



BIPE

**To improve the framework for
SMEs in the Chemicals,
Plastics, Rubber and related
sectors**

**Final Report
European Commission
DG III.C4**

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Table of contents

EXECUTIVE SUMMARY	4
INTRODUCTION: GENERAL CONTEXT	9
GENERAL OBJECTIVES OF THIS STUDY	9
SOME KEY FIGURES ON CHEMICALS, PLASTICS AND RUBBER INDUSTRY SMES	10
EUROPEAN COMMISSION POLICY TOWARDS SMES	13
A. SUMMARY OF PHASE 1 RESULTS	14
INTRODUCTION	14
A.1. EU ENTERPRISE POLICY	16
A.2. EU PROGRAMMES AND MEASURES TO SUPPORT SMES	20
1 - FINANCIAL MEASURES FOR BUSINESSES AND ESPECIALLY SMES	22
2 - EUROPEANISATION AND INTERNATIONALISATION:	24
3 - RESEARCH & DEVELOPMENT	28
4 - EDUCATION AND TRAINING PROFESSIONAL PROGRAMMES:	32
A.3. RECENT POLICY INITIATIVES AT MEMBER STATE LEVEL	34
A.4. PHASE 1 KEY FINDINGS	35
1 - INTERNATIONALISATION	36
2 - PRODUCTION	36
3 - INNOVATION	37
4 - INVESTMENT POLICY	37
5 - ENVIRONMENTAL ISSUES	38
6 - HUMAN RESOURCES AND TRAINING	38
7 - SMES BEHAVIOUR VS COLLECTIVE PROGRAMMES: EU PROGRAMMES ARE TOO LITTLE KNOWN	39
B. ASSESSMENT OF A SHORT LIST OF SUCCESSFUL INITIATIVES	41
B.1. FINANCE: EUROTECH CAPITAL	42
1 - GENERAL OBJECTIVES	42
2 - RECIPIENT COMPANIES	42
3 - BUDGET AVAILABLE	43
4 - MEANS OF ACCESS AND PARTICIPATION CONDITIONS	45
5 - POINTS OF INTEREST	46
6 - IMPROVEMENT AREAS	46
7 - CONTACT	47
B.2. EUROPEANISATION - INTERNATIONALISATION: ECIP	48
1 - GENERAL OBJECTIVES	48
2 - RECIPIENT COMPANIES	50
3 - BUDGET AVAILABLE	52
4 - MEANS OF ACCESS AND PARTICIPATION CONDITIONS	53
5 - POINTS OF INTEREST	55
6 - IMPROVEMENT AREAS	55
7 - CONTACT	56
B.3. INNOVATION: THE FIRST ACTION PLAN FOR INNOVATION	57
1 - PROTECTION OF INTELLECTUAL PROPERTY	58
2 - FINANCING INNOVATION	58
3 - REGULATORY FRAMEWORK AND ADMINISTRATIVE SIMPLIFICATION	59
4 - EDUCATION AND TRAINING	60

5 - GEARING RESEARCH TOWARDS INNOVATION	60
B.4. RESEARCH AND DEVELOPMENT / ENVIRONMENT: LIFE	61
1 - GENERAL OBJECTIVES	61
2 - RECIPIENT COMPANIES	63
3 - BUDGET AVAILABLE	65
4 - MEANS OF ACCESS AND PARTICIPATION CONDITIONS	67
5 - POINTS OF INTEREST	68
6 - IMPROVEMENT AREAS	69
7 - CONTACT	69
B.5. TRAINING: ADAPT	70
1 - GENERAL OBJECTIVES	70
2 - RECIPIENT COMPANIES	75
3 - BUDGET AVAILABLE	77
4 - MEANS OF ACCESS AND PARTICIPATION CONDITIONS	78
5 - POINTS OF INTEREST	80
6 - IMPROVEMENT AREAS	82
7 - CONTACT	83
C. KEY FINDINGS AND RECOMMENDATIONS	84
C.1. CHEMICALS AND ALLIED SECTOR SMES: SPECIFIC ISSUES	85
C.2. AN IDENTIFIED NEED FOR A SET OF NATIONAL SME CONTACT POINTS	90
1 - UNITED KINGDOM: CIA / SOCSA-SORIS	90
2 - ITALY: FEDERCHIMICA / CIRC	91
3 - THE NETHERLANDS: VNCI / SYNERCHEM	92
4 - BELGIUM: FEDICHEM	93
5 - GERMANY: VCI	93
6 - FRANCE: UIC	93
7 - SPAIN: FEIQUE	94
C.3. COORDINATION AT EUROPEAN LEVEL	96
1 - ESTABLISHMENT OF A NETWORK OF NATIONAL CONTACT POINTS	96
2 - FUNCTIONS TO BE CARRIED OUT BY NATIONAL CONTACT POINTS	97
3 - COORDINATION AT EUROPEAN LEVEL	99
APPENDICES	100
SOURCES	101
MAIN COMMUNITY NETWORKS	103
EURO-INFO-CENTRES	104
5TH FRAMEWORK PROGRAMME (1998-2002)	106
SME DEFINITION	107

