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COMMUNICATION FROM THE COMMISSION TO THE COUNCIL AND TO THE EUROPEAN PARLIAMENT

on promoting the utilization of the results of Community-
sponsored R & D

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Summary & Conclusions

1. The purpose of the present Communication is to recapitulate briefly the present situation concerning the utilization of the results of Community sponsored R&D and to present and seek approval for new proposals which take into account both the recommendations made by CREST (1) and the fundamental objectives of the Framework Programme (2). The term "utilization" is used in the sense of using research results by whatever means, including their protection, dissemination and exploitation, and not simply by the licensing of inventions.

The methods described in some detail in this Communication form a self-consistent and comprehensive approach to the overall task of ensuring the optimum utilization of the results of Community sponsored R&D within the Community or in the interests of the Community. The type of method used must clearly depend on the nature of the particular result.

If the result is exploitable by industry and can be protected, e.g. by patenting or the confidential handling of know-how, then steps are taken to prevent its premature publication and to ensure its protection and exploitation, with appropriate licensing arrangements when the invention does not belong to the firms doing the exploitation.

If, on the other hand, the result cannot be protected and exploited by industry, then it is disseminated to potential users.

The two types of method are clearly complementary.

In what follows an attempt has been made to distinguish between, on the one hand, present methods for the dissemination, protection and exploitation of research results and, on the other hand, proposed new methods.

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However, it must be borne in mind that, since some of the proposed new methods have in fact already been used on a very infrequent basis, the distinction between present and new methods cannot always be absolutely clear cut.

The present situation

2. Present methods for promoting the utilization of the results of Community sponsored R&D fall into three categories :

2.1 Dissemination of information to a wide range of potential users, notably by

- the controlled distribution of progress reports within the Community (e.g. EURATOM);
- the publication of reports and monographs;
- the holding of conferences on specific topics, either restricted to Community participants or open, followed by publication of proceedings when appropriate;
- articles published in specialised journals;
- an abstracts journal (Euroabstracts) and newsletters;
- the data base (EABS) giving an overview of the results of research completed for the account of the European Community.

2.2 Protection of the results of Community sponsored scientific and technical activities, including

- patent, utility model, trade-mark, copyright and even plant-variety protection;

- the protection of know-how;

2.3 Exploitation of the results of Community-sponsored scientific and technical activities by:

- assessment of the market potential for inventions;
- publicizing of inventions through selected exhibitions and other publicity media;
- licensing and follow-up to ensure effective exploitation.

Some of these methods have only been introduced recently on a trial basis and in all cases the effectiveness of each particular method is systematically monitored in order to ensure that the most effective existing methods are reinforced and used in a systematic manner.

In the light of the CREST recommendations (1) or in the course of this monitoring of existing methods it has become apparent that there is a need for the further methods which will now be outlined.

Proposed methods

3. Further methods proposed for promoting an even more effective utilization of the results of Community sponsored R&D fall into one of the three categories mentioned above.

3.1 In the dissemination of information the following new or relatively little used methods should now be added:

- promote more awareness of the research efforts of the Community in the general public;

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- develop the data base on European Community research so that it covers not only completed research, as is now the case, but also provides short items of information on projected and on-going research;
- produce more monographs presenting the results of programmes or sub-programmes in synthetic form;
- expand the present little used Community system for confidential circulation.

3.2 In the protection of the results of Community sponsored scientific and technical activities the following new methods should be added:

- carry out and make available, as an input to the relevant existing or planned Community activities, computerized or other analyses of patenting trends;
- establish a comprehensive over-view of relevant national measures for protecting inventions, to help ensure that the fullest possible use is made of them, particularly by SMEs;
- encourage the establishment of such measures, where they do not exist, and
- as long as the means indicated under the two preceding indents do not exist, to offer Community resources on terms which do not distort competition.

3.3 In the exploitation of the results of Community sponsored scientific and technical activities the following new or relatively little used methods should be further developed (1)

- in certain cases undertake or stimulate prototype construction incorporating the results of JRC and shared-cost activities;

(1) A programme specifically for developing JRC inventions has existed since 1980, its present budget being about 0.5 Mio ECU p.a.

- contribute financially to pilot projects to prove overall industrial viability;
- use financial instruments of the Community in a preferential manner to promote diffusion into the economy.

Promising prototype and pilot activities can often be covered by the resources of their respective programmes. However, if any such prototype or pilot activities cannot be catered for in this way the resources requested in the present Communication can be made available.

