

COMMISSION OF THE EUROPEAN COMMUNITIES

SEC(92)1300 final

Brussels, 7 July 1992

REPORT FROM THE COMMISSION

Transnational Training for Technology in Europe - the COMETT Experience

COMETT II Interim Evaluation Report
1990 - 1992

Table of Contents

Europe on the Move

Introduction	1
The changing map of Europe	1
I. Cooperation: A key concept	2
COMETT in brief	3

Forging Links between Universities and Industry

II. Preparation for the Europe of tomorrow	4
1 COMETT: A developing scheme	4
2 Technology in COMETT	4
3 Towards a Single European Market:	5
European Network of University-Enterprise Training Partnerships	5
Joint Continuing Training Courses	6
Transnational Exchanges	8
Pool Schemes	9
4 COMETT Outputs 1990-1992	10
5 Budget	12
6 Added Value of COMETT	12
III. A visible and coherent approach	13
1 External evaluation	13
2 Internal evaluation	14
3 'Positive Actions'	17
4 The Sectoral Development of COMETT	19
5 Conferences	21
IV. Future Perspectives	21
Conclusion	22
ANNEXES	24
1 Selection Procedure	24
2 Programme Management	26

Europe on the Move

Introduction

The changing map of Europe

The 1990s will be remembered as the decade of dynamic developments and transformation which changed the map of Europe. One of these transformations will be the creation of the biggest single market in the world by 1 January 1993, comprising now 12 Member States and involving 340 million people. We have already witnessed significant advances towards political, economic, and monetary union and more efforts will yet be made towards the acceleration of the integrative process within the European Community. Within a short space of time we hope to see a frontier-free Europe with freedom of movement for people, services, goods and capital.

In addition to these long-debated changes, there were the historic developments in Central and Eastern Europe and the re-unification of Germany. Suddenly our fundamental ideas of neighbourliness need to be reconsidered and adapted to the possibility of extending the Community to include our 'new' neighbours.

The third significant development, not only within the European Community, but throughout the world at large, is the rapidly increasing pace of technological change. At a time when technologies are developing ever more rapidly, the Community has become concerned about its qualified personnel of the near future. Is Europe's competitive edge under threat?

As varied as these changes and transformations are, they are nevertheless united in the similar questions and efforts they demand. One of which is the demand for cooperation. The last decade has witnessed a variety of new partnerships emerging; most recently it is the cooperation between enterprises and universities that has commanded our attention. Another principal issue is the development of human resources: education, training, and re-training have become key priorities. However, the main conclusion at all levels is that these are not separate but interdependent issues, and that, consequently, economic well-being and the growth of education must go hand in hand. Clearly, if Europe wishes to retain its economic competitiveness, new links must be forged between industry, research institutions, education and training.

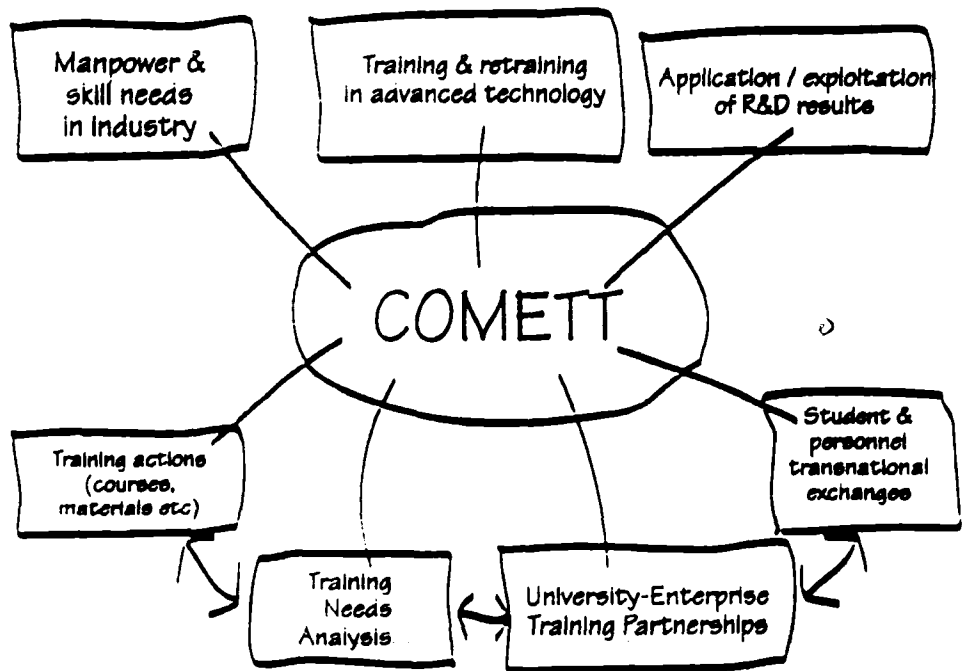
While each Member State has its own distinctive system of higher education and training, the Community is in a position to improve the effectiveness of these individual systems through actions carried out on a concerted basis with the active involvement of industry. Since 1986, the year of the ratification of the Single European Act, the Community has launched several initiatives that have clearly demonstrated its commitment to these key concepts. The COMETT Programme is one of these initiatives. COMETT is directly involved not in one but in a whole range of interdependent issues which work towards a deeper integration of the European Community.

I. Cooperation: A Key Concept

Some hard facts

- It is estimated that 2/3 of the technology of the year 2000 has not yet been invented while 3 out of 4 people working now will still be active then. At a time when technologies are developing ever more rapidly, the updating of education and training in technology has become imperative. In recent years there has been an increasing awareness that education and training are priority concerns in securing the competitiveness of the European industry.
- In order to combat the problem of increasing skills shortages, cooperation between universities and enterprises within the European Community has become a priority concept.

In an effort to tackle these two key issues the COMETT Programme supports a variety of actions involving the cooperation of enterprises and higher education in the field of training for new technologies. For example, one of the actions supported by the COMETT Programme is the promotion of university-enterprise training partnerships (UETPs). The COMETT UETPs are unique structures which serve as valuable links between the world of industry and the university sector. The Programme responds in particular to the specific skill requirements of small and medium sized businesses (SMEs¹).



COMETT recognises that at a time when the pace of technological change is rapidly increasing and when technological expertise is synonymous with economic competitiveness, it has become absolutely essential that Europe train a maximum of

¹In this report an SME is defined as an enterprise with less than 500 employees

people in new technologies. COMETT is therefore also directly involved in funding student placements and staff exchanges, the organisation of courses and the development of training materials. One of the priority concerns is to give a European dimension to cooperation between universities and industry in initial and continuing training relating to technologies and their applications and transfer. COMETT also promotes equal opportunities for men and women in initial and continuing training in advanced technology.

COMETT in brief

- COMETT, the Community programme for Education and Training in Technology, was established by the Council Decision 86/365/EEC of 24 July 1986. Following a preparatory year, COMETT I ran for three operational years, from 1987-89. COMETT II, adopted by the Council on 16 December 1988 (89/27/EEC), came into operation on 1 January 1990 for a five year period, with a provisional budget of 230 million ecus.
- With the beginning of the second phase and in accordance with the Council Decision of 22 May 1989, universities and enterprises of the countries of EFTA (European Free Trade Association consisting of Austria, Finland, Iceland, Liechtenstein, Norway, Sweden and Switzerland) are able to take part in the COMETT Programme.
- COMETT II is not simply an extension of COMETT I but a development, a deepening and broadening of the scheme. The Decision re-emphasises COMETT's role as a Community programme for advanced training for technology and its application but places increased stress on changing skill requirements and regional needs.
- During the first three years of COMETT II more than 15,000 student placements, and more than 300 personnel exchanges were arranged. COMETT II will support more than 7,000 training course sessions giving more than 500,000 persons training in advanced technology.
- So far, COMETT II has involved close to 10,000 enterprises, 2,400 universities and higher education institutions and 4,100 other organisations from EC and EFTA countries. One can estimate that around 20,000 European organisations will be involved in COMETT II by 1994.
- During this period, COMETT II has set up 200 University-Enterprise Training Partnerships (UETPs). These unique structures serve as active links between the world of industry and the university sector. The COMETT UETPs have identified some vital skill shortages and training needs in a variety of technology sectors and geographical areas throughout the Community.