Executive Summary

SMEs in the chemicals, plastics, rubber and related sectors

The chemicals industry is a major contributor to employment, technology and wealth-creation in Europe. Contrary to popular belief, small and medium-size enterprises (SMEs) constitute a major part of this industry. More than 95% of chemicals industry companies have fewer than 250 employees and these SMEs account for about 30% of jobs and output in Europe (more than 50% for rubber and plastics processing SMEs).

It would be a major error to think of this part of industry as a mere processor of the output of those large chemicals firms that constitute the core of know-how and the only engine of growth. These companies are actually responsible for spreading technology throughout European industry, by enriching and personalising bulk chemical products. Mostly, it is these companies that have to work on a daily basis with tens of thousands of European customers, in order to create value and a competitive edge.

Chemicals industry SMEs play an important role in every European country. They are dominant in certain activities such as paints, cosmetics, speciality chemicals, fine chemicals and pharmaceutical precursors.

The aim of this study, which gave national and European associations a major role in each of its phases, was to understand the specific needs of the European chemical and allied sector SMEs, in order to identify a set of actions to improve their economic environment.

For this purpose, a two phase approach was adopted.

Phase 1 (report, based on 350 interviews, and presented in November 1997), aimed:

- To describe European chemical industry SMEs' behaviour and rationale in terms of industrial, internationalisation, human resource, etc. policies
- To assess SMEs' uses of the various collective programmes, which have been set up at European or national levels

Phase 2, more results-oriented, aimed:

- To identify and select effective initiatives, currently implemented or being set up by the EC, which could potentially be adapted to chemical industry SMEs
- To provide recommendations and identify actions to be implemented in addition to existing initiatives

Phase 1 results: chemicals and allied sector SME characteristics

Chemical industry SMEs have to cope with many difficulties which are common with SMEs in other sectors, such as the complexity of legislation and administration, the lack of management and marketing resources, and problems of access to long-term finance and to relevant information sources.

Their uniqueness lies in three challenges. They actively participate in the development of new products and processes and, more than in any other branch of industry, innovation is increasingly vital for them amid ever fiercer international competition. They are also strongly export-oriented with marketing investments to gain a foothold in new markets both within and outside Europe. And they are greatly hindered by a disproportionate burden of environmental legislation.

Key findings based on 350 interviews are described below:

Internationalisation

Chemicals SMEs are strongly involved in the process of internationalisation, more so than similar-size companies in other industries.

Export figures are not much different from industry-wide totals (28% vs 36% of sales). 85% of chemical SMEs export, 67% more than 20% of their output and 31% export more than 40%.

The majority of our sample SMEs were trying to develop European sales (essentially SMEs in the organic chemistry and tyres & tubes sectors, and in Northern Europe countries) but 58% of companies also export outside the EU.

Given the characteristics of many chemical products (not suitable for transport, local markets), it appears that on average, SMEs are involved in the globalisation of markets to the same extent as large chemical groups, and far more than their cousins in other industries.

The main problems encountered by chemical SMEs vary sector by sector. The most common export-related complaints are: difficulty in finding suitable partners (31%), logistics and transport costs (25%), the existence of trade barriers (20%), problems with certification and registration.

Production

Overseas production represents a small percentage of SMEs' activities.

Only 8% of production takes place abroad, but a good 20% of companies has had this type of experience (11% outside Europe). These figures are not low and demonstrate that a significant proportion of SMEs has already dealt with the more complex form of internationalisation. For these companies, vicinity to markets is more of a determining factor than tax considerations or the cost of labour.

There are several barriers to access to the Internal Market for SMEs, and one of the most important complaints is the existence of differences in compliance, interpretation and enforcement of Community laws.

