

**Opinion of the Economic and Social Committee on the 'Communication from the Commission on the Implementation of the First Action Plan on Innovation in Europe'**

(98/C 235/10)

On 21 January 1998 the Commission decided to consult the Economic and Social Committee, under Article 198 of the Treaty establishing the European Community, on the above-mentioned communication.

The Section for Energy, Nuclear Questions and Research, which was responsible for preparing the Committee's work on the subject, adopted its opinion on 13 May 1998. The rapporteur was Mrs Sirkeinen.

At its 355th plenary session held on 27 and 28 May 1998 (meeting of 27 May) the Economic and Social Committee adopted the following opinion by 116 votes to none, with three abstentions.

## 1. Introduction

1.1. In its opinion<sup>(1)</sup> on the Green Paper on innovation the Economic and Social Committee notes that:

- innovation is the basis for competitiveness, employment and economic and social development and well-being;
- innovation lays the foundations for ongoing cohesion; and
- innovation is by nature an extensive and decentralized process comprising many elements and should be approached on the basis of respect for the subsidiarity principle, albeit in a coordinated fashion.

1.2. Reducing unemployment in Europe requires the adoption of new attitudes and approaches. In particular, there is a need to improve the capacity for innovation in Europe. This extends far beyond research and technology to include factors related to prevailing attitudes, the social and educational context and the legal framework. The Amsterdam and Luxembourg European Councils entrusted the Commission with the task of promoting research and innovation with a view to reducing unemployment.

1.3. With the publication of its Green Paper on innovation in 1995, the Commission launched a debate on innovation policy.<sup>(2)</sup> The Economic and Social Committee adopted an opinion on the Green Paper in May 1996<sup>(1)</sup>. On the basis of the Green Paper and the feedback generated by it the Commission drew up the First Action Plan for Innovation in Europe in December 1996. The Commission communication which is the subject of the present opinion contains the first annual report on implementation of the Action Plan together with a proposal for priorities for action in 1998.

## 2. Gist of the Commission's communication

The Commission document is organized as follows:

### 2.1. *Implementation of the Action Plan*

Implementation has commenced at Community level. The following table lists the various measures and summarizes the main progress made and current situation in different fields.

#### Protection of intellectual property

Green Paper on patents:

- Commission decision on appropriate follow-up at the beginning of 1998

Intellectual Property Right (IPR) Help Desk:

- Call for tenders concerning the provision of external services at the beginning of 1998; service operational mid-1998

Access to data on patents:

- Decision by the European Patent Office on implementation of a single interface

Protection of biotechnological inventions:

- Unanimous agreement by the Council on the need for a directive in November 1997

Intellectual property in the information society:

- Commission proposal for a directive on 10 December 1997

Technical inventions:

- Commission proposal for a directive subsequent to consultation on the Green Paper on protection of utility models in the single market

#### Financing innovation

The European Capital Markets:

- Launch of the Euro-New Market and EASDAQ (European Association of Securities Dealers Automated Quotations)
- Commission report to the European Council on the remaining obstacles, June 1998

<sup>(1)</sup> OJ C 212, 22.7.1996.

<sup>(2)</sup> COM(95) 688 final.

## I-TEC (Innovation and Technology Equity Capital):

- Selection of the first nine venture capital funds at the end of 1997 (ECU 380 million for 150 high-tech SMEs); plan to establish a network between the selected funds

## JEV - Joint European Ventures:

- Implementation of project to support the creation of European joint ventures (ECU 5 million)

## LIFT (Links to Innovation Financing for Technology):

- Call for tenders for the external operation of a Help Desk to facilitate contacts between investors and players in the field; operational mid-1998

## Spirit of enterprise and access to financing :

- Investment fora and training seminars under the Innovation programme (approx. 330 projects to date) and the Brite-Euram programme (five projects to date)
- Establishment of a Biotechnology and Finance Forum
- Paris Round Table on innovation, the creation of businesses and jobs