With more than 7,000 course sessions and a minimum of 3,000 training materials COMETT II will have directly influenced about 500,000 people in Europe. ■

Forging Links between Universities and Industry

II. Preparation for the Europe of tomorrow

1 COMETT: A developing scheme

To meet its objectives and prepare for the Europe of tomorrow, COMETT focuses on four main areas of activity. These actions have in common that they set out to promote, on a transeuropean basis, training for technology. Another unifying feature is that they will always involve at least *one* university and *one* enterprise.

The COMETT Programme centres on the following areas of activity:

- **European network of university-enterprise training partnerships (Strand A)**
- **Short training courses (Strand Ca)**
- **Joint training projects (Strand Cb)**
- **Pilot Projects (Strand Cc)**
- **Transnational student placements (Strand Ba)**
- **Transnational advanced student placements (Strand Bb)**
- **Transnational personnel exchanges (Strand Bc)**

The response to the annual Calls for Applications has been tremendous with the demands for funding far exceeding the budget available. In 1990, for example, more than 2.000 projects were submitted.

Although the fundamental objectives adopted at the outset have remained unchanged, a direct comparison between the individual years is difficult. Not only has the scheme been developed and broadened, and the programme structure changed, but with the beginning of the second phase universities and enterprises of the EFTA countries could take part in the COMETT Programme.

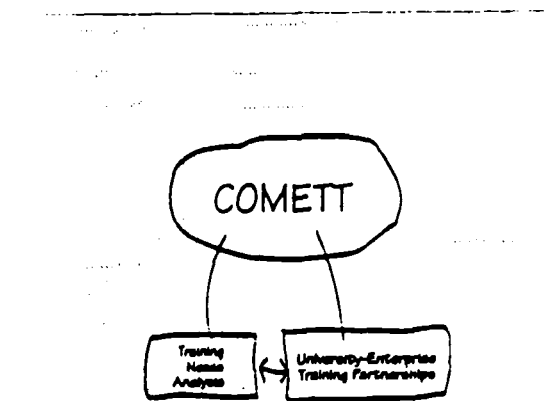
2 Technology in COMETT

• *COMETT projects cover a wide variety of technology sectors ranging from Microelectronics, Biotechnology to Civil Engineering, Advanced Materials, Medical Technology, Innovation Management and Quality Control.*

• *Since the first year of COMETT II there has been a particularly high demand in Environment, Advanced Materials and Advanced Production - industry's increasing interest in training actions in these sectors is clearly demonstrated.* ■

3 Towards a Single European Market

European network of university-enterprise training partnerships (Strand A)



The backbone of the COMETT Programme is the development of university-enterprise training partnerships (UETPs) operating both on a regional and sectoral basis, to further transnational cooperation. Of the 158 UETPs accepted in 1990, the first year of COMETT II, 99 are regional in that they are confined to a particular geographic area, 49 are sectoral in that they are concerned, on a transnational basis, with a specific technological or industrial sector, and 10 are mixed (regional/sectoral) partnerships.

By 1991 most of the 158 UETPs accepted in 1990 were firmly established. This year COMETT also introduced a new aspect in that only consortia accepted in the previous year could submit new projects in 1991. Moreover, applications were possible only for student and personnel exchanges, short training courses and complementary back-up measures. All Member States were represented. As far as the EFTA countries are concerned, all countries were participating except Switzerland (which at the time did not have a UETP) and Norway (whose only UETP did not submit a new project).

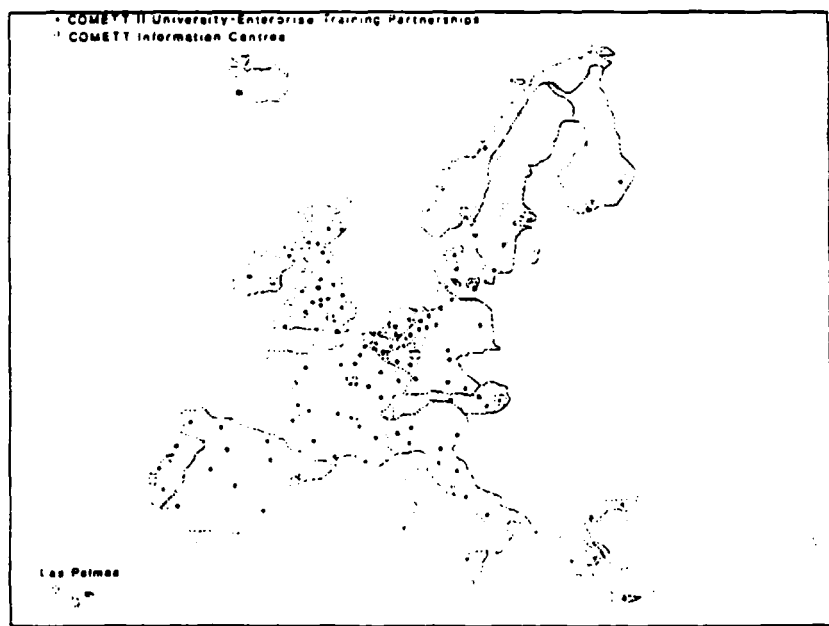


Figure 1: The geographic coverage of COMETT UETPs in 1991.

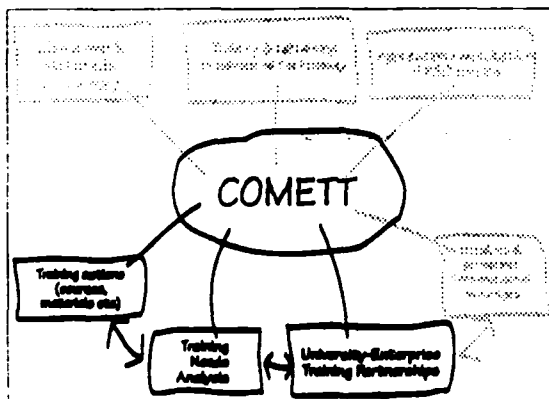
In 1992 114 projects were submitted in this Strand. With the projects accepted, an additional 42 new COMETT UETPs have been set up bringing the total to 200 consortia in the twelve Community countries and the seven EFTA countries. Noteworthy is the now improved coverage in the EFTA countries, especially in Switzerland and Norway.

Figure 1 shows the distribution of COMETT UETPs throughout the Community and EFTA countries.

Example of a University-Enterprise Training Partnership (UETP)

Due to rapid industrial restructuring, the Basque region in Spain experienced massive unemployment. At the same time many new SMEs emerged. The UETP, Euskal-Herria, organised by Centro para el Desarrollo de la Empresa, San Sebastian/Spain, undertook a project which involved 10 enterprises, 7 universities, and 18 professional organisations. Having identified the particular skill needs, the UETP went on to develop training and re-training courses to upgrade the existing labour market. Hundreds of ill-qualified and/or unemployed personnel of SMEs had the opportunity to re-train for a new career. Confirming that the development of human resources is as much a national as a European concern, the UETP put great emphasis on the organisation of transnational student and personnel exchanges. In short, the COMETT UETP brought economic and social well-being to an otherwise declining community. ■

Joint projects for continuing training in technology (particularly advanced technology) and for multimedia and/or distance training (Strand C).



These COMETT projects are of three types:

- Short training courses with a European dimension in technology (particularly advanced technology) designed for the rapid dissemination - by and in universities and by and in industry - of research and development results in the field of new technologies and their applications, as well as for the promotion, particularly for small and medium-sized enterprises, of the transfer of technological innovation to sectors in which it was not previously applied.

- The devising, developing, and testing at European level of joint training projects in technology (particularly advanced technology), initiated jointly by different industries in association with the universities concerned in at least two

different Member States in fields relating to the new technologies and their applications. Many of these projects are involved in the development of training materials using new technology such as computer based training, simulators, CD-ROM, interactive videos, etc.

- Pilot projects are similar to joint training projects but are set up in a more substantial form.

One may recall here that during the lifetime of COMETT I over 1.200 course sessions were organised and approximately 720 training materials were developed during this period. In all, some 100,000 persons have received training in advanced technology as a result of COMETT I projects.