Moreover, participation in public procurement among SMEs is low, due to a lack of awareness of opportunities and to the difficulties of pre-qualification (shortage of financial guarantees, difficulties in coping with national technical standards where European-wide standards cannot be applied, or difficulties in providing relevant references). Opportunities for SMEs to relocate production are often hindered by the costs and risks involving travel expenses, recruitment of local staff or national regulations.

R & D

The level of R & D is significantly high (around 70% of interviewed SMEs have carried out one « sector leading » development programme over the last five years). 45% of SMEs have managed to patent their innovations. Main research projects have covered products and processes, with an average of 6% of employees working in R&D.

Innovation and research are top priorities for chemical SMEs in Europe, as they are for the whole chemical industry. It is due to the fact that chemical SMEs are not – as often in other industries - merely sub-contractors.

SMEs encounter difficulties in transforming scientific discoveries into marketable products, because access to finance is quite difficult (for 45% of them) and regulatory barriers are too high to promote the effective development of research results.

European SMEs are trying to work with universities (41%), research centres and laboratories (31%), and are aware that they need to seek partnerships. But the awareness of networks, and of the possibilities of exploiting commercial synergies between businesses, universities and other structures, is low.

The complexity of the European Commission's programmes renders them ill-adapted to the needs of SMEs; they would like them to be simpler and more effective.

Investment Policy

SMEs are aiming to increase investment, mainly to increase capacity (for 56% of them), to launch new products (56%) and to develop R&D (42%).

SMEs are very dependent on their own capital structure and working capital. They have real difficulties in accessing loans at low rates, and often solve their financing problems by using informal funding sources, such as family.

Self-financing is the most used source of investment financing (86%). The structure and the size of their assets mean SMEs encounter more difficulties than larger firms, as they are perceived by banks as higher risk. To cope with their investment financing problems, SMEs need easier access to long term finance, to venture capital and the creation of a SME European capital market.

Environmental issues

Complying with legislation is an arduous task for chemical SMEs, and 44% of them mention this is a major area of investment. Basic compliance is actually a costly activity, which limits resources for growth.

This is one of the most clear-cut result of the survey, and is confirmed by companies' rating of major problems. For 55%, it is too expensive to keep up with changes in regulations and standards; for 60% the rules are changed too often; for 48% interpreting the details of legislation is difficult, etc.

SMEs consider they are burdened with rules and regulations designed - often wrongly - for much larger firms that have the internal resources to handle these issues. What are just costs for a large firm represent a real obstacle to growth for a small or medium-size business.

Human Resources and Training

SMEs have a strong need for both commercial and well-educated science and technology workers, and would like to make more use of specific national and European training programmes.

70% of companies report difficulties finding personnel. The most critical areas are marketing and sales (34%), chemicals knowledge (31%), quality, logistics and processes (30%), foreign language competence, mobility, etc..

The problem does not end with recruitment, and in-service training is a priority request of SMEs, for whom in-house training infrastructure and means are often weak. Training topics in demand are quality, logistics, process (43%), marketing and sales (38%), foreign languages (30%), and chemicals science (30%).

SME behaviour w.r.t. collective programmes: awareness of EU programmes is low

SMEs would like access to European support programmes, to complement those national programmes they already use.

A small proportion of SMEs is in contact with the European Commission, though most prefer to work through Chambers of Commerce and trade associations. Less than 30% of SMEs who were aware of European Commission programmes (essentially in the fields of industrial co-operation), used one or more of them; by comparison, nearly 60% of SMEs who were aware of national support programmes used them (mainly investment financing).

Euro-Info-Centres are not widely known by SMEs and are very little used, mostly because of a lack of information and because the system is perceived as too bureaucratic.

During Phase 1 of this study, the project team also identified and analysed a large number of initiatives (about one hundred), set up by the European Commission or by national

governments, to support European businesses and particularly SMEs. In practice, specific programmes for chemicals industry SMEs are rare.

The objective of Phase 2 of this project was therefore to propose recommendations for the improvement of existing and successful programmes, to adapt them to the specific needs of chemicals industry SMEs.