- 3.4 Moreover, in order to enable relevant national and regional bodies to be more closely involved in promoting the utilization of the results of Community sponsored R&D, and as CREST has recommended (1), the Commission proposes that this should be arranged within the framework of the "Plan for the transnational development of the supporting infrastructure for innovation and technology transfer" (2).

Legal framework

4. Concerning the legal framework for Community sponsored scientific and technical activities, no formal changes are at present proposed.

Nevertheless, in order to favour the early exploitation of inventions arising from future R&D programmes, it is proposed to impose somewhat stricter contractual obligations concerning the notification of inventions to the Commission.

Finally it is recognized that for certain new programmes under the European Economic Community Treaty, it may be appropriate to adopt conditions concerning the dissemination, protection and exploitation of research results which differ somewhat from those which would be applicable if Council Regulation No 2380/74 were applicable.

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Administrative and financial arrangements

5. Particular attention has been paid to the financial resources and the internal administrative arrangements necessary for the implementation of the present proposals.

In particular because of the specialized approach needed for promoting the effective utilization of research results, because the needs for this approach may continue to exist for several years after the end of an individual programme and because such needs are not readily predictable, the Commission intends to maintain its current and satisfactory practice of generally entrusting the above activities to the existing horizontal unit. This implies a strengthening of the relationship between the administrative units concerned.

In the last few years the resources of this central unit for carrying out its present activities, listed in section (2) above, have fallen by a factor of two in relation to the Community's overall budget for scientific and technical activities.

It is therefore necessary both to redress this situation and to provide for the new activities proposed in section (3) above.

In the light of a comparison between the present situation and the hypothetical situation which would have arisen in 1982 had the present proposals already been made possible, future activities could be covered if, in the framework of the annual budgetary procedure, an amount corresponding normally to about 1.5% of the Community's overall R&D budget for that year were allocated for the activities covered in this Communication. The arrangements proposed for doing this are set out in more detail in section (4.4) of the main text below.

Evaluation

6. As indicated in section (5) of the main text below it is proposed to submit an Annual report evaluating the utilization of the results of Community scientific and technical activities.

Conclusion

- 7) The Council is invited to take note of and to approve the orientations proposed in the present Communication and, to this effect, to adopt the accompanying Resolution.

1. Introduction

- 1.1. At its meeting on 21 October 1979 and in its conclusions adopted on 20 December 1979, the Council stressed that the ultimate aim of Community research must be to produce results which contribute to the attainment of the economic, social and other objectives of the Community and its Member States. It accordingly requested the Commission to develop appropriate proposals for a policy for promoting the utilization (i.e. the protection, dissemination and exploitation) of the results of common R&D programmes.
- 1.2. In response to this request, the Commission submitted, on 31 December 1980, a Communication to the Council on the "Exploitation and Evaluation of Research Results" (1). This Communication outlined both the Commission's current actions and its proposals for the further development of its policy in the field of the promotion of the utilization of the results of Community sponsored R&D. This led to the recommendations made by CREST on 5/1/82 (2). Moreover, in its first outline of a Framework Programme for the Community's scientific and technical activities, covering the 1984-1987 period (3), the Commission announced that special proposals would be made by the end of 1982 indicating the efforts that would have to be devoted to the promotion of the utilization of research results generated at a Community level.
- 1.3. The purpose of the present Communication is thus to recapitulate briefly the present situation and to elaborate, in the framework of the Treaties, new proposals taking into account the CREST recommendations and the fundamental objectives of the Framework Programme. As explained under section 3 below, the term "utilization" is applied in the sense of using research results by whatever means, including their protection, dissemination and exploitation, and not simply by the licensing of inventions.

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1.4. A policy for promoting the utilization of the results of Community-sponsored scientific and technical activities should cover all phases of the innovation process, starting with the preparation of the programmes, projects or actions and ending with the utilization of the results and their evaluation.

It follows that when preparing such activities the available scientific, technical, commercial, financial, patenting and other information relating to the utilization of the expected results should be properly taken into account.

Furthermore, experience has shown that it is convenient to group under the four headings indicated below the factors which should be taken into account in planning proper utilization of the results of any Community-sponsored scientific and technical activity:

- The general framework (section 2)
 - . Programme objectives, context, character and content
 - . The legal framework
- Methods for promoting the proper utilization of the results of Community scientific and technical activities (section 3)
- Resources appropriate for promoting the utilization of the results of Community scientific and technical activities (section 4)
- Evaluation of the utilization of the results of Community scientific and technical activities (section 5)

The analysis which follows presents certain governing principles which, however, will certainly need to be modulated to take account of the specific features of each of the various types of Community scientific and technical activity.