## The regulatory framework and administrative simplification

## BEST (Business Environment Simplification Task Force):

- Report to the European Council in June 1998

## SLIM (Simpler Legislation for the Internal Market):

- Report to the European Council in November 1997

## European Economic Interest Groupings (EEIG):

- Communication from the Commission on the participation of European economic interest groupings in public contracts and programmes financed by public funds
- Practical guide to EEIGs for SMEs under the Regie (European Network of EEIGs) initiative

## Education and training

## Erasmus Apprenticeship initiative:

- Transnational placement of 70 000 apprentices by 1998

## Europass:

- Introduction of sandwich classes in higher vocational education

## Campus-Voice:

- Network of partnerships involving 70 universities, six enterprises, seven newspapers and student associations

## Form-Inno-Tech:

- Founding principles for the establishment of a European network drawn up in September 1997; aimed at enterprises and establishment of SMEs

## Train-Re-Tech:

- Increased cooperation between the Training and Mobility for Researchers programme and the Leonardo programme; continuation of the fifth RTD framework programme
- Development of the Training and Mobility of Researchers network

## Gearing research to innovation

## Fifth RTD framework programme:

- Concentrated key actions as an integral part of the framework programme
- Promotion of innovation within thematic programmes

## Integrating SMEs into the EU's fifth RTD framework programme:

- Horizontal programme 'Innovation and Participation of SMEs'
- Some 9 000 SMEs have participated in the fourth framework programme over a period of two and a half years

## Improved gearing of research to standardization:

- Working document on research and standardization

## Prosoma Esprit:

- Access to RTD results on CD-ROM and the Internet

## European technology-transfer initiative at the Joint Research Centre (JRC):

- Phasing in of the initiative from 1998, with provision for monitoring developments and evaluating results

## Strengthening overall coordination of innovation policy

## Establishment of mechanisms for coordinating implementation:

- Group of Directors-General for Innovation
- Commission Communication on coherence, competitiveness, RTD and innovation policy in preparation

## Trend Chart on innovation in Europe

- Project and work schedule confirmed in November 1997

## 2.2. Priorities for action in 1998

2.2.1. Continued implementation of the Action Plan will remain one of the Commission's top priorities, in particular in the following fields:

- intellectual property,

- access to financing,
- administrative simplification,
- developing the spirit of enterprise.

2.2.2. With that objective in mind, emphasis will be put on actions aiming at:

- mobilizing Member States and the operators concerned, in particular through their participation in the elaboration of the Trend Chart on innovation;
- fostering the creation, development and growth of companies, in particular of those based on new technologies;
- encouraging new production and trading patterns;
- supporting the acquisition of professional skills by innovation support specialists, in particular through training in the areas of technology brokerage, technology transfer and financial analysis of stocks;
- facilitating the interconnection or, whenever necessary, the setting up of private and/or public networks to support and advise firms in the area of technology, marketing, management, information and finance.

2.2.3. Information sheets on the actions described above are appended to the communication.

### 3. General comments

3.1. In the present opinion the Economic and Social Committee focuses on making a number of general observations on the Commission document and commenting on the priorities for action in 1998 listed therein. Reference is made to measures already under way only to the extent that there is something fundamentally new to note about them. The Committee has already adopted or is currently drawing up a number of opinions that touch on the Action Plan on innovation policy.<sup>(1)</sup> The present opinion draws on the views expressed in these opinions without actually repeating them.

3.2. The publication by the Commission of an annual report on the Action Plan on innovation, together with proposals on priorities for action, is clearly beneficial both to the parties directly involved in such activity and

<sup>(1)</sup> Opinion on the Green Paper on innovation, OJ C 212, 22.7.1996. Own-initiative opinion on the impact on SMEs of the steady, widespread reduction in funds allocated to research and technological development in the EU (at Community and national level), OJ C 355, 21.11.1997, p. 31. Opinion on the Proposal for a Council Decision concerning the rules for the participation of undertakings, research centres and universities and for the dissemination of research results for the implementation of the Fifth Framework Programme of the European Community (1998-2002) and the Fifth Framework Programme of the European Atomic Energy Community (Euratom) (1998-2002).

those who are interested in it. More attention needs to be paid to presentation, however. Despite its conciseness the communication is rather difficult to understand for people who are not familiar with the subject, especially since the classification it employs differs from the one used in the Action Plan. Moreover, no justification is given for the priorities for action in 1998 nor is there any description of the measures required.

3.3. In order to make the report easier to read, the Committee proposes the inclusion of a separate summary table with three columns headed as follows:

- priority measures;
- progress made with regard to each measure; and
- planned action in the following year.

#### *Objectives and priorities of EU innovation policy*

3.4. High unemployment is one of the most serious problems facing Europe. It is therefore both right and necessary that innovation policy be used to alleviate this problem as well. Countries which invest more on education and training, research, innovation and new technology also generate more new jobs.

3.5. Innovation is essentially a cultural issue. This should be given more emphasis in the Commission's Action Plan. It has to do with attitudes and society's willingness to renew itself, the way people relate to change and risk, entrepreneurial spirit and dynamism in general. Developing education and training and strengthening their connections with firms and the world of work play a key role in this regard.

3.6. It is important for the success of innovation that at the workplace there is wide involvement in all aspects of the innovation process and that work organization is such that it fosters participation by each individual and the development and utilization of the skills and know-how of each individual.

3.7. It is customary in Europe to focus particular attention on the need to ensure that due regard is also paid to social cohesion in the process of structural change in the economy. This need is now formally recognized in the Amsterdam Treaty. Social dialogue between the social partners can play a major role in this process.

3.8. Job creation takes place primarily in small and medium-sized enterprises, craft industries and micro enterprises. They are close to markets and can adapt and respond quickly to people's needs. Improving the ability of SMEs to participate in all aspects of the innovation process is a top priority. The ESC has drawn

attention to various aspects of this question in a number of opinions.<sup>(1)</sup> The creation of business networks and particularly cooperation between small and large firms can make a major contribution in this connection.

3.8.1. It would be useful in implementing the Action Plan to apply the three-fold classification of SMEs into those which develop technology, those which exploit new technology and passive enterprises which is presented in more detail in the above-mentioned opinion. A practical proposal based on this classification is given below in point 5.1.4.

3.9. Innovation policy is a highly complex sector and operates at many levels. It involves enterprises and other individual operators at local, regional, national and Community level. In its opinion on the Green Paper on innovation, the ESC stressed that the EU should give first priority to those issues which fall within its competence, that is issues related to the regulatory framework at EU level, the single market, the structural funds and research programmes. The ESC would reiterate that human resources and financing allocated to these areas must be given clear priority.

3.10. The EU can take action in areas falling within the sphere of activity of Member State, regions or market operators only if this generates added value or political mobilization is called for. Among the decentralized areas typically associated with the innovation system are funding, education and training; the formation, development and research activity of firms; and universities and other research centres. The EU's primary task in these areas should be the collation and provision of comparable data, the creation of opportunities for exchange of experience and the establishment of networks of partnerships between organizations providing information, educational and advisory services in Member States and, where necessary, the coordination of national and regional action.

#### *First Action Plan on Innovation*

3.11. The ESC notes with satisfaction that the Action Plan echoes many of the views set out in its opinion on the Green Paper on innovation.<sup>(2)</sup> Since, however, the ESC has not had an opportunity to deliver a separate opinion on the Action Plan for

innovation in Europe, the following comments on the Action Plan are presented below.

3.11.1. Given the importance of promoting innovation, it is essential to have an effective and smoothly functioning Action Plan. So far, however, the Commission's first Action Plan and its implementation give the impression of being somewhat fragmentary and lacking in direction. Whilst recognizing that the promotion of innovation is a complex and thus difficult task, the Committee is nevertheless concerned about the effectiveness of the Action Plan in its present form.

3.11.2. The Action Plan is very largely built on research activity and exploitation of research results, and in particular the EU's fifth RTD framework programme. Most of the measures are designed to improve opportunities for and remove obstacles to exploitation of research results.

3.11.3. But not all innovation is research-driven. The Action Plan completely ignores one part of the innovation system which is at least equally important, namely markets. Recognition of market needs and marketing within and outside the EU must be developed in enterprises parallel with the development of supply in the technology field. This should be stated explicitly in the Action Plan, even though a large proportion of potential measures in this area, such as those related to education and training, do not fall within the competence of the EU.

3.11.4. The effective functioning of the single market is, however, one area which clearly falls within the EU's competence and is vital for the success of innovation. Though this applies to all market segments, the problems are particularly acute in those sectors which are still partially or totally closed to competition. Areas where development has most clearly lagged behind that of leading competitors are telecommunications and information technology in general, i.e. those sectors with the highest level of innovation.

3.11.5. The Structural Funds are the most important resource which the EU has at its disposal for fostering regional economic development, cohesion and a steady improvement in living conditions in Europe. The use of the structural funds to foster innovative activities should also be one of the main tools of innovation policy at EU level in the future. This would also be the best way to promote employment, which, in the view of the ESC, should be the prime objective of the structural funds reform. At the moment the Action Plan only mentions this possibility.

3.11.6. All projects supporting the development of the information society in Europe are also important from the point of view of improving innovative activity. The information society offers a favourable environment for innovative activity and creates both demand and the

<sup>(1)</sup> Own-initiative opinion on the impact on SMEs of the steady, widespread reduction in funds allocated to research and technological development in the EU (at Community and national level), OJ C 355, 21.11.1997, p. 31.

<sup>(2)</sup> OJ C 212, 22.7.1996.

necessary conditions for the emergence of new products and services.

#### *Implementation of the Plan*

3.12. The ESC welcomes the fact that implementation of the Action Plan has commenced on such a broad front. In particular, the Committee notes with satisfaction that a major part of the measures which have been initiated fall under the priority area of action aimed at establishing a legal, regulatory and financial framework conducive to innovation. The ESC considers measures in this area to be of prime importance because, as noted in point 3.9, they fall specifically within the EU's competence.

3.13. The ESC would point out that not even in the priorities for action in 1998 does the communication make any mention of taxation, technology foresight, competition, structural funds, etc., all of which are identified as areas for action in the Action Plan. It would be useful if the Commission could make known its intentions as regards measures in these areas, for example when outlining the priorities for action in 1998.

3.14. It is not intended to grant separate appropriations for the Action Plan. Instead, action will take the form of horizontal measures, coordination and revisions to the content of existing programmes. In its opinion on the Green Paper on innovation, the ESC endorsed precisely this kind of approach, but considered it necessary to make additional funding available for the dissemination and exploitation of RTD results within the framework of the (fourth) framework programme. To what extent have these views been taken on board in the proposals concerning the fifth framework programme?

3.15. As innovation policy is horizontal by nature, cooperation and coordination between the Commission's DGs is a *sine qua non* for successful action at EU level. The indications are that the Group of Directors-General has already made good progress in this regard. The ESC calls for a further strengthening of cooperation so that concrete results can be achieved.

3.16. The Commission has set up a Group of Senior National Officials to guide preparation of the Trend Chart on innovation performance and policies in Europe. The ESC feels the Group should be enlarged to form an Innovation Platform which would bring together experts representing various interest groups in society, give its views on key problems and priorities and serve as a forum for the exchange of effective methods and practices.

3.17. Evaluation and the measures it gives rise to must form an integral part of the management of the Action Plan. This requires the active deployment of

effective, wide-ranging instruments, including in particular the expertise of the Innovation Platform mentioned above. The ESC must be involved in a constructive way in the evaluation process.

#### 4. Specific comments on the Action Plan

##### 4.1. *Protection of intellectual property rights*

4.1.1. The Green Paper on patents. The Committee has adopted a separate opinion on this subject<sup>(1)</sup>.

4.1.2. Intellectual Property Right (IPR) Help Desk. The service as such is necessary but the ESC nevertheless recommends that use of the Help Desk be monitored closely in order to determine whether this kind of centralized solution corresponds to users' needs or whether preference should be given to the provision of decentralized services at national or regional level.

##### 4.2. *Innovation financing*

4.2.1. I-TEC pilot project. The project and the way in which it is implemented seem well-founded, but it is too early as yet to comment on the practical experience gained.

4.2.2. LIFT project. This seems to be a necessary action but here, too, the project has not yet advanced to a stage where there is enough experience for results to be evaluated. Rather, the focus for the time being must be on monitoring the project and, in particular, the effectiveness of a centralized solution.

4.2.3. Entrepreneurship and access to financing for advanced technologies. A number of worthwhile initiatives have already been launched in this very important area. It is still too early to evaluate results; the 'results' presented by the Commission refer to the measures implemented rather than to final results.

##### 4.3. *The regulatory framework and administrative simplification*

4.3.1. Communication on EEIGs. Public procurement can play an important role in promoting innovation, and this is a factor which the Commission should emphasize in the future. EEIGs, for their part, are a key instrument as regards organizing firms' activity in the innovation field. Accordingly, a communication which highlights these aspects is to be welcomed.

4.3.2. Regie Action. Networks of this kind are necessary. However, the initiative seems to be progressing very slowly.

<sup>(1)</sup> OJ C 129, 27.4.1998.



#### 4.4. *Education and training*

4.4.1. The Campus-Voice, Form-Inno-Tech and Train-Re-Tech initiatives are all aimed at key components of the innovation system. The ESC considers them to be pilot projects which can serve as a source of experience and ideas for programmes at national and even EU level. It is important to evaluate the projects implemented under these initiatives and draw practical conclusions, including where necessary the discontinuation of less successful projects.

#### 4.5. *Gearing research to innovation*

4.5.1. The planning of action at EU level in the years ahead is in its final stages as the key decisions concerning the Fifth RTD framework programme have almost been finalized. The ESC has adopted or is currently drawing up a number of opinions on this subject<sup>(1)</sup>.

4.5.2. The Commission notes that the EU's RTD efforts face four handicaps: insufficient investment in research; fragmentation; shortcomings in identifying the needs of society and emerging markets; and insufficient linkage between research and its applications. Proof of the existence of the last two handicaps is provided by, for example, the fact that Europe has lost market shares in the fastest growing sectors, in particular. The better research is able to respond to the needs of the marketplace, the smaller are the problems associated with funding research: the resources invested can be quickly recouped from the market.

4.5.3. Integrating SMEs into the framework programme. In its opinions the ESC has repeatedly highlighted the importance of this type of action. Whilst the increased participation of SMEs is a positive development, the goals set for action in this area must be more ambitious.

4.5.4. Improved gearing of research to standardization. Although the Commission working document marks an important stage in the implementation of Community policy on standardization, measures in this area should go further and have a wider range of application. When research projects are launched,

whether at EU level or some other level, standardization must be taken into account from the outset, either by seeking to ensure compatibility with existing standards or being aware of future standardization needs.

4.5.5. Prosoma. The purpose of this interesting initiative seems to be to facilitate the dissemination of research results. It is too early at this stage to draw any conclusions about the experience gained.

4.5.6. Technology transfer initiative at the Joint Research Centre (JRC). The ESC supports all measures aimed at promoting exploitation of research carried out at the JRC. The results would be even better if, from the very beginning, the JRC and its activities were market-oriented.

#### 4.6. *Strengthened overall coordination*

4.6.1. Trend Chart on innovation in Europe. The Trend Chart is designed to serve as a tool for analyzing innovation policy. This is need for a tool like this, given the very complex nature of innovation policy and the fact that the instruments at its disposal are still only partly developed.

### 5. **Priorities for action in 1998**

5.1. The criteria used for establishing priorities are not stated explicitly in the Commission document. Notwithstanding this, the four priority areas identified — intellectual property, financing, administrative simplification and developing the spirit of enterprise — are important and of topical interest.

5.1.1. In the field of intellectual property, there is a particularly urgent need for regulations to ensure the effective functioning of the information society, including electronic commerce, and for action to address issues in the biotechnology sector. The Commission should also take a leading role in advocating the harmonization of the patent system on a global basis, all the more so if the EU develops into a single patent area.

5.1.2. In order to improve financing of innovation, the EU and the Member States must create an effective regulatory framework and put in place a system of general incentives. It would be useful in this context to identify the obstacles to financing in the various Member States. Direct financing by the EU and Member States should be limited to the provision of seed capital.

5.1.3. As regards administrative simplification several studies have been carried out and a number of programmes launched. The ESC has addressed this issue in a number of opinions and endorsed measures aimed at simplification. Rather than spend more money on new

<sup>(1)</sup> Opinion on the Commission Working Paper: Towards the Fifth Framework Programme — scientific and technological objectives, OJ C 355, 21.11.1997, p. 38; Opinion on the amended proposal for a European Parliament and Council Decision concerning the Fifth Framework Programme of the European Community for research, technological development and demonstration activities (1998-2002), OJ C 73, 9.3.1998, p. 133; Opinion on the specific programmes of the Fifth Framework Programme for R&TD (in preparation); Opinion on the Proposal for a Council Decision concerning the rules for the participation of undertakings, research centres and universities and for the dissemination of research results for the implementation of the Fifth Framework Programme of the European Community (1998-2002).

studies, efforts should henceforth focus on implementing plans and dismantling unnecessary administrative obstacles at EU and national level.

5.1.4. As for developing the spirit of enterprise, the ESC would refer to the comments made in point 3.9. In the view of the ESC, it would be useful to apply the classification proposed in point 3.8.1 in seeking to increase the innovative capacity of SMEs of various kinds. The Committee further proposes the launching of pilot projects for the development of technology brokerage bodies in areas where they do not already exist. These bodies could be associations or individuals, such as chambers of commerce and consultants, which either possess the relevant expertise themselves or act as intermediaries for the transfer of such expertise and which, on demand, would assist SMEs in the acquisition of appropriate technology, partners (large firms, individual researchers, etc.) and funding. With the aid of the Commission, these intermediaries could be organized into EU-wide networks.

5.2. The five objectives mentioned at the end of the communication deserve the Committee's support. However, the Commission does not make it very clear what action it is intended to take in each of these areas. All of the areas concerned fall largely within the competence of the Member States, and so the need for and planning of action at EU level must be examined very carefully.

## 6. Conclusions and recommendations

6.1. The Committee feels it is useful to publish an annual report on implementation of the Action Plan on innovation. However, the first report is rather difficult to read. The ESC therefore proposes that the readability of the report be improved by the addition of a summary table setting out the priority measures, the progress made for each measure and planned action for the following year.

6.2. More still needs to be done to improve the capacity of small and medium-sized enterprises, craft industries and micro enterprises to participate in the innovation process as a whole. In order to develop the

spirit of enterprise, which is one of the priorities for action in 1998, the ESC proposes the launching of pilot projects for the development of technology brokerage bodies in areas where they do not already exist. They would assist SMEs in the acquisition of technology, partners and funding. In the view of the ESC, it would be useful to apply the three-fold classification of SMEs into those which develop technology, those which exploit new technology and passive enterprises.

6.3. The Action Plan completely ignores the fact that markets are an extremely important part of the innovation system. The ESC considers it important to note that the effective functioning of the single market, the responsibility for which lies clearly with the EU, is a *sine qua non* for successful innovation.

6.4. The use of the structural funds to promote innovation should also be a key instrument of innovation policy at EU level. This would also be the best way to improve employment, which the ESC considers to be the prime objective of the structural funds reform.

6.5. In the view of the ESC, EU innovation policy should focus primarily on those issues which fall within the competence of the EU, i.e. those related to the regulatory framework at EU level, the single market, the structural funds and research programmes. The EU can take action in areas falling within the sphere of activity of national or regional authorities or market operators where such action generates added value. The EU's primary role in these areas should be to collate and disseminate comparable information, provide opportunities for the exchange of experience, establish partnership networks and, where necessary, coordinate national and regional measures.

6.6. The effective implementation of the Action Plan on innovation in Europe calls for a broad-based approach towards the identification of problems and priorities and evaluation of results which draws on available expertise in this area. To this end, the ESC proposes the setting up of an Innovation Platform comprising the Group of Senior National Officials augmented by experts representing different interest groups in society. The Platform could serve as a forum for the exchange of experience and coordination between Member States and other relevant players.

Brussels, 27 May 1998.

*The President*  
*of the Economic and Social Committee*  
Tom JENKINS