National Trade associations of European countries have, for this purpose, selected different programmes as being well adapted to SME needs, especially to chemical industry SMEs:

FIELD	PROGRAMMES
Finance	EUROTECH CAPITAL
Internationalisation / Europeanisation	ECIP
Competitiveness / R&D / Training <ul style="list-style-type: none"> • R&D • Environment • Training 	5 th Framework Programme LIFE ADAPT
Information on EC programmes	EURO-INFO-CENTRES

Instead of the *5th Framework Programme* which is not yet finalised, it was agreed to focus on innovation and especially on *the First Action Plan on Innovation*.

An identified need for a set of national SME contact points ...

Local, national and particularly Community programmes and measures are often regarded by SMEs as being impenetrable, as a result of their complexity, size, or range, etc. The purpose of this proposed set of “**national SME contact points**”, specifically targeted to the needs of chemicals industry SMEs, is:

- To gather, select and up-date information on local, national and European support programmes and measures for which chemicals SMEs are eligible
- To guide (interface role) SMEs in their search for potential support

In fact, such contact points have already been set up in some countries (UK, Italy, the Netherlands, Belgium, Germany) within national trade associations or at their initiative, but it is not the case everywhere.

But our assessment is that, even in those countries where such contact points already exist, **the means devoted to European support programmes are under-dimensioned.**

So the tasks of the national contact points should be focused in the short term on:

- Absorbing the Phase 1 report, including the description of the various existing EC programmes (about 50)
- An in-depth knowledge of a short list of EC support programmes or measures (e.g. the 5 programmes described in this final report) which refers to the notion of “small victories vs no end large projects”.

This last point implies a certain number of specific actions which are described below:

- Eurotech : this programme is considered a significant success and has been developed in various versions (ECIP, JEV, etc.) which need to be strongly promoted by the contact points. On the other hand, it is important to maintain relationships with the EUROTECH venture capitalists, each of whom is in charge of 4-5 projects.
- Adapt: this programme will finish in 1999. It is important to draw lessons from the results of ADAPT to see what could be improved in the definition of the 2000-2006 training policy (AGENDA 2000), e.g. needs for continuous training, alternative training (tele-training, etc.)

On the other hand, contact points will have to translate into common language concepts such as “learning organisation” which are still not well understood by SMEs.

- First Action Plan For Innovation: this plan prominently figures some existing actions/programmes (ITEC, European Structural Funds, European Social Fund, BEI, etc.) and aims to follow and up-date regularly the various projects and results. The network of national contact points will of course need to be aware of these programme modifications and opportunities.

Co-ordination at European level

It appears important to co-ordinate the network of national SME contact points at European level.

This structure, which could be integrated with CEFIC in Brussels, would have as a duty to represent European chemicals industry SME interests to European government (Commission and Parliament).

Such a project was formally presented to all the European Chemical Industry Federations in Berlin on 11th June 1998, will be re-discussed in December 1998 and finalised at the beginning of next year.

Introduction: General context

GENERAL OBJECTIVES OF THIS STUDY

In the European Commission Report of May 1996, entitled “Industrial competitiveness for the European chemical industry: an example”, the role of SMEs was pointed out clearly, along with the need to pinpoint further action in terms of industrial policy benchmarking.

An important step in this direction came in 1997, when DGIII promoted this study “To improve the framework for SMES in the chemicals, plastics, rubber and related sectors”.

The aim of the study was to understand the specific needs of European SMEs in the chemicals, plastics, rubber and related sectors, in order to identify a set of actions to improve their economic environment.

For that purpose, a two phase approach was adopted.

Phase 1 (report presented in November 1997), aimed to:

- List and describe the various support measures for SMEs at European and Member State levels
- Describe European chemicals industry SMEs’ behaviour and rationale in terms of industrial, internationalisation, human resources, etc. policies
- Describe European chemicals industry SMEs’ behaviours w.r.t. the various collective programmes, which have been set up at European or national levels

The objectives of Phase 2 were more results-oriented:

- To identify and select effective measures, currently implemented or being set up by the EC, which could potentially be adapted to chemicals industry SMEs
- To provide recommendations and identify actions to be implemented in addition to existing measures

SOME KEY FIGURES ON CHEMICALS, PLASTICS AND RUBBER INDUSTRY SMES

In the European Chemicals Industry, focus has often been put on large groups, due to the leading position of many European groups. Sixteen out of the 30 world chemicals majors have their headquarters in the EU. But SMEs are not marginal in terms of turnover and importance.