In 1990 the Community supported 124 projects dealing with *short training courses*. A further 192 *joint training projects* were concerned with the devising, developing and

testing of courses and materials in technology (particularly advanced technology). These projects undertook the development of close to 800 training materials - both traditional media, such as books and cassettes, and more advanced media such as computer-aided teaching, interactive video and CD-ROM.

It was at the end of 1990 that the *Pilot Projects* were introduced. Pilot Projects have been created specifically with the aim of having a strong and structural impact upon training in technology. In addition to the standard criteria of Joint Training Projects, they show one or more of the following four characteristics: Pilot Projects address skills and qualifications in a specific technology sector at a European level; they aim at developing close and lasting cooperation between industry and universities; they focus on appropriate industrial training programmes for SMEs; finally, they are truly "transfer projects", in that they focus on the transfer of qualifications, skills and methodologies. Of the projects invited to submit revised proposals, 30 were accepted for development as *Pilot Projects*.

In 1991 there was no Call for Application either for joint training projects or for Pilot Projects. However, it is worth noting that the 192 joint training projects and 30 Pilot Projects accepted in 1990 were now in their second operational year and actively developing training materials and courses. While the precise figures will only be available when the final reports will have been written at the completion of these projects, it may be estimated that in 1991 more than 1,300 courses sessions were given and close to 1,000 training materials were under development thanks to the support of COMETT.

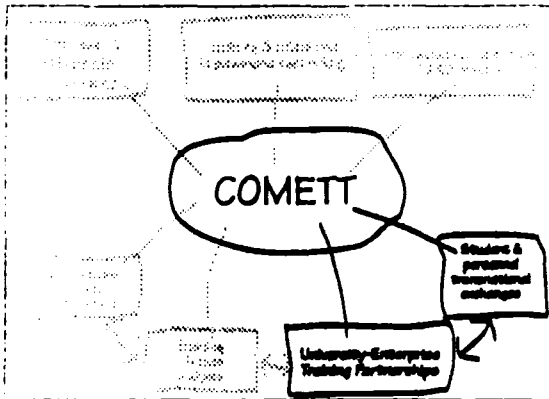
In 1992, more than 70% of the UETPs submitted applications for short training courses, that is COMETT received applications for nearly 3,000 short training course sessions. Of these 1,400 have been selected for Community support.

Example of a joint training project

We all know that the protection of iron is vital: every time iron rusts, one of our primary materials is irrevocably destroyed. Involving 2 enterprises, 3 universities and 3 professional organisations, the Centre des Métaux Non Ferreux, Brussels, developed the SYMUL-METALPROTECT project. The project consists of a series of training courses and materials which teach the theory of corrosion and anti-corrosion, as well as the practical aspects of protecting iron with non-ferrous metals. Presented on interactive video-disc, the programme teaches through simulated real-life situations how the different processes are applied and how optimum protection is achieved. Not only can by this method a wide band of the population be reached quickly, but an external evaluation assessed that trainees using these multi-media training courses mastered the subject significantly quicker than students using traditional teaching methods. ■

Transnational exchanges

The grants for transnational exchanges fall into three categories:



- ▶ Grants for students undergoing periods of training in industry in another Member State or EFTA country as an integrated part of their training at university.
- ▶ Grants for advanced training placements. This Strand is similar to the one above concerning integrated student placements and only differs in that the participants must be engaged in the most advanced training level but not in research.
- ▶ Grants providing fellowships for personnel seconded from universities to industry or vice versa in another Member State to bring their skills to the host organisation.

Transnational exchanges of students and personnel are a major commitment for the UETPs. COMETT I supported 4,115 student placements and some 200 transnational secondments of university and industry personnel.

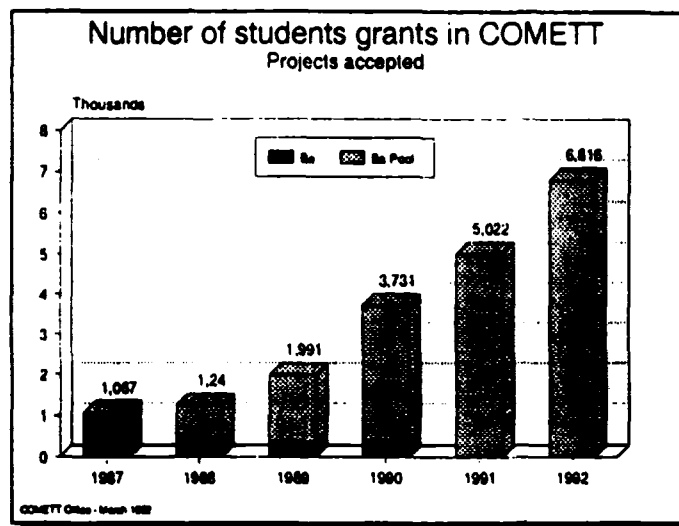


Figure 2: Evolution of the number of student placements accepted since the first year of COMETT I.

In 1990, 3,731 transnational student placements were accepted. This means that the total number of transnational student placements supported by COMETT in 1990 was almost double the number of 1989 (see Figure 2). The three main 'exporting' countries in 1990 were France (661), the United Kingdom (649), and Germany (397). In this year some countries received significantly more students than they sent abroad, notably Belgium and Germany, the Netherlands, Austria, and Switzerland, while the opposite is true of Denmark, Spain, Greece and Ireland.

In 1991 the number of transnational student placements substantially increased. Particularly interesting to note is the steep increase of this activity since 1989 with the two first years of COMETT II doubling the number of student exchanges for all of COMETT I.

That the interest in this activity continues to grow is demonstrated by the projects submitted in 1992 requesting more than 26,000 student placements. From these applications, 6,816 placements were accepted for Community support.

As far as *advanced training placements* (requiring higher academic level and increased duration of the placements) are concerned, the number of accepted projects was low in 1990: only 13 of the 99 placements were accepted. Although the accepted projects were of high quality, the overall response to this Strand was disappointing. Due to the low success rate in the previous year, there was no Call for Applications for advanced training placements in 1991 and 1992.

Out of the 132 applications for *personnel exchanges* received in 1990 COMETT supported 66 projects thereby enabling 94 staff members to have an advanced training secondment in an organisation abroad. One third of these secondments concerned flows from university to industry; another third represented flows from one enterprise or professional organisation to a university; the remaining exchanges were between other types of organisations (such as research institutes) and enterprises. Interesting, too, is that in this year the technological sectors most frequently represented in this activity were Biotechnology, Mechanical Design and Civil Engineering.

Turning to 1991, in this year COMETT received 215 applications for personnel exchanges from which 124 were selected for support. With these projects 89 persons were exchanged between the different Member States, 23 travelled from an EFTA to an EC country, while 13 were exchanged from an EC to an EFTA country. In 1992, 124 personnel exchanges were accepted.

The Pool Schemes

1988 witnessed the beginning of the very successful Pool Schemes whereby the COMETT university-enterprise partnerships receive from the Commission a 'pool' of grants to be allocated flexibly over the ensuing academic year. Initially designed for student exchanges only, the procedure of the Pool Scheme has since 1991 also been applied to personnel exchanges and organisation of courses.

The great success of the 'Pool Schemes' is reflected in the fact that the majority of COMETT UETPs are participating actively in this scheme. By 1991 all the submitted projects, both for student placements and for courses, were 'pool' projects. In this year the UETPs organised more than 5,000 student exchanges and some 725 courses within the framework of the 'pool' system. In 1992 6,800 student placements and 1,400 course sessions have been arranged by the Pool Scheme indicating an increasing interest in the pool system.

Example of a Transnational Student Placement Scheme

The German project, W.E.R.-Euro-Praktika, organised by the UETP WER-Weser-Ems-Region, D-Osnabrück, is but one of many examples illustrating the growing interest in student placement schemes. The project began in 1987 and over the first three years the number of student placements almost doubled, rising from 28 to 50 placements in foreign enterprises. In 1990 the UETP submitted a 'pool project' and applied for placements of nearly 300 students of which COMETT II supported 60. In 1991 COMETT again funded 60 placements involving universities and enterprises from Spain, France, the Netherlands and the UK. If the COMETT projects are important for those who are being sent abroad, they are equally important for those who stay put. Students have first-hand experience in a European dimension and professional initiation in the field of technology; industry benefits from new input and strengthens its relationships with universities.

Complementary promotion and back-up measures

In addition there is a fourth Strand which comprises a range of complementary promotion, evaluation, and back-up measures. These include the exchange of visitors, support for preparatory activities in less developed regions, compilation and exchange of information, and analysis of skill needs. Visits funded under this Strand are intended to facilitate the preparation of project applications under subsequent Calls. In 1990 there was only a limited participation by the EFTA countries.

Of the 341 projects submitted in 1990 COMETT accepted 49. This apparently low success rate is due to the fact that a substantial number of applications are linked to other Strands.

In 1991 COMETT received 88 applications. The 69 accepted projects provided Community support for 135 visits, that is, 92 visitors travelled from an EC to another EC country, 17 from an EC to an EFTA country, and 26 from an EFTA to an EC country.

4. COMETT Outputs 1990-1992

Some significant figures...

- *During the first half of COMETT II 2,000 training materials have been, or are being, developed. One can estimate that so far more than 200,000 persons have used, or are using, training materials funded by COMETT II.*
- *During 1990-1992 COMETT II funded 4,000 course sessions giving approximately 100,000 people the opportunity to train in modern technologies. In the period under review, all in all 300,000 persons benefitted directly from the COMETT Programme.*
- *The number of SMEs involved has increased since the beginning of the Programme, rising from 64% in COMETT I to 73% in 1992. In 1992, 80% of the projects submitted involved at least one SME.*
- *During the first half of COMETT II, the Programme involved 9,300 enterprises, 2,400 universities and 4,100 other organisations.*
- *Since COMETT I the number of enterprises involved has significantly increased. Moreover, the enterprises are taking a more and more active role in the projects. A clear demonstration of this is the fact that during COMETT II industry's financial contribution to the projects has been consistently increasing over the years. ■*

In 1990, the first Call for Applications under COMETT II, a total of 2,201 projects were submitted by the twelve Member States, plus 156 from the EFTA countries. A brief look backwards to the first phase of COMETT (four rounds of applications during 1986-1989 with 1,137, 1,413, 1,699 and 770 projects respectively submitted), clearly indicates the significant increase in the number of projects received. Such a direct comparison is, however, not possible between 1990, 1991 and 1992 since in the second and third years of COMETT II the Call for Applications was a 'restricted' Call, that is, it was limited to some Strands and some categories of projects.

One of the most striking and encouraging characteristics of COMETT II applications is, on average, the extent of interaction with other Community programmes, both in the R&D field and in relation to other Community priorities such as regional development or energy. In this year links with more than 50 other programmes were recorded, with ESPRIT, BRITE/EURAM, and DELTA being especially prominent. Also strongly featured were AIM, DRIVE, BRIDGE, ECLAIR, FLAIR, RACE, JOULE, and SPRINT.

As a result of the 1991 selection, more than 725 training courses were accepted. In addition, there were the joint training courses and the Pilot Projects accepted in 1990, both of which are running for at least three years. Entering now their second year, these 1990 projects were now fully established and could develop the proposed training courses and materials. In the period under review, all in all more than 2,800 courses were supported by COMETT, with more than 70,000 people receiving training in advanced technology. During the first half of COMETT II more than 1,100 training materials have been, or are being developed.

In 1992 863 projects were submitted, of which 718 were from Member States and 145 from EFTA countries. 114 proposals for new UETPs were submitted; 26,000 student placements were requested.

In total, 534 projects were accepted, leading to the setting up of 23 new regional UETPs and 19 new sectoral UETPs. 6,816 student placements and 753 short training courses were accepted.

5. Budget

Figure 3 shows the evolution of the budget allocated during the three first years of COMETT II.

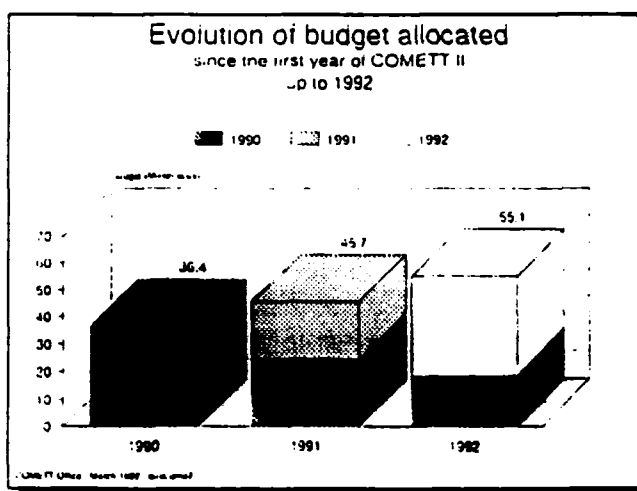


Figure 3: Budget allocated to projects accepted during the first three years of COMETT II.

The overall estimated budget for COMETT II (1990-1994) is 200 million ecus, excluding the contribution of the EFTA countries (30 million ecus). This sum is intended to cover all the actions supported under the four Strands of the Programme.

The Community support under COMETT is, with some minor exceptions, (such as grants and visits), allocated on a principle of *cost-sharing*, between the Community and those undertaking the project.

Noteworthy is that each year, the budget requested by applications was approximately ten times as high as the budget available, clear evidence of industry's interest in training activities.

In 1990 the total budget requested by the 2,357 applications was close to 400 million ecus. The overall budget allocated to the 878 accepted projects was 36.6 million ecus for the first year of the projects.

In 1991 the total budget allocated to the projects accepted amounted to 21 million ecus with 14 million ecus being given for transnational student exchanges, 6 million ecus for short training courses in technology and 1 million ecus for personnel exchanges.

In 1992 projects accepted were granted a total budget of 36 million ecus.

6. Added value of COMETT

The COMETT Programme has developed a balanced network of cooperation between universities and industry, providing vital links throughout Europe. Many new cooperation axes are now actively contributing to the economic and social well-being of the Community. Numerous exchanges of students and personnel have been organised between countries that before had never exchanged either students or staff. Without the COMETT support and the creation of the COMETT UETP network these exchanges would never have taken place. Working towards a better understanding of national concerns in student placements and continuing education, COMETT has contributed towards a deeper integration of the European Community.

In certain countries and/or regions COMETT has been catalytic in creating a continuing training market, while in others COMETT has contributed to its enrichment, transparency and improvement of the quality, in particular, of advanced technology courses. Without the COMETT support, many universities would not have been able to invest in Continuing Education Training (CET) programmes.

COMETT projects provide feedback to the initial, local education systems thereby improving the existing curricula. For many universities COMETT has been the first experience with a European programme; in addition, COMETT has contributed to reflections and insights on structural and management issues in these institutions.

COMETT has given special attention to regional development through the creation of a very active university-enterprise training partnership network within the Community, and more recently the EFTA countries. The COMETT programme incorporates an important number of 'transfer' projects which have been specifically designed to transfer knowledge and skills from more to lesser advantaged regions. While such projects occur in all 'Strands' of activities and in many sectors, they are of particular significance in the technology and industrial areas of the less developed regions.

III. A visible and coherent approach

1. External evaluation

The ECOTEC Report

In June 1990 the Commission launched a Call for Tender for a second external evaluation of the COMETT Programme² - the Call for Tender for the third external evaluation of the Programme will be launched in autumn 1992.

The second external evaluation of the last two years of COMETT I (1988-1989) and the early stages of COMETT II (1990-1991) was carried out by ECOTEC Research and Consulting Ltd and finalised in August 1991. The report examined the performance of COMETT, focusing particularly on such issues as COMETT's support for university-industry cooperation within the context of regional development in the Community, both through the creation of university-enterprise networks and within the sectoral context of industrial development and interaction with Community R & D.

Some conclusions of the evaluation report on COMETT...

- *The ECOTEC Report concluded that the various objectives of COMETT have been successfully achieved. Commenting on the COMETT sectoral network, the Report stated that 'The COMETT programme has helped establish a diverse range of sectoral UETPs. They have promoted a high measure and variety of university-enterprise cooperation, particularly transnational cooperation.'*
- *Another key finding concerned the skills needs, training and training products and the Report concluded that 'A wide range of objectives have been met by the COMETT funded projects. The training needs analysis work has often been pioneering and has helped improve communication between employers and university trainers. The work has helped the customers of training increase their influence over the type and form of advanced technology training provision.'*
- *Commenting on the transnational student exchange programmes, the Report drew attention to the considerable expansion of this activity during COMETT II. It was in particular noted that the benefits of this activity '...extend beyond COMETT. In particular there are considerable long term benefits to the trainees involved. The activity has contributed strongly to university-enterprise cooperation and the development of transnational networks.'* ■

The Commission's response

Welcoming the ECOTEC external evaluation, the Commission recognised that the Report raises a number of basic policy questions which acknowledge COMETT's achievement while correctly putting these issues on a broader agenda which goes far beyond COMETT as such.

² The first external evaluation of COMETT I was carried out by Coopers & Lybrand and the Science Policy Research Unit of the University of Sussex. This report was published by the Commission of the European Communities, CEC, *Evaluation of the COMETT Programme*, Luxembourg (1989).

One of ECOTEC's key recommendations in connection with the regional UETP network is that the Commission should retain *commitment to the maintenance* of this network and that the European-level objectives for this network should be more clearly defined. The Commission fully accepts this recommendation and is engaged in a series of actions to develop the effective operation of the regional UETP network during the remainder of COMETT II.

The Report's analysis of the *financial sustainability of UETPs* is an invitation to the Commission and the Member States to continue funding provided its objectives and nature are properly defined. For the time being, the Commission will maintain the policy intention on UETP funding set out in the COMETT II Decision, continue its efforts to assist UETPs in meeting that objective as well as continue its discussions with the relevant bodies, drawing on the analysis made in the external and internal monitoring work.

The Report argues that *progress in transnational university-enterprise cooperation has been slow, especially with SMEs*. This is a point that is reiterated in the Conclusions. Certainly, this is an area that remains one of the greatest challenges for the Commission as well as the UETPs, since much hope has been placed in the merits of local approaches.

The *UETP contribution to knowledge of and activity in other EC programmes* is an important observation. It demonstrates that COMETT must not be evaluated in too narrow a context, but in one which takes account of the rapidly developing education and training scene in the European Community, to which the various other Community education and training programmes have contributed (especially ERASMUS, LINGUA, FORCE, TEMPUS, and EUROTECNET).

The finding regarding the *lack of standard methodologies for training needs analysis* is one which strongly echoes analyses which the Commission has itself made. Nevertheless, the finding that the TNA work undertaken has reduced the 'supplier-led' character of many of the projects, is very welcome. Furthermore, the recommendation for more work in this area is totally in line with current work within the Task Force Human Resources, and the call for more resources to be devoted to this is fully noted.

Concerning the transnational student placements, the Commission takes clear note of the finding that it is 'unlikely that much of the activity would happen in the absence of the programme'. Within the same context, the *imbalance in student flows* is an important issue on which vigilance is required. Great hope is placed in the 'pool' schemes which give a reasonable and promising basis to enable the UETPs to contribute towards balanced movements across the Community as a whole.

2. Internal Evaluation

Internal monitoring and evaluation are important aspects of the implementation of the COMETT Programme. A variety of formal and informal methods are used to collect and analyse information at the following levels: project level, Strand level, sectoral level, and programme level.

At project level, the process begins with an analysis of project applications according to specified criteria to ensure selected projects are adequately designed. For approved projects, the formal process consists of interim and final reports. In this way every project is continuously monitored to ensure its progress is satisfactory and to identify specific issues which may have wider implications. In addition, more informal contact with project promoters occurs through their visits to Brussels, attendance at conferences and other similar activities. At Strand level, a number of Strand-specific

analyses have been undertaken. The analyses undertaken on sectoral level will serve as a basis for the development of sectoral networks.

At programme level, the development of the Programme has been carefully monitored with respect to both its internal design and implementation and its wider contribution to Community objectives. The contributions of the COMETT Committee, the COMETT Experts Group and the COMETT Information Centres are of importance in providing information about the development of COMETT within each Member State and EFTA country.

In 1992, the COMETT Technical Assistance Office published a definitive analysis of the outcome of COMETT I entitled *The Development of COMETT I*. Noteworthy is that many of the observations and recommendations established in the internal assessment, reflect in significant details the key findings of the external evaluation, the ECOTEC Report discussed above, although these analyses were conducted independently. The main policy areas which continue to remain prominent on the agenda and on which the COMETT internal evaluation provides important predictive measures include:

- university-enterprise training partnerships
- student placements
- personnel exchanges
- joint training projects and multi-media initiatives

The university-enterprise training partnership (UETP) network

Examining the UETP network, the internal analysis found that the 'catalyst' role of the UETPs often leads to activities which extend beyond COMETT as such, - this is a point which was also stressed in the ECOTEC Report. Clearly, COMETT has been successful in creating a dynamic UETP network which provides the all-important link within the Community, and more recently under COMETT II, the EFTA countries. Although the approach of the sectoral and regional UETPs varies (due to policies on personnel, management or finance), they are nevertheless faced with the same problems, and the recommendations for the future development of the network include the following main points:

- ▶ the need for small-scale, medium-term development strategies to achieve a more professional level of activity.
- ▶ consortia are regularly confronted with the problems of SMEs. If industry is to become more involved in university-enterprise cooperation in training activities, additional efforts must be made to understand the special concerns of SMEs.
- ▶ it is widely accepted that the UETP network forms the very backbone of the Programme. This is also stated several times in the ECOTEC Report. However, for UETPs to actively exploit their potential, they have yet to fully realise themselves as:
 - a platform for European development in education and training, in liaison with other programmes and initiatives at both national and Community level;
 - a platform for identifying skills shortages at regional and sectoral level;
 - a platform for distributing information and training products;

- a mechanism for setting up new kinds of cooperation between enterprises and universities in the field of education and training.

Student placements

The COMETT report demonstrates that as far as student placements are concerned COMETT I achieved its objectives not only in terms of quantity (almost 96% of planned exchanges were completed), but above all in terms of quality, that is, with respect to:

- training for advanced technologies
- joint development of training programmes
- setting up transnational networks
- providing a European dimension to cooperation between universities and industry in initial and continuing training
- creation of an added value through the exchange of personnel, students and materials at transnational level.

By the end of COMETT I the pool procedure predominated which resulted in the UETPs taking a much more active role in the organisation of the placement.

While the results so far have been very encouraging, there remain nevertheless some issues which require the attention of the Commission, the Member States, the EFTA countries, and the project promoters. The COMETT report emphasises in particular the following two points:

- ▶ The creation of more effective channels of communication between the UETPs to improve the quality of the placements and the efficiency of the organisational methods.
- ▶ Given the number of students placed by UETPs, and the problems which face them in the receiving countries, it was suggested that a guide should be produced offering useful advice on how to organise placements. - Once again, this is a comment that has already been taken up and a guide for European student placements is forthcoming (see section 3 on *Positive Actions*).

Personnel exchanges

In the light of experience gained over the first three years of COMETT I, four points are worth considering for the future:

- first, the need to differentiate between exchange objectives, taking into consideration the type of university-enterprise flow;
- second, the need to develop the concept of integrated projects where exchanges become an integral part of more global development projects;
- third, the opportunity to focus efforts, particularly on specific sectors where the impact of this type of personnel exchange project could be more significant;
- finally, the need to improve the promotion of this Strand among UETPs.

Joint training projects and the development of multi-media initiatives

COMETT has been very innovative in constructing entirely new methods and models for transnational cooperation between universities and industry in the area of training for technology. Reviewing the quantity and quality of training courses and materials organised during the first years of COMETT, the following suggestions for further improving the management and development of the European market were put forward:

- Sectoral and transnational networks are particularly important in the context of joint training projects and the study stressed the need for more formalised sectoral networks, where funding could be focused so as to achieve an impact commensurate with the importance of these sectors at European level. - This is a point which has received concentrated attention during 1991 and 1992, and the first results of the Sectoral Studies Programme will be discussed below (see section 4 below).
- COMETT I is one of the very few Community programmes which has acquired some expertise in developing multimedia systems and distance learning methodologies. Multimedia and distance learning are, of course, areas which will be of increasing importance in the future development of human resources. Since a significant number of projects have used these systems, an in-depth analysis with respect to economic and technical aspects would be of value.

Conclusion to the Internal Evaluation

'The primary achievement of COMETT I is making enterprises and universities aware of the necessity for European university-enterprise cooperation in training for technologies at a transnational level. This awareness has resulted in the setting-up of university-enterprise consortia on a regional or sectoral basis, the development of ambitious placement and exchange programmes, and the support of various joint training projects.'

'The achievements of COMETT I are not an end in themselves. They represent a first step towards university-enterprise cooperation which should go far beyond any given COMETT project. The challenge lies in achieving an effective and functional relationship between training and industry, in which initial and continuing training are important to university and enterprise alike. Such a relationship is vital if we are to build a technologically strong Europe, a Europe capable of responding to the opportunities and challenges for technology brought about by the Internal Market. Education, training, and more generally, investment in human resources, qualifications and skills all constitute a key approach to the reinforcement of economic and social cohesion within the Community. It is the objective of COMETT II to help this collective venture.'

3. Positive Actions

In 1991 the Commission launched a series of actions, **Positive Actions**, the main aim of which is to meet the challenge of some of the economic and social differences of the countries and regions within the European Community. The first task was to analyse the gaps and weaknesses in the development of the COMETT network and on the basis of this analysis to identify actions that would strengthen and enhance the regional and sectoral UETP network.

In order to assist the identification, development and implementation of these actions a working group, or Experts Group, was set up. This working group discussed, on a practical level, the strengthening of the university-enterprise cooperation, the training of UETP managers, the transnationality of partners, and the improvement of the student exchange programmes.

The Positive Actions that were launched can be listed under the following headings:

- National studies and promotion measures
- UETPs (networking and training of UETP managers)
- Student placements
- Actions for the promotion of industrial participation
- Sectoral activities

National studies and promotion measures

- Certain actions were implemented at European level while others focused on individual countries, taking into account the different national and/or regional situations. The latter actions concern in particular Spain, Greece, southern Italy, Portugal, Switzerland, and Norway. The main objective of these Positive Actions is to identify structural and functional problems in the implementation of the COMETT Programme in these specific countries. The activities included a series of operations (organised in collaboration with the relevant national authorities) whose overall aim was to respond in a flexible way to the identified needs.
- Related to the Positive Actions were the measures taken to assist the integration of the new German *Länder*. 1 million ecu was allocated to the following three actions assisting the integration of enterprises, universities and other organisations from the *Länder* in the COMETT network:
 - Financial support to prepare university-enterprise training partnerships for the next Call for Applications in 1992.
 - Grants for transnational student placements.
 - Various initiatives to introduce persons and organisations from the new federal states to the EC environment. These activities included project training, study visits, conference or seminar participation, as well as studies concerning the university/industry environment.

UETPs (networking and training of UETP managers)

- Since the UETPs are a fundamental component of the COMETT programme, a feasibility study for the development of a qualification programme for UETP managers was designed and a series of courses as part of a training programme were organised. The purpose of the feasibility study was to identify the working structure of UETPs, their needs, areas of activities, and to gather, in a general way, information concerning their future development and perspectives.

Student Placements

- ▶ Two conferences concerning student placements were organised (in Lappeenranta, Finland, 2/3 September 1991, and in Segovia, Spain, 7/8 November 1991). Both conferences provided complementary opportunities to promote and strengthen transnational student exchanges. Particularly successful was the Segovia conference, organised by the 'Fundacion Universidad-Empresa' in collaboration with the Commission of the European Communities. The conference was dedicated to generic aspects of the COMETT student placements schemes and to analysing its relationship with other educational programmes of the Commission, in particular with ERASMUS. The conference also provided essential information for a forthcoming guide on European student placements.
- ▶ Four projects received support to explore and develop electronic-mail and database facilities for the daily work of the Ba managers of the UETPs. The results of these projects were presented at the Segovia conference. These results will also provide the basis for a document on the exchange and coordination of information for the finalisation of coherent interactive projects in this area.

Actions for the promotion of industrial participation

- ▶ In the general context of targeting industry and SMEs, three projects were supported to examine and improve industrial participation in the Programme. The first of these projects focuses on the improvement of industry participation in the COMETT Programme in Belgium, Denmark and the Netherlands, while the second is concerned with the improvement of SME participation in the COMETT Programme in Iceland. The third of these projects concentrates on Northern Sweden and its increased participation of enterprises in the COMETT network.

Sectoral Studies

- ▶ Within the framework of Positive Actions a COMETT **Sectoral Strategy Scheme** was launched in 1991. (For full details see the following section on 'The Sectoral Development of COMETT').

4. The Sectoral Development of COMETT

Sectoral distribution of projects: COMETT becomes "greener"

A detailed analysis of the sectoral trends over the last 5 years of COMETT shows that the group of the 15 most important COMETT sectors has remained almost unchanged over this period (see Figure 4). In fact, 11 sectors have been consistently among the top 15. However, their relative position changed considerably over the years. Whereas Information Technology, Materials, and Mechanical Engineering have been consistently at the top, all other sectors have moved up and down within the top league. Of particular interest is the Environment sector which ranked in seventeenth place during 1987-1989; under COMETT II this sector moved up into the second place, immediately after Advanced Manufacturing Technology.

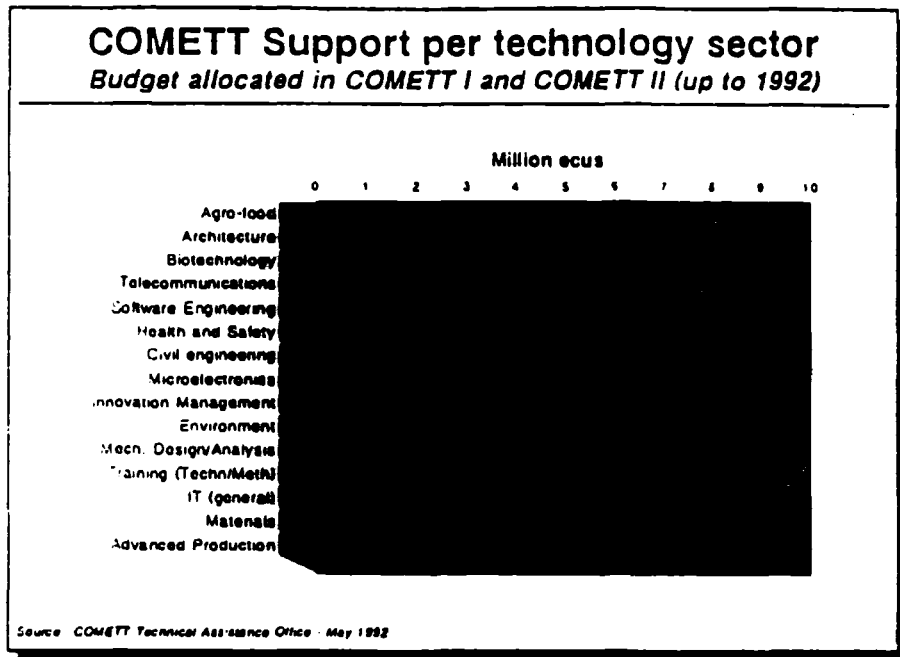


Figure 4 : Breakdown of budget allocated in COMETT by technology sector.

Sectoral networking

The idea of sectoral networking dates back to the beginning of COMETT I when the collaboration between UETPs and project consortia pointed up the growing need for more sectoral interaction. The Council Decision for COMETT II reflects this development:

'...to further transnational cooperation ... in developing links in the form of transnational sectoral networks bringing together projects from various Strands of the programme in the same area of training.'

The strategy adopted by the Commission to implement the requirements for sectoral networks has to date consisted of the following key steps:

- Selection of high quality projects in a broad range of technology and industry sectors.
- Sectoral analysis of the projects.
- The organisation of workshops for the promotion of cooperation between sectoral projects. Following a series of experimental sessions in previous years, 1992 will see the first formal sectoral workshops involving all the major COMETT actors.

Ten carefully selected COMETT sectoral UETPs were contracted (with allocations varying between 5,000 and 10,000 ecus) to determine the feasibility and benefits derived from sectoral networks. The ten sectors selected for surveys are: Advanced Manufacturing Technology, Agro-food, Biomedical Engineering and Medical Technology, Biotechnology, Environment, Materials, Mechanical Engineering, Microelectronic Technology, Software Technology and Engineering, Technology and Innovation Management. These sectoral surveys have now been completed and are currently being made available. One of the most interesting findings to date is that

advanced technology training, such as is supported by the COMETT Programme, can be classified under two main headings, that is, Technology Transfer and Diffusion, and Advanced Research and Technology. While the two groups overlap in places, they differ on such aspects as the technology development stage and applicability, the type of organisations involved, the personnel concerned, and the demands of the training market. Although there are these differences, COMETT is actively engaged in both types of advanced technology training projects.

The COMETT Sectoral Survey will be the beginning of a transeuropean advanced technology training network that may have an impact on the supply and structure of training provision throughout the Community over the next decade.

5. Conferences

In addition to several COMETT-supported conferences and workshops, there was a major COMETT conference held in Amsterdam (13-15 November 1991) with over 400 delegates attending. Entitled 'Towards new models of university-industry cooperation: the example of COMETT', the conference focused on two main themes - COMETT's experience in establishing university-industry cooperation, and the findings of the recent IRDAC report on European skills shortages. The conference consisted of two plenary sessions and 17 parallel sessions. The first of the plenary sessions was devoted to the two main themes of university-industry cooperation and the role of industry in continuing technological education, while the other session focused on transcontinental differences in continuing technological education.

The conference demonstrated that COMETT is a crossing point for a large number of topics, varying from methodologies for training needs analysis to regional development policies or to problems in technology transfer. Another general conclusion from the conference was that there is a clear demand to continue improving university-industry cooperation and that there is a need for a programme like COMETT. The conference drew attention to the fact that 'true competitiveness does not come from having the technology but from having a workforce which is capable of exploiting that technology in the optimum way'. In the words of the Commission, the conference made the delegates realise afresh that it is 'such factors as human attitude and human capital that will largely determine the success or failure of their activities' and that 'it is this message which COMETT has succeeded in propagating'. - The proceedings of the conference will be published in 1992.

IV. Future Perspectives

For the entire duration of the Programme, COMETT will be funding close to 30,000 student exchanges together with approximately 7,000 courses sessions. By 1994 close to 3,000 training materials will have been supported by the Programme. This means that by the end of the second phase of COMETT II no less than half a million people throughout Europe will have directly benefitted from the Programme. ■

Conclusion

As is only too clear there is a strong interrelationship between all the activities described above, with the UETPs representing the agencies through which a great number of the transnational exchanges of students and personnel are being organised. The UETPs are furthermore particularly well placed to coordinate the development of training courses which respond to economic regional and sectoral needs. They are in a unique position to receive and/or give information and as such fulfil a 'broker' role suited to the multi-faceted character of COMETT.

Patently, COMETT covers a wide-ranging number of issues and problems. This is most evident when we refer not to individual activities, or separate Strands, but to *themes* that make use of more than one component of the Programme. These horizontal themes include, for example, the measures taken under Positive Actions, or the COMETT interaction with national CET programmes, the role of open and distance learning in CET, skill needs analysis, women and technology, technology transfer and continuing education. Bringing a wide range of different and yet interrelated issues together, COMETT can in a very special way improve university-enterprise cooperation on a transnational basis.

As to further disseminating the key messages which have emerged from the COMETT experience, the Commission is not standing still. The Memorandum on Higher Education (COM(91) 349 def), issued 5 November 1991, addresses a full range of issues regarding cooperation between higher education and industry. Building on that, a Communication on higher education-industry cooperation is in preparation and scheduled for issue in the Autumn of 1992. That document will draw on the experience of COMETT in order to:

- contribute to the debate on the role of university-industry cooperation in helping meet European training and skills requirements
- document and disseminate the experience which has been gained at both European Community and Member State levels
- promote greater exchange of experience with a view to stimulating further action.

When in 1991 the ECOTEC Report commented on the transnational student exchange programmes, it stated what is applicable to the COMETT Programme as a whole, namely, that in its multi-faceted character its role goes far beyond COMETT, contributing to a deeper integration of the Community. In its own way, COMETT works towards the Europe of tomorrow where men and women despite their different national, political and cultural backgrounds can live and work together, and in the words of Winston Churchill, "think as much of being European as of belonging to their native land; and wherever they go in this wide domain will truly feel 'here I am at home'".

* *
*

ANNEX

Selection Procedure

Programme Management

1. Selection Procedure

The selection procedure adopted for 1990, 1991 and 1992 was, except for slight variations, consistent. The following pattern was adopted in the period under report:

- First came the initial assessment of the applications by the Commission with the support of the COMETT Technical Assistance Office. All ineligible applications were removed at this early stage (ineligibility, for example, due to the non-transnational nature of the project or the lack of a university-industry partnership), and the ground was prepared for the later stages of the selection process.
- The criteria used for the selection of projects were those given in the Vademecum and Application Package. In accordance with the fundamental objectives of COMETT, eligible projects have to involve cooperation between universities and enterprises relating to post-secondary level training concerned with technology and its application or areas affected by technological change.
- The next concern was that of the internal coherence with the other Community programmes, both those relating to the Framework Programme of Research and Development as well as those directed towards specific sectors, such as the strategic programme in favour of SMEs. The Community programmes with which COMETT has established close links are DELTA³, Erasmus⁴, Force⁵, Eurotecn⁶, Lingua⁷, and Tempus⁸.

Both in 1990 and in 1992 an inter-services consultation assisted in selecting from the submitted projects those which proposed synergy with other Community programmes.

- The projects were then assessed by the COMETT Experts Group, a group of independent experts from universities and industry. In 1990 the Experts Group met in Brussels on 9/10 May, in the following year they met on 14 March, and

³ DELTA - Developing European Learning through Technological Advance. Council Decision 90/221/Euratom, EEC,OJ No. L117, vol.33, 8.5.1990.

⁴ ERASMUS - European Community Action Scheme for the Mobility of University Students, Council Decision 87/327/EEC, OJ No. L 166, 25.6.1987 p 20 24

⁵ FORCE - Community Action Programme for the Development of Continuing Vocational Training in the European Community, 90/267/EEC, OJ No. L 156/1, 21.6.1990.

⁶ EUROTECNET - Community wide network of demonstration projects in the field of New Information Technologies and Vocational Training, COM (85) 167 Final.

⁷ LINGUA - Community Action Programme to promote Foreign Language Competence in the European Community, Council Decision 89/489/EEC, OJ No. L239/24, 28 July 1989.

⁸ TEMPUS - Trans-European mobility scheme for university studies, Council Decision 90/233/EEC, OJ No. L 131/21,7, May 1990.

in 1992 they met on 5/6 March.

- The proposed draft list of accepted projects is submitted to the COMETT Committee and the COMETT EFTA Joint Committees. In the period under report the draft list was submitted in June 1990, April 1991 and May 1992. In this process, as provided for in the COMETT Decision, specific arrangements are made to permit discussion by the Committee of projects for which a Community contribution of more than 100,000 ECU was proposed.
- Taking into account the views expressed by the COMETT Committee and the COMETT EFTA Joint Committees, the Commission decides upon a final list of projects for Community support.

While the procedure for selecting the projects was more or less the same during the first half of COMETT II, the nature of the Calls for Application varied during this period. In 1991 all the submitted projects, both for student placements and for courses, were 'pool' projects. Again in 1992 the Pool Scheme was exclusively devoted to student and personnel exchanges and for short training courses. Once again, the response to the Call for Applications was massive with the demands for funding being 10 times higher than the budget available.

In 1992 priority was given to those regions of the European Community and the EFTA countries in which there was so far limited or no regional coverage. Thus, first priority was given to the regional coverage in the new German Lander, Switzerland and Norway, where there were so far no regional UETPs. The second priority was the improvement of coverage in countries in which there were still significant gaps, notably Southern Italy and Southern Spain. The third priority was the improvement of coverage in other regions in which there are still some gaps.

Equally, in 1992 priority sectors were identified for the application for university-enterprise training partnerships. The selected projects fall within a certain number of technology areas where the coverage is still very limited or does not yet exist. These priority sectors were defined as follows: Software Technology, Chemical Processing, Telecommunications, Applied Electronics, Electrical Power Technology.

2. Programme Management

The development of the COMETT Programme has been conducted throughout in close collaboration with the COMETT Committee. The role of the Committee is to assist the Commission in the implementation of the COMETT Programme. The Committee consists of two representatives from each Member State on the basis of nominations made by the Member States as well as two representatives of the social partners as observers. The Commission chairs the Committee and provides its secretariat.

The Commission may consult the Committee on any matter concerning the implementation of the COMETT Programme. The Committee delivers opinions, in particular on the general guidelines governing the COMETT Programme, the general guidelines for the financial assistance to be provided by the Community, the procedure for selecting the various types of projects and any measures which require a Community contribution of more than 100,000 ECU.

Since the launch of COMETT II, the EFTA countries have participated in the COMETT Programme, and Joint Committees were established between the European Community and each EFTA country.

IN 1990 the COMETT Committee met formally on four occasions (9 January 1990, 5 June 1990, 28/29 June 1990 and 15/16 November 1990) and the EC-EFTA Joint Committees met on 29 June and on 16 November 1990. The dates for 1991 are the following: the COMETT Committee met formally on 3/4 April 1991 and 16/17 July 1991; there was also an informal meeting on 28 February 1991. The EC-EFTA Joint Committees met on 4 April 1991 and 17 July 1991. In 1992 the COMETT Committee and the EC-EFTA Joint Committees met on 9 January 1992, the COMETT Committee had an additional meeting on 9 April 1992.

COMETT Information Centres

To facilitate and promote the dissemination of information about COMETT, national Information Centres have been established within each Member State and, from the beginning of COMETT II, also in the EFTA countries. The precise organisational location of each Information Centre varies between the participating countries according to individual needs and circumstances. The Information Centres' main tasks are to respond to information queries concerning the COMETT Programme, especially on projects led by organisations within their country and to produce informational material (brochures, bulletins, projects files etc). They also organise information days, workshops and press conferences, to assist with the preparation of new applications and to disseminate COMETT project outputs. Finally, in cooperation with the UETPs, the Information Centres provide assistance for COMETT Project promoters within their country, including finding new project partners and disseminating relevant project outputs from other countries.

The Commission provides financial support towards the costs of activities undertaken by the Information Centres. In addition, the Commission supplies various forms of documentation, services and promotional material for use by Information Centres.

COMETT Experts and Advisers

Following the Council Decision, the Commission established the COMETT Experts Group as an additional source of specialist technical advice and expertise. Members

█

of the Group are appointed by the Commission on the basis of their personal knowledge of a particular technical area or sector related to the work of COMETT. The breadth of membership is such that there is at least one Expert from each participating country, ensuring awareness of the level of technology exploitation in all of these countries. The Experts met on 9/10/11 May 1990 and on 15/16 October 1990; in the following year they met on 14 March 1991 and 19 November 1991, and in this year they met on 5/6 March 1992. The main objective of their meeting was the examination of the project proposals received by the Commission under the three Calls for Applications. Their developing role in project monitoring as well as their technical advice helps to ensure that the Commission is able to select the most appropriate range of projects to achieve COMETT objectives.

Project Advisers

Because of the exemplary nature and large scale of the Pilot Projects a new approach was adopted whereby a Project Adviser was assigned to work with every Pilot Project during the project's life time. A tripartite relationship is developed between the project coordinator, the COMETT project officer and the project adviser. This process has proved very beneficial in assuring the good development of the Pilot Projects.

Technical Support

The Commission is assisted in the operational implementation of the COMETT Programme by the COMETT Technical Assistance Office, a non profit organization with which appropriate contractual arrangements have been made.

Links with other Community Programmes

An important aspect of COMETT is the potential it has for synergy with other Community programmes. COMETT complements the strategic Community approach in the R & D and innovation fields by contributing towards the development of highly qualified manpower necessary for the development, transfer and exploitation of new technologies. Close consultation has been established both in the selection of projects and also the on-going monitoring and development of the COMETT Programme. COMETT Projects have also established links between organisations active in a number of Commission R & D Programmes. There is in particular a close link between COMETT and DELTA in view of the complementary objectives of the two programmes in the field of technology support for education and training. In 1991, at a practical level, this link involved the following:

- Joint COMETT/DELTA presentations at key conferences and DELTA launch meetings.
- Participation in the selection process for the current phase of DELTA which started in the latter half of 1991.
- Cooperation between the two programmes with regard to COMETT Pilot Projects with close links to current DELTA projects, for example, COSTEL (COMETT) and COSYS (DELTA).

In the education and training field COMETT complements the activities of the ERASMUS Programme for the mobility of university students, FORCE, the programme for the development of continuing vocational training, and the EUROTECNET Programme for basic vocational training for the new information technologies. Links exist also with the LINGUA and the TEMPUS Programmes.

of the Group are appointed by the Commission on the basis of their personal knowledge of a particular technical area or sector related to the work of COMETT. The breadth of membership is such that there is at least one Expert from each participating country, ensuring awareness of the level of technology exploitation in all of these countries. The Experts met on 9/10/11 May 1990 and on 15/16 October 1990; in the following year they met on 14 March 1991 and 19 November 1991, and in this year they met on 5/6 March 1992. The main objective of their meeting was the examination of the project proposals received by the Commission under the three Calls for Applications. Their developing role in project monitoring as well as their technical advice helps to ensure that the Commission is able to select the most appropriate range of projects to achieve COMETT objectives.

Project Advisers

Because of the exemplary nature and large scale of the Pilot Projects a new approach was adopted whereby a Project Adviser was assigned to work with every Pilot Project during the project's life time. A tripartite relationship is developed between the project coordinator, the COMETT project officer and the project adviser. This process has proved very beneficial in assuring the good development of the Pilot Projects.

Technical Support

The Commission is assisted in the operational implementation of the COMETT Programme by the COMETT Technical Assistance Office, a non profit organization with which appropriate contractual arrangements have been made.

Links with other Community Programmes

An important aspect of COMETT is the potential it has for synergy with other Community programmes. COMETT complements the strategic Community approach in the R & D and innovation fields by contributing towards the development of highly qualified manpower necessary for the development, transfer and exploitation of new technologies. Close consultation has been established both in the selection of projects and also the on-going monitoring and development of the COMETT Programme. COMETT Projects have also established links between organisations active in a number of Commission R & D Programmes. There is in particular a close link between COMETT and DELTA in view of the complementary objectives of the two programmes in the field of technology support for education and training. In 1991, at a practical level, this link involved the following:

- Joint COMETT/DELTA presentations at key conferences and DELTA launch meetings.
- Participation in the selection process for the current phase of DELTA which started in the latter half of 1991.
- Cooperation between the two programmes with regard to COMETT Pilot Projects with close links to current DELTA projects, for example, COSTEL (COMETT) and COSYS (DELTA).

In the education and training field COMETT complements the activities of the ERASMUS Programme for the mobility of university students, FORCE, the programme for the development of continuing vocational training, and the EUROTECNET Programme for basic vocational training for the new information technologies. Links exist also with the LINGUA and the TEMPUS Programmes.

The ERASMUS Programme was adopted by the Council in June 1987 to promote inter-university cooperation and in particular to increase substantially the number of university students carrying out a period of integrated study in another Member State. Although there are a number of important differences between the specific aims, objectives and actions of the two Programmes, both COMETT and ERASMUS include the common policy aim of encouraging students to spend periods of recognised training in other Member States. The TEMPUS Scheme, which is designed specifically to promote transeuropean mobility and the development of higher education systems in the countries of Central/Eastern Europe, was adopted on 7 May 1990 by the Council of Ministers. Close links have been established to ensure coordination of the overall implementation and monitoring of the three Programmes.

* *
*