All the activities described in this Communication will, as in the past, always be undertaken in concertation with the programme manager concerned. It must also be stressed that the present activities of the Joint Research Centre for the development of its own inventions are covered in the present Communication. This implies that their future financing is to be ensured by the method in section 4 of this Communication.

2. The General framework

2.1. Programme objectives, context, character and content

The valuable experience of the last few years, and in particular that of the Community's evaluation programme, has indicated several factors which merit attention.

2.1.1. Objectives

First, the continuing aim must be to express clearly the objectives both of programmes and of individual contracts, not only in order to facilitate the subsequent evaluation of their implementation, but also in order to draw attention to the key phases in the utilization process, so that appropriate measures may be taken for any step which otherwise might be a source of subsequent difficulties.

2.1.2. Context

Secondly, the intended activity should be placed in the appropriate context, in particular with respect to the potential value to the Community of the results anticipated, and in relation to the resources devoted to it.

The value to the Community may find expression in a number of possible ways, such as collaboration between partners from different Member States or the Community-wide utilization of results which otherwise

would have remained within a national orbit or the generation of norms, standards, and regulations, but, whichever way is chosen, it is appropriate to identify it from the beginning.

2.1.3. Character and content

Thirdly, Community-sponsored scientific and technical activities are acquiring a specific character which is neither that of pure academic research, nor that of the final stages in the development of new products, processes or services. Instead it has increasingly the character of basic but oriented research which is potentially of direct economic or social value, which may either be:

- non-competitive (i.e. related to needs in legislation, social policy, norms, standards, public services, etc.)

or

- pre-competitive (i.e. it is just upstream of the research aimed at specific products, processes or services for which the balance of risks and rewards can be fully borne by the industrial or other sponsor ; in this way competitiveness is promoted without public involvement in the competitive processes of the economy).

Such an orientation implies that industrial and other users should nevertheless be able and motivated to utilize the results of Community-sponsored scientific and technical activities. As the character and specific content of the individual activities are all different and, more especially, as the results often cannot, by the very nature of research, be fully known in advance, activities to ensure the proper utilization of the results of Community-sponsored scientific and technical activities must inevitably be a mix adapted to each invention on project, since each has its own special problems.

2.2. The legal framework

2.2.1. The policy concerning the promotion of the utilization of the results of Community scientific and technical activities should be governed by the principle of the widest and most effective dissemination and exploitation in the Community, in the interest of the Community, this approach being complemented by an active protection of the intellectual and industrial property rights of those entitled to them. The legal basis for this policy is to be found in the three Treaties which set up the European Communities (Art. 55 of the Coal and Steel Community Treaty, Artt. 5-29 of the EURATOM Treaty and occasionally the Council Regulation No 2380/74 of 17 September 1974, based on Art. 235 of the European Economic Community Treaty).

These basic provisions and the provisions for their implementation worked out by the Commission (in general in annexes to research contracts) lay down the rights and obligations of the Community, on the one hand, and of the contractors (firms, universities, research institutes), on the other.

Three principal types of activity are subject to the above mentioned provisions:

- (a) the dissemination of information obtained with a view to its publication (see section 3.1 below);
- (b) the protection of research results (patentable or non-patentable inventions) either by the Community or by the contractor (see section 3.2 below);
- (c) the exploitation of research results either by the contractor or by licensees of the Community or by licensees of a contractor (see section 3.3 below).

2.2.2. It is convenient to divide Community scientific and technical activities into two categories :

- Joint Research Centre activities
- Shared cost activities (including coordinated research),

the rules governing the ownership of inventions and the dissemination of information being somewhat different for each category.

2.2.2.1 Joint Research Centre (JRC) activities

In general inventions made by the staff of the JRC belong to the Community, except when the JRC carries out work under contract for a third party.

The JRC may also enter into contracts with third parties under which it pays the whole cost of work which complements its own activities. In this case all rights concerning the dissemination, the protection and the exploitation of the results obtained belong, in principle, to the Community.

2.2.2.2 Shared cost activities

In this case the Community likewise enters into research contracts with third parties (firms, universities, research institutes) - usually on the basis of research programmes. General conditions governing the rights and obligations concerning the dissemination, protection and exploitation of the results are laid down for each programme, often on the basis of, or by analogy with, Council Regulation No 2380/74. The Community generally only contributes part of the cost of individual projects, and the programme decision may set upper and lower limits to the share of the total cost of any individual project which it is permissible for the Community to bear.

Although the Regulation provides that the title to the inventions and information arising from the execution of Community research programmes can belong to the Community, it is at present standard practice to include in the contracts, pursuant to Article 3, provisions granting title to the inventions (whether patentable or not) to the Contractor.

Because it may not be until five or, quite often, ten years after the signing of a research contract that there is commercial exploitation of inventions which may arise from it, it is still somewhat premature to draw definitive conclusions concerning the effectiveness of Council Regulation No 2380/74 in promoting the interests of the Community.

Nevertheless, in connexion with the protection of inventions and the exploitation of the results of research (activities (b) and (c)), and as CREST has observed, a potential danger has arisen in cases when the Council Regulation No 2380/74 was applicable in full.

This Regulation requires the contractor "to exploit inventions which belong to him or to have them exploited under conditions which are in conformity with the interests of the Community and within a period to be laid down in the contract". However until recently the contractual requirements concerning the notification of inventions to the Commission have not been very stringent, so that, by the time it has become apparent to the Commission that an invention has not been exploited, it may have lost its usefulness. It is therefore the Commission's intention to overcome this difficulty by adopting a new approach, which should be of benefit both to the Community and the contractors themselves. It would notably involve making it a standard contractual obligation for contractors to notify the Commission of inventions as soon as they are available on pain of penalties including, for instance, immediate termination of the contract if there is manifest deliberate contravention. Within a specified interval after this notification, the Commission would enquire of the contractor his exploitation intentions and ask whether the Community itself could be of help in that respect. If the contractor expresses an intention to exploit, this should be specified more precisely and he should be held to it as a contractual obligation. Community support in the exploitation of the results, at the request of the contractor, would not necessarily be excluded. If he intends to exploit, but insufficiently to satisfy the Community market or policies of the Community, appropriate action should be taken, where possible, by common consent.

If the contractor disclaims any intention to exploit the Commission should, in the framework of future programme decisions, not be required to impose obligatory licences, since in practice the contractor can almost always withhold essential know-how. Therefore other sanctions for unjustified failure to exploit should be envisaged both in the programme decision and in the contracts. The Commission will make appropriate proposals concerning each programme.

In cases where the ownership of the inventions or information lies with the Contractor, the Commission will take measures, in view of a widest and most effective dissemination and exploitation of the results, to influence the licensing policy of the Contractor in particular as regards ensuring access to the results by third parties.

To achieve this a modification of the Regulation No 2380/74 is not necessary. Instead it would suffice in future programme decisions to make appropriate provisions concerning the dissemination of results (activity (a)) and the protection and exploitation of inventions, taking into due account the share of Community or other public financial support envisaged and further relevant factors.

Experience will in due course undoubtedly reveal to what extent it might be worthwhile codifying a set of rules generally applicable to most research programmes.

In the case of Community coordinated research, which is executed jointly by the Member States and their research organisations, together in some cases with the Commission's services, Community rules for the utilization of the results cannot be applied as such, but it is evident that the general rules of the Community Treaties concerning, for example, non-discrimination on grounds of nationality, rules on competition, etc. must be respected.

If the Community is actively engaged in such an action, alongside the other partners, the rights and obligations of the various parties in the exploitation of the results will clearly have to take account of this factor.

2.2.3. The Commission receives royalties from the exploitation under licence of inventions belonging to the Community (principally arising from JRC activities) or for which the Community enjoys a licence. In the case of shared cost activities ownership of the inventions usually lies with the contractor.

3. Methods for promoting the proper utilization of the results of Community scientific and technical activities

Notwithstanding the great diversity of Community-sponsored scientific and technical activities, there is a considerable degree of similarity between the hurdles which are encountered and the methods which may be used to overcome them. It is convenient to consider the latter under four headings.

3.1. Dissemination of information

This covers a wide variety of items of information, presented in a variety of ways, depending on the nature of potential consumers, e.g. highly specialized scientific or technical information, for specialists, management information and information for the general public.

The methods used have been constantly refined through the years in the light of experience and to reach the objectives presented in the Communication from the Commission to the Council on the "Exploitation and evaluation of research results"(1). A few have actually been added since the date of that Communication. At present dissemination is carried out through:

- (i) the controlled distribution within the Community of progress reports, mainly on JRC research, in the form of annual overviews and more detailed six-monthly reports;

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- (ii) the publication of reports and monographs, mainly (a) reports on completed research projects, (b) "topical" reports on results of particular interest and (c) "status" reports, giving an overview (on an annual or pluriannual basis) of achievements within a particular programme;
- (iii) the holding of conferences on specific topics, either restricted to Community participants or open, followed by publication of proceedings when appropriate; the latter is often achieved with the aid of commercial publishers to optimise dissemination and reduce costs; this is an efficient dissemination method which should be developed;
- (iv) articles in specialised journals submitted by the research workers themselves and covering results of particular interest, most of the costs being carried by the journals in question;
- (v) an abstracts journal (Euroabstracts) and a series of newsletters:
 - a) Euroabstracts publishes monthly bibliographic data and abstracts of all publications mentioned under (ii) - (iv);
 - b) sectoral newsletters highlight special results, announce conferences, major publications, calls for tenders, etc.
 - c) Videotex bulletins (disseminated via PRESTEL, VIDITEL, BILDSCHIRMTXT, etc.) have also been issued experimentally;
- (vi) the data base EABS (so called because it is derived from Euroabstracts) covering all scientific and technical publications of the European Communities; some 22,000 items to date.

The experience gained in these existing activities will be used systematically to ensure that the present methods which have clearly proved beneficial are always adopted.

The CREST, in the recommendations it made on 5 January 1982 (CREST/1201/82) proposed that these activities should not only be continued and, where appropriate, reinforced (e.g. the CREST would welcome more newsletters) but supplemented by the following new or relatively little used activities which the Commission now recommends launching:

- (vii) promoting more awareness of the research efforts of the Community in the general public;
- (viii) developing the EABS data base on European Community research so that it covers not only completed research, as is now the case, but also provides both descriptions of research projects as soon as they are started and subsequently additional short items of information on their progress, with a view to favouring contacts, at as early a stage as possible, between research workers engaged in similar work, throughout the Community; (as soon as this system becomes fully operational the feasibility of opening it up to input from research projects in all sectors - national, private and Community should be studied;)
- (ix) producing more monographs presenting the results of programmes or sub-programmes in synthetic form.
- (x) expanding the present little used Community system for confidential circulation of certain reports to selected Community organisations, enterprises and persons along the lines provided for by Art. 13 of the EURATOM Treaty.

3.2. Protection of the results of Community sponsored scientific and technical activities

The objective of the protection of the results of Community-sponsored scientific and technical activities is, generally speaking, to permit effective exploitation in the Community. Before being approved for dissemination to the Member States, their firms, research institutes and persons, all documents relating to the results of Community sponsored scientific and technical activities are therefore screened and measures are taken to protect any inventions they may contain. The type of protection adopted depends both on the methods available and on the type of scientific and technical activity involved.

Since the Communication from the Commission to the Council on the "Exploitation and evaluation of research results" (1), many of those proposals have been put into effect on a trial basis, so that methods of protection now include:

- (i) patent, utility model, trade-mark, copyright and even plant-variety protection;

This activity involves the protection of R&D results arising from JRC activities (see section 2.2.2.1 above). It is basic to subsequent licensing operations and is complementary to the Commission's efforts to ensure proper dissemination of R&D results.

- (ii) the protection of know-how and many incremental technological improvements which, not being protectable by the above methods, but being crucial for the exploitation of the results in question, is achieved through confidentiality in dissemination.

The experience gained in these existing activities will be used systematically to ensure that the present methods which have clearly proved beneficial are always adopted.

It is proposed to complement them with the following new ones:

- (iii) to carry out and make available, as an input to the relevant Community activities, computerized or other analyses of patenting trends.

Patenting trend analysis, based on published documents, is a valuable but too often neglected tool in the planning and management of public- and private-sector R&D. The Commission already has promising experience in carrying out such analyses, covering both statistical trends in broad technical areas and detailed aspects of specific technical topics and, if appropriate, could have further such studies carried out under contract.

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Furthermore, recent developments, and notably the increased emphasis on contract research programmes, have brought to light a need for better and wider protection of results arising from such programmes, notably in Member States other than the one in which the work was done and especially when exploitation is in the hands of an SME. It is therefore proposed, in line with what is suggested in section 2.1.3 above:

- (iv) that the Commission should, by establishing a comprehensive overview, help ensure that the fullest possible use is made of relevant national measures available to contractors, and in particular to SMEs, concerning the assessment and the protection of their inventions.
- (v) that the Community should encourage the establishment of such measures where they do not exist (for example by concertation or through Community directives), and
- (vi) as long as the measures indicated under (iv) and (v) do not exist, to offer Community resources for contributing to patenting costs, on terms which do not distort competition.

While the above proposals (iv) to (vi) are restricted to contractors participating in shared cost activities and to licensees of Community owned inventions lacking the necessary resources, they constitute, in the context of a Community-wide market, a special case of a more general proposal concerning analogous Community measures in favour of innovation which figure in the Community transnational innovation plan (1).

3.3. Exploitation of the results of Community-sponsored scientific and technical activities

Since the Communication from the Commission to the Council on the "Exploitation and evaluation of research results" (2), many of those proposals have been put into effect on a trial basis, so that the Community's methods in this area now include:

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(i) Assessment of the market potential for inventions

Quite often scientists and engineers pay insufficient attention to market and economic factors when fixing their priorities. For this reason, and notwithstanding the limited resources available, the Commission has in recent years used qualitative surveys of technical market opportunities, carried out by specialists under contract, in order to help focus exploitation work on the most promising research results arising from both JRC and shared cost activities. It has found this method of great value, notably in avoiding a waste of its own (and its contractors!) limited effort available for exploitation. It therefore considers that the method should be employed systematically. For this, the very limited resources at present available need to be considerably expanded, and should also cover technical feasibility studies where these are not otherwise provided for.

(ii) Publicizing of inventions (using appropriate methods; see 3.1 above)

The use of carefully selected exhibitions and other publicity media has proved its value and this activity should be maintained and developed.

(iii) Licensing and follow-up

The results of a publicly sponsored scientific or technical activity are quite often obtained by organizations which are not the best placed to exploit them commercially. In such cases an appropriate agreement with an exploiting organization and adequate arrangements for follow-up are indispensable.

Good follow-up is particularly necessary in the case of SMEs aiming at wide exploitation in the Community, since relatively few of them have adequate experience in this respect. The existing limited staff of the Commission will continue to act in an advisory capacity.

The experience gained in these existing activities will be used systematically to ensure that the present methods which have clearly proved beneficial are always adopted.

Nevertheless several obstacles remain, which necessitate applying in future the following further exploitation methods (reference should be made here to section 2.1.3 above) ; in particular, while several promising prototype and pilot activities have been carried out within the framework of their respective programmes, a number of cases have arisen where this has not proved possible. It is proposed to make available the resources requested in this Communication to such activities in sections (iv) and (v) below :

- (iv) In certain cases undertaking or stimulating prototype construction incorporating the results of JRC and shared cost activities, whether involving partial or 100% financing;

In several recent cases and, notwithstanding the small budget allocation available for promoting the utilization of certain results of JRC research, the commercialization of inventions, notably by SMEs, has been delayed or prevented by a lack of Community resources for the construction of a prototype necessary for convincing the future industrial partner of the technical viability of the invention.

- (v) Financial contribution to pilot projects to prove overall industrial viability

A pilot project is generally an obligatory step in the exploitation of inventions leading to large scale industrial processes; SMEs often lack the ability to find finance to cover it completely.

It could be a task of the Community to contribute to part of the cost of such projects if they arise from inventions made in the framework of JRC or shared cost activities.

Energy Demonstration Projects (1) which are currently supported financially by the Community are intended to share the risk of proving the technical and economic viability of innovation in energy. The results of such projects, depending upon the subject treated, require a selective dissemination already provided for in the Community scheme. However publication of major reports and some general publicity of results could be incorporated in the present framework.

- (vi) Using financial instruments of the Community in a preferential manner to promote diffusion into the economy.

Such initiatives are particularly desirable when the economic advantages of the new technique can be more fully reached on a Community-wide basis, when the rules of the European Investment Bank do not allow it to intervene or when the preference given is justified by unequal market conditions.

3.4. Collaboration with national and regional bodies

As CREST has recommended (2), relevant national and regional bodies should be more closely involved in promoting the utilisation of Community sponsored R&D, and the Commission proposes that this should, in particular, be arranged within the framework of the "Plan for the transnational development of the supporting infrastructure for innovation and technology transfer" (3).

To the extent that the information arising from Community research may interest developing countries, all steps will be taken to make this information available to them through appropriate channels.

(1) Regs. EEC 1302/78, 1303/78, COM(82)458 and 555

(2) CREST/1201/82

(3) COM(82)251 final

4. Resources appropriate for promoting the utilization of the results of Community scientific and technical activities

The Commission therefore believes that the Community should have the full range of means to ensure that all the downstream steps in the innovation process are properly covered. The Commission's proposals concerning improvements in promoting the utilization of Community-sponsored R&D were already made known some time ago (1); the Commission has welcomed with great interest the recommendation of CREST concerning them (2), which it now invites the Council to endorse formally after allowing for adaptations and clarifications which more recent developments have suggested would be appropriate.

One of these clarifications concerns the question of resources for promoting the utilization of Community-sponsored scientific and technical activities, which CREST felt could partly be provided from the individual programmes. In this connection, the Commission has conducted a thorough analysis of the relative merits of funding the promotion of the utilization of the results of scientific and technical activities either:

- as an integral part of individual activities, or
- from a specific central budget item covering the bulk of the resources necessary for these activities.

It has further examined the level of the resources needed in order to be able to carry out properly both the existing tasks and the new ones proposed in this Communication.

- 4.1. Because the needs of the individual activities for specialized services dealing with the utilization of the results of Community-sponsored scientific and technical activities are,

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in the Commission's view:

- (a) sometimes subcritical in size,
- (b) not readily predictable in terms both of their magnitude and the time when they make themselves felt, and,

as CREST indicated:

- (c) in most cases continue to exist for several years after the end of the research programme or project itself,
- (d) cannot always be attributed to specific programmes and,
- (e) do not take account of the required development of coordination activities,

4.2. The Commission intends on the whole to maintain its current and satisfactory practice of generally entrusting the direction of all the above activities to the existing horizontal unit in concertation with the programme managers concerned who, as in the past, will have the possibility of using part of their own programme budgets for necessary occasional and urgent activities.

4.3. Over the last decade central funds covering present activities only (see items (i)-(vi) of section 3.1, (i)-(ii) of section 3.2 and (i)-(iii) of section 3.3) have fallen steadily, by about a factor of two, in relation to the overall level of funding of Community research.

While a degree of rationalization of procedures made it initially possible, in spite of this handicap, to maintain these activities at a tolerable level, there is now an acute need:

- to overcome the present penury in the resources available for the existing utilization promotion activities just mentioned and
- to provide for the new activities, (vii)-(x) of section 3.1; (iii)-(v) and especially (vi) in section 3.2 and (iv)-(vi) in section 3.3.

4.4. In order to arrive at the necessary overall level of central direct funding the resources needed for promoting the utilization of the results of all the present continuing or immediately planned Community scientific and technical activities have been taken into account, except for activities (v) and (vi) of section 3.3, which require special treatment.

On the basis of this examination the Commission considers that the requirements relating to the promotion of the utilization of the results of R+D vary appreciably according to the very nature of the programmes and activities and that furthermore their timing does not correspond to the duration and timetable for the execution of these programmes. Consequently the Commission considers that the financial resources to be allocated to the promotion of the utilization of the results of Community research should be considered as a whole and calculated each year on the basis of a sound relationship between these financial resources and the sum total of the credits allocated for that year to all R+D activities.

The Commission considers that, in the framework of the annual budgetary procedure, these resources should normally be equivalent to about 1,5 % of the overall R&D budget.

The proposed strategy for promoting the utilization of Community scientific and technical activities and the associated budget procedures should be examined annually in the political context of the Framework Programme (1).

Clearly in the case of programmes, activities and projects relating to the European Coal and Steel Community, the particular rules of this Community will continue to apply and no charge on the ECSC budget is envisaged.

(1) COM(82)865 final

5. Evaluation of the utilization of the results of Community scientific and technical activities

The Commission's main proposals for the evaluation of Community research and development programmes are presented in a separate document (1) and cover in detail, in particular:

- evaluation methodology
- evaluation of the R&D programme management
- evaluation of R&D programme results.

In view of what has been said in section 1.4 above, and in order to justify the utilization of the budgetary means requested in this Communication, it is important to evaluate, in a parallel but separate exercise, the utilization of the results of Community scientific and technical activities. However, given the character and content of Community scientific and technical activities (see section 2.1.3, above), and while it may be relatively easy to identify results of scientific value, it is likely to be less easy to identify a large number of results of a more tangible economic or social character. In particular it cannot be expected that the utility of Community-sponsored scientific and technical activities will be measurable principally in terms of the output of inventions directly exploitable by industry.

Notwithstanding this, the Commission proposes to present to the Council, to the European Parliament and to the Economic and Social Committee, each year before the Summer recess, an Annual Report on the utilization of the results of all Community scientific and technical activities.

6. Conclusion

The foregoing proposals, which represent a logical development of past policies and practices should, in the first place, have a significant impact on the ability of Community-sponsored scientific and technical

(1) COM(83)1 final

activities and their utilization to "contribute to the attainment of the economic, social and other objectives of the Community and its Member States", thereby responding to the aim expressed by the Council on 21 October and 20 December 1979 and underlined by the European Council of 28 and 29 June 1982.

Moreover, the utilization strategy put forward here constitutes the only one which will be systematically launched in the public sector throughout the Community. In as much as the process of innovation needs the dimension of the Common Market, this activity should, within the framework of the proposed "Community plan for the transnational development of the supporting infrastructure for innovation and technology transfer" (1) and, in the spirit of CREST's recommendations, operate in the interest of the effectiveness of all concerned. As CREST requested this should be done in partnership and coordination with corresponding activities in the Member States.

The Council is invited to take note of and to approve the orientations proposed in the present Communication and, to this effect, to adopt the accompanying Resolution.

(1) COM(82)251 final

Draft resolution of the Council on
promoting the utilization of the results
of Community-sponsored research and development

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaties establishing the European Communities ;
Having regard to the draft resolution submitted by the Commission;
Having regard to the opinion of the European Parliament ;

Whereas the effort devoted by the Community and its Member States to the dissemination, protection and exploitation of the results of research and development should be consonant with the effort devoted to that research and development ;

Whereas in order to maintain the competitiveness of the economy of the Community and existing living standards research and development must have a greater economic impact ;

Whereas during its meeting on 21 October 1979 and in the conclusions it adopted on 20 December 1979 the Council stressed that the ultimate aim of Community research must be to produce results which contribute to the attainment of the economic, social and other objectives of the Community and its Member States ;

Whereas at the same time it requested the Commission to develop appropriate proposals for a policy for the exploitation of these results ;

Whereas on 31 December 1980 the Commission transmitted to the Council a Communication on the exploitation and evaluation of research results (1), in which it first submitted proposals for implementing its policy for promoting the utilization of the results of Community-sponsored research and development ;

(1) COM(80)889 final

Whereas at its meeting in Luxembourg on 29 and 30 June 1981, the European Council stressed that efforts should be made to obtain greater economic benefit from the research activities currently being pursued in the Community and the Member States ;

Whereas in its study on the aims and priorities of a common research and development policy, adopted on 26 and 27 January 1982 (1), the Economic and Social Committee expressed the opinion that research and development findings should be made readily available to potential users, while protecting legitimate rights ;

Whereas the opinion of the Scientific and Technical Research Committee delivered on 5 January 1982 (2) contained precise recommendations;

Whereas small and medium-sized enterprises in particular should be able to benefit from the results of Community research and development ;

HAS ADOPTED THIS RESOLUTION :

Article 1

The Council approves the general guidelines of the Communication from the Commission on promoting the utilization of the results of Community-sponsored research and development (3).

Article 2

The Council takes note that in this respect the requirements vary according to the specific nature of the various programmes and activities and that for each programme and activity the timing of these requirements differs from that laid down for their execution.

(1) ESC - 82 - 001

(2) CREST/1201/82

(3) COM(83)18 final

Article 3

The Council considers that the financial resources to be devoted to promoting the utilization of the results of the various research and development programmes and activities should be aggregated and assessed each year on the basis of a sound relationship between these financial resources and the total budget allocated for that year to the whole of these programmes and activities.

Article 4

The Council itself believes that the financial resources envisaged by the Commission, namely about 1.5 % of the whole Community research and development budget, give a good indication of the Community effort which should normally be undertaken with a view to improving the utilization of the results of Community research and development ; it invites the European Parliament to support this guideline.

Article 5

The Council requests the Commission to report to the Council, to the European Parliament and to the Economic and Social Committee each year on the utilization of the results of Community research and development.