Number of companies (1994 - UE 15)

Number of employees	Chemicals Industry		Rubber and Plastic Processing Industry	
	Number	%	Number	%
0 - 9	24 462	68.5%	38 352	78.0%
10 - 49	7 002	19.6%	13 038	23.5%
50 - 249	2 866	8.0%	3 553	6.4%
+ 250	1 376	3.9%	651	1.1%
Total	35706		55 594	

96.1% of chemicals companies and 98.9% of rubber and plastic ones have less than 250 employees.

SMEs encounter pressures from the large groups. Those companies aim to consolidate their position by mergers and acquisitions, to become more competitive on a world-wide basis.

A major error would be to think of this part of industry as a mere processor of the output of large chemicals firms, who constitute the sole source of know-how and the only engine of growth. These companies are actually responsible for spreading technology throughout European industry, by enriching and personalising bulk chemical products. Mostly, it is these companies that have to work on a daily basis with tens of thousands of European customers, in order to create value and a competitive edge.

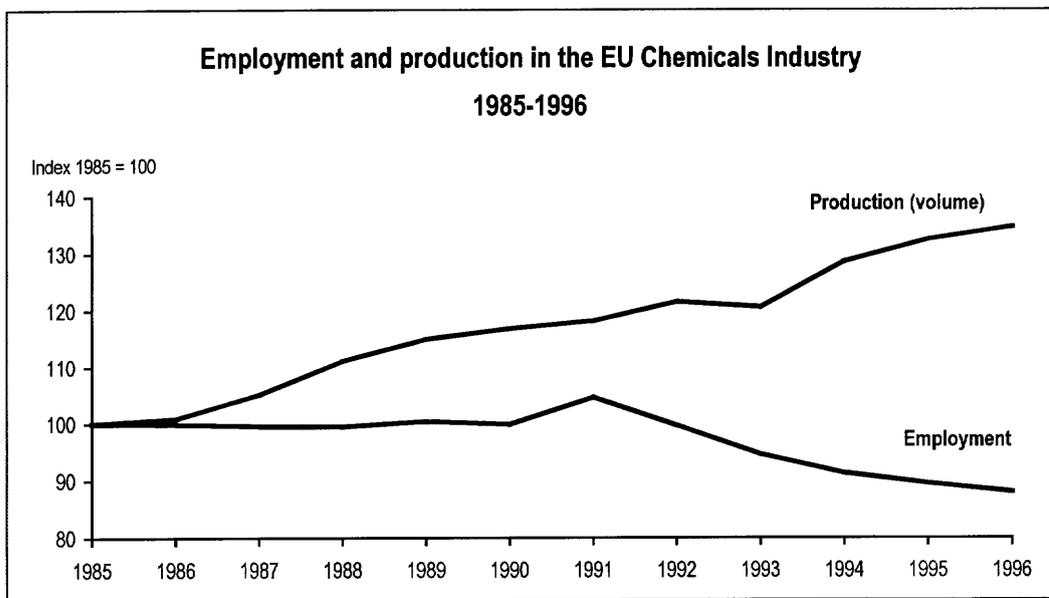
Turnover (1994, MECU)

	Chemicals Industry		Rubber and Plastic Processing Industry	
	Turnover	%	Turnover	%
0 - 9	10 894	2.7%	8 539	6.1%
10 - 49	27 261	6.7%	28 238	20.0%
50 - 249	67 972	16.6%	41 241	29.3%
+ 250	301 859	74.0%	62 803	44.6%
Total	407 986		140 822	

A quarter of the turnover in the chemicals industry, and more than 50% of the turnover in the rubber and plastic processing industries is generated by SMEs.

Number of enterprises by employment size-class in the EU chemicals industry

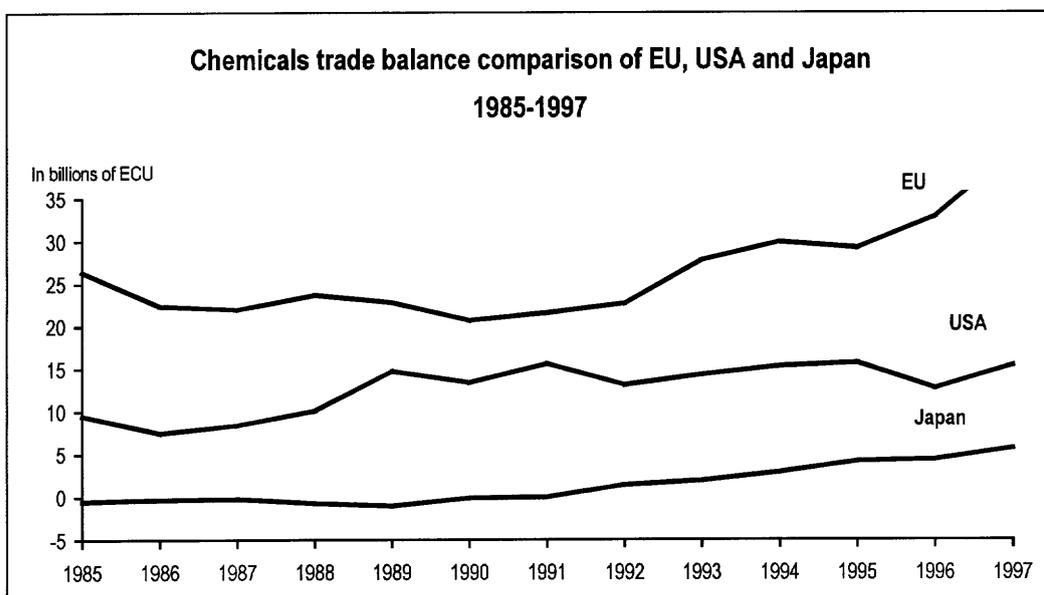
	1992		1994	
0 - 9	27 300	70%	24 462	68.5%
10 - 49	10 140	26%	9 868	27.6%
+ 250	1 560	4%	1 376	3.9%
Total	39 000	100%	35 706	100%



- The number of businesses in Europe is decreasing together with employment.
- Total employment reached 1,7 million people or 7% of the overall workforce in manufacturing. This is some 12% less than in 1985, whereas production has grown by 35%.
- Productivity per employee has improved markedly over the period 1985-96, due to a more qualified, better-trained labour force.
- The challenge for SMEs is to work together, for example by creating joint ventures, in order to remain competitive vs larger groups.

Extra-EU Chemicals trade with major geographic blocs in 1996

In ECU bn	Import	Export
Africa	1.1	5.8
Asia	5.6	17.0
Central and Eastern Europe	4.7	9.1
Japan	4.3	5.6
Latin America	1.6	6.1
North America	15.2	15.5
Oceania	0.3	2.1
Total	32.8	61.2



Sources: ESCIMO & CE IC - Ecos n lysis.

- Exports have risen significantly over the last few years, imports at a slower pace.
- This has resulted in a record trade surplus of ECU 40.5 b. in 1997.
- The chemicals industry is already internationalised to a large degree. To improve internationalisation, they need more specific and more applied support.

EUROPEAN COMMISSION POLICY TOWARDS SMES...

SMEs, which currently represent the main sources of growth and employment in Europe, play a crucial role in the European economy, and this role is set to increase in the future. SMEs of the chemicals sectors account for a very significant share in this industry, in terms of turnover and employment. In fact, 96% of chemicals businesses have less than 250 employees.

Within the development of SMEs in general, the European Commission has identified bottlenecks or difficulties encountered by these companies: financing, complexity of the legislative and administrative environment, management capacity, access to information (on new products, new markets, protection of patent rights...).

The objective of the European Commission is to ensure a closer partnership between all parties concerned with the development of SMEs - at Community, national and regional levels - with a view to enhancing the convergence and effectiveness of measures taken. European meetings in Madrid (1995) and Florence have underlined the necessity to reinforce actions in favour of SMEs.

DG XXIII has overall responsibility for co-ordinating business policy in favour of SMEs. This co-ordination role aims to ensure that the SME dimension is integrated into the definition and implementation of Community policies and to increase their involvement in Community programmes.

DG XXIII works closely with other DGs, with the EU's financial instruments and with external partners. This ensures that SME interests are taken into account when preparing legislation, and that they have proper access to finance and programmes from which they are intended to benefit.

In December 1996, the Commission adopted a decision on the 1997-2000 Third Multiannual Programme for SMEs in the European Union. This programme, under the responsibility of DG XXIII, provides the legal and budgetary basis for Community-specific SME policy actions.

In all these domains, European and national actions coexist. It is worth noting that in terms of financing, European support is always granted in co-operation with national or regional partners. As there are numerous support programmes in each Member State, as programme access procedures are complicated, and as it is difficult to obtain information on available support, support programmes at national and European level need improvement.

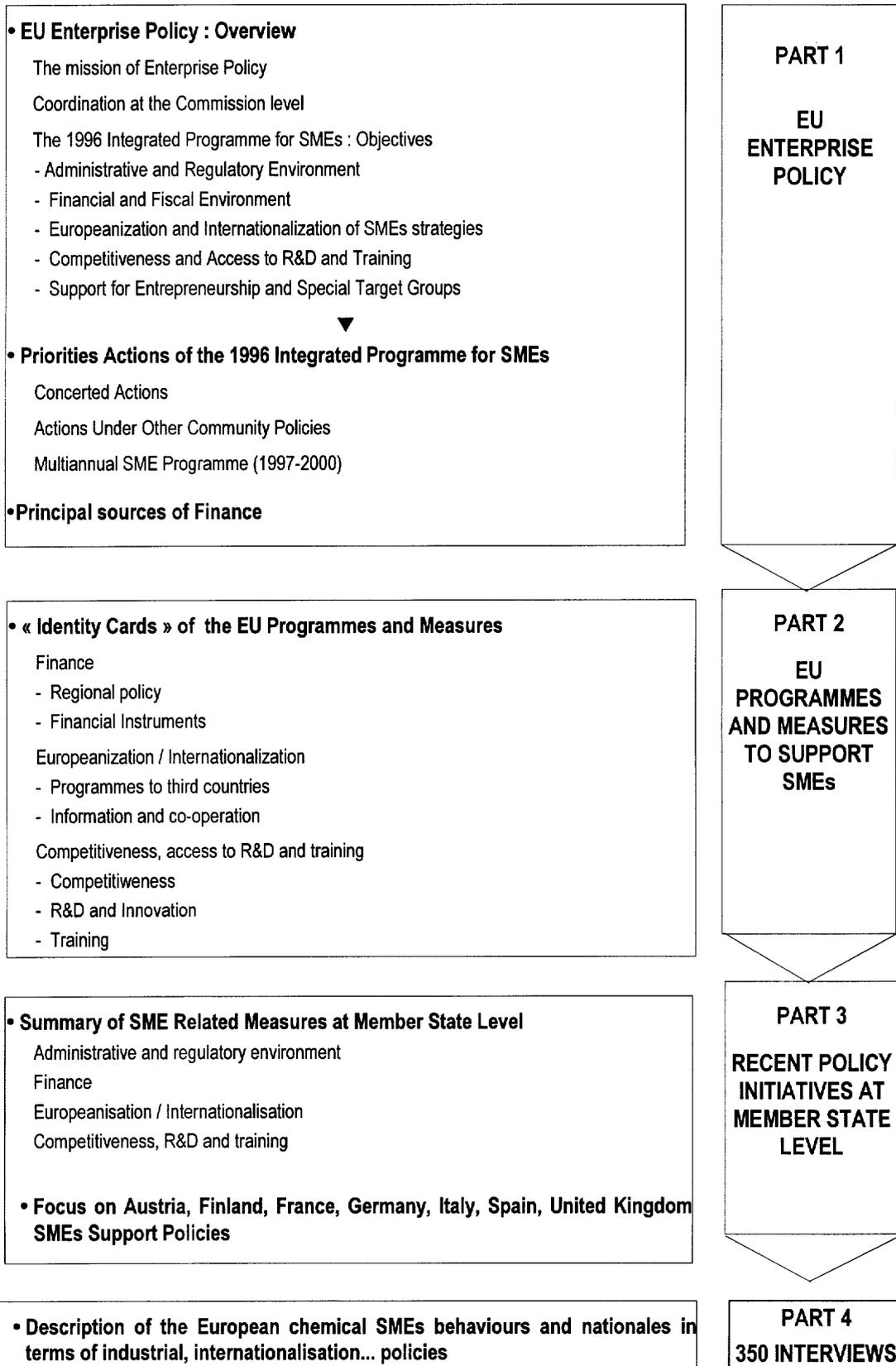
A. Summary of Phase 1 results

INTRODUCTION

Phase 1 analyses were sub-divided in 4 parts (cf. table next page).

- EU enterprise policy: overview
- Identification of the various EU programmes and measures to support SMEs
- Assessment of the recent policy initiatives at Member State level
- Description of the European chemicals industry SMEs behaviour and rationale in terms of internationalisation, innovation etc. policies

THE EUROPEAN FRAMEWORