cost effective and easy manner.

2. **Choice of Radio Sub-system**

Considerable experience in designing, manufacturing and operating public paging systems already exists in Europe. Much of this experience derives from the successful development and exploitation of the European POCSAG paging code (now CCIR Radio Paging Code N°1) by manufacturers and telecommunications administrations. This accumulated experience and knowledge should speed the task of selecting a suitable radio sub-system for the pan European paging system. On the basis of the work underway within ETSI and in particular the RES 4 group, final decisions on the radio sub-system should be made by August **1989**. The system specification should be decided by **January 1990**. The radio sub-system specification covers the modulation method, channel coding, the radio system structure and the pager's radio identity code structure (RIC).

3. **The Paging Receiver Specification**

The specification of the paging receiver will cover the radio-performance, services and facilities and physical characteristics. The receiver specification should be finalised by **March 1990**. However, the optimisation and commencement of production of prototype paging receivers should begin with or before the decision on the radio sub-system in **August 1989.** This will provide a lead time for the testing and production of equipment before the start of service in **January 1992**. This early start to development should be ensured by the close relationship and cooperation between manufacturing industry and ETSI.

4. **System Implementation**

National operators and telecommunication administrations should be responsible for the implementation of the paging system in their countries. The largest proportion of traffic on each national system will be national traffic, but implementation should support full roaming. Furthermore, the system specification should allow flexibility to enable economic implementation both in areas of low traffic density and areas of very high traffic density. To enable the service to commence in **January 1992,** the system specification should be completed by **January 1990**. The manufacture of the system or parts of it may commence before completion of the specification and this will depend on a close working relationship between industry and ETSI.

The system specification should include system access, call routing and processing, numbering scheme, and specification of paging network controller.

5. **Services and Facilities specified and supported by the pan-European paging system**

The services and facilities specification should be completely specified by **December 1989**, and should fall into two categories : mandatory and optional

Mandatory services and facilities :

Mandatory services and facilities should define the minimum features available on each national system and hence the pan- European system as a whole.

Optional services and facilities :

The optional services are value added services and should be provided at the discretion of each operator under the conditions of open-competition. The non-provision of an optional service or facility should not affect in any way the functioning of the pan-European service at a basic level. The provision of an optional service or facility on one national system should not increase the cost of the basic service on that system, or require an increase in functionality or an increase in cost on any other national system.

6. **Tariff Considerations**

Telecommunication Administrations should establish the principles of charging, taking full account of the competition rules of the Treaty, for the European service and of cross charging between national operators for the handling of roaming traffic. These principles should be established so that the network implications can be identified and resolved, and provision should be made in the functional specification for the network controller. This functional specification should be finalised by **January 1990.**

7. **Geographical Service Coverage**

The Pan-European public radio paging system should be introduced by **January 1992** at the latest. Geographical service coverage in each Member State should progressively extend as follows :-

January 1992	Start of service
January 1993	At least 30% of population
January 1994	At least 60% of population
January 1995	At least 80% of population

The coverage obligation should include the provision of service on the main travel routes between areas where service has been provided.

Administrations should study priorities for service coverage in order to stimulate the maximum pan-European traffic demand at the earliest possible stage compatible with commercial strategies.

8. **Schedule for the completion of the pan-European paging specification and service provision**

Figure 1 of this Annex gives the important milestones for the production of specifications by the CEPT, the schedule for the implementation of the system and the coverage obligation by the Member States.

9. **Special Requirement**

Consideration should be given to providing within the ERMES system, the ability to have displayed on the radio paging receiver characters in all official Community languages where appropriate.

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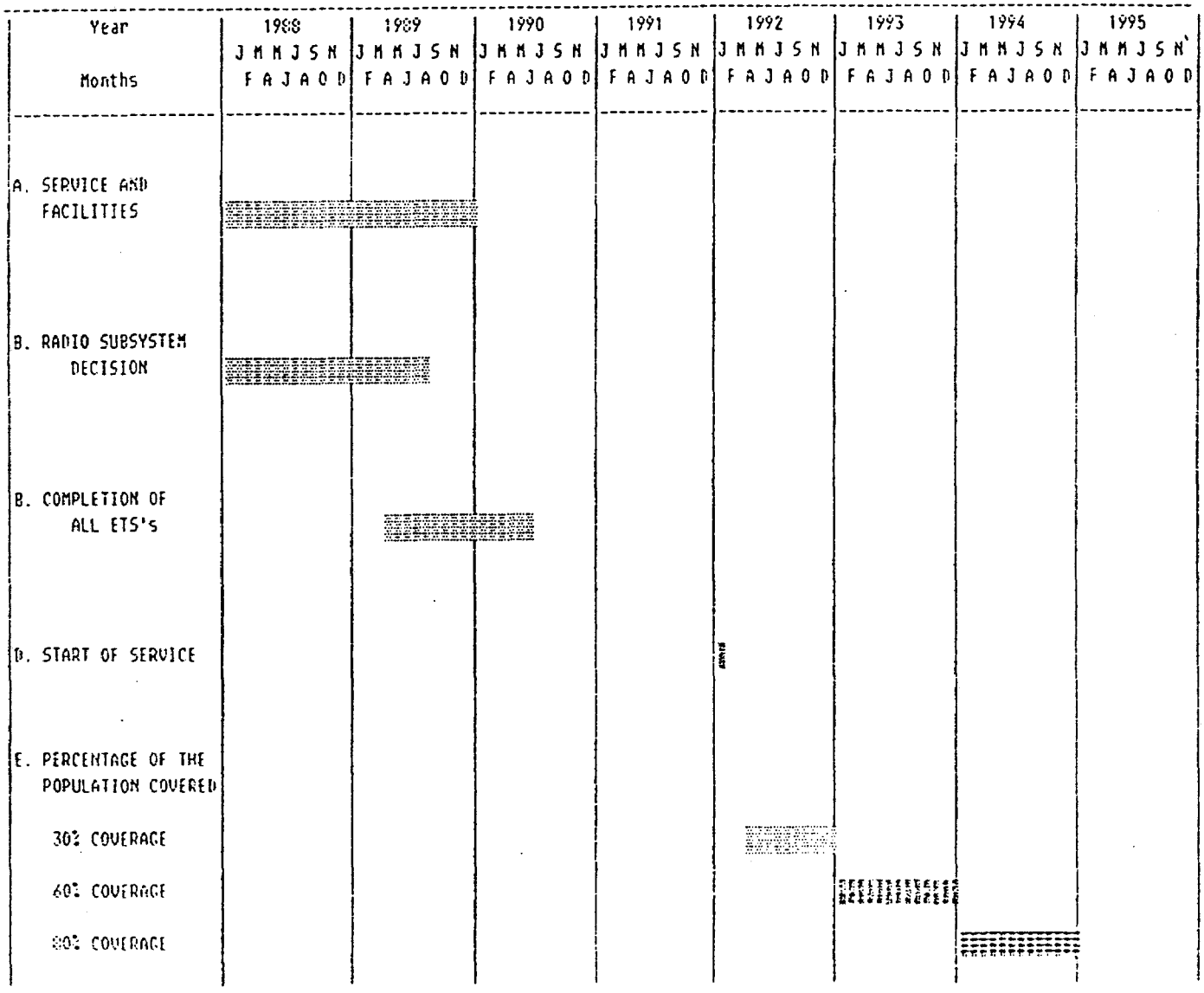
FIGURE 1 TO THE ANNEX

SCHEDULE FOR THE COMPLETION OF PAN-EUROPEAN PAGING SPECIFICATION BY THE CEPT AND SERVICE PROVISION, BY THE TELECOMMUNICATIONS ADMINISTRATIONS



Revised proposal for a

COUNCIL DIRECTIVE

ON THE FREQUENCY BANDS TO BE RESERVED FOR THE COORDINATED INTRODUCTION OF PAN-EUROPEAN LAND-BASED PUBLIC RADIO PAGING IN THE COMMUNITY

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],

[1] .....

[2] .....

[3] .....

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

Whereas radio paging services are the only low cost means of alerting and/or sending messages to users on the move;

Whereas radio paging services depend on the allocation and availability of frequency bands 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 change-over to the more advanced radio paging system codenamed European Radio MEssaging System (ERMES) being specified by the European Conference of Postal and Telecommunications Administrations (CEPT), will provide a unique opportunity of establishing a truly pan-European radio paging service;

Whereas CEPT has identified the unpaired frequency band **169.4-169.8 MHz** as the most suitable band for public radio paging;

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 full range of the frequency band set out above will be indispensable for the establishment of a truly pan-European radio paging service;

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 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 ../.../EEC of ..... 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 **1 January 1992** at the latest;

[4] OJ No L 298, 16.11.1984, p. 49.

[5] .....

18

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 as required 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 communication drawn up by the Analysis and Forecasting Group (GAP) for the Senior Officials Group of Telecommunications (SOG-T), strongly recommends that Administrations reach an agreement to use the same radio frequencies as a precondition for pan-European public radio paging [7];

Whereas favourable opinions on this report have been delivered by the telecommunications administrations and by the CEPT;

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

[6] OJ No L 217, 5.8.1986, p. 21.

[7] Proposals by the Analysis and Forecasting Group (GAP) for the Coordinated Introduction of Public Mobile Communications in the Community - 5.12.1985.

HAS ADOPTED THIS DIRECTIVE :

Article 1

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, provided in each of the Member States to a common specification which allows persons wishing to send and/or receive an alert and/or numeric or alphanumeric messages anywhere within the coverage of the service in the Community.

Article 2

Member States shall designate on a priority and protected basis, four channels within the band 169.4-169.8 MHz preferably:

- *169.6 MHz,*
- *169.65 MHz,*
- *169.7 MHz,*
- *169.75 MHz*

for the pan-European land-based public radio paging service by 1st January 1992 *at the latest.*

Member States shall ensure that plans are prepared as quickly as possible to enable the pan-European land-based public radio paging service to occupy the whole of the band 169.4 - 169.8 MHz according to commercial demand.

Article 3

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

Article 4

1. Member States shall bring into force the provisions necessary to comply with this Directive not later than 1 July 1991. They shall forthwith inform the Commission thereof.

   The provisions adopted pursuant to the first subparagraph shall make express reference to this Directive.

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

Article 5

This Directive is addressed to the Member States.

Done at Brussels .....

For the Council

The President

ASPECTS FINANCIERS

1. Ligne budgétaire

7700 : actions relatives à l'infrastructure des télécommunications avancées

2. Base juridique

- Recommandation du Conseil concernant l'introduction coordonnée des communications mobiles terrestres publiques cellulaires numériques paneuropéennes dans la Communauté (87/371/CEE);

- recommandation du Conseil relative à l'introduction coordonnée d'un système paneuropéen de télé-appel public terrestre dans la Communauté (proposée);

- directive du Conseil relative aux bandes de fréquences à réserver pour l'introduction coordonnée du système paneuropéen de télé-appel public terrestre dans la Communauté (proposée)

3. Classification

Dépenses non obligatoires

4. Description

Cette action a pour but d'assurer la mise en oeuvre en temps opportun dans la Communauté du système paneuropéen de télé-appel public terrestre "ERMES" ainsi que sa promotion et son extension dans la Communauté et au-delà des frontières commuautaires au profit de l'industrie de production, des exploitants et des utilisateurs des systèmes de télé-appel dans la Communauté.

Cette action inclura les activités spécifiques suivantes :

- contributions au développement des spécifications techniques et opérationnelles au sein de l'ETSI;

- contribution à l'identification dans le cadre de la CEPT d'un spectre de fréquences adéquat pour l'extension du service;

- application dans ce domaine de la directive du Conseil 83/189/CEE prévoyant une procédure d'information dans le domaine des normes et réglementations techniques, ainsi que de la directive du Conseil proposée concernant la normalisation dans le domaine des technologies de l'information et des télécommunications;

- soutien financier à des conférences, séminaires et bulletins d'information pour la diffusion des informations concernant le système et à la promotion de ce dernier par la sensibilisation vis-à-vis de ses avantages potentiels;

- études des moyens permettant d'assurer le fonctionnement transfrontalier des récepteurs et identifiant les accords douaniers et de licence nécessaires pour permettre la libre circulation des récepteurs de télé-appel;

- études sur la disponibilité de la technologie adéquate en Europe, et aide à l'industrie, si nécessaire, pour assurer cette disponibilité en temps utile;

- suivi de la mise en oeuvre et de l'extension du service dans les Etats membres;

- promotion du système au sein du CCIR en tant que norme mondiale, et encouragement de sa mise en oeuvre dans des pays tiers;

- promotion de l'extension du service par l'étude des possibilités d'introduction de diverses fonctions à valeur ajoutée, d'applications plus larges en fonction de besoins spécifiques des utilisateurs, et de son intégration future avec d'autres services de communications mobiles paneuropéennes.

5. Coûts et méthodes de calcul

Les crédits impliqués concernent la ligne budgétaire 7700. Les coûts ont été calculés pour chaque activité figurant à la section 4 ci-avant, pour ce qui concerne :

- l'effort en hommes/années, pour les experts, le personnel auxiliaire et le personnel temporaire;

- les frais de déplacements et de séjours;

- les coûts des publications;

- le financement des études;

- l'aide aux séminaires, conférences, etc.

- la mise à disposition d'installations pour les conférences.

6. Implications financières pour les crédits d'intervention

6.1. Calendrier des engagements et paiements (en millions d'écus)

Année	Engagements	Paiements
1989	0,75	0,5
1990	1,0	0,7
1991	1,5	1,2
1992	0,85	1,2
1993	-	0,5
TOTAL	4,1	4,1

6.2. Part du financement communautaire dans le coût total de l'action

La contribution financière de la Communauté variera entre 30 et 100 %, en fonction des activités concernées.

6.3. Méthodes de financement durant l'année en cours

Le lancement de cette action 1988 sera financée par la ligne 7700 du budget 1989.

7. Implications financières des frais de personnel et d'exploitation

7.1. Personnel requis exclusivement pour cette action :

1 fonctionnaire - catégorie A
1 fonctionnaire - catégorie B
1 fonctionnaire - catégorie C

7.2. Les besoins supplémentaires de personnel seront couverts soit par une réorganisation interne, soit dans le cadre du plan de roulement (postes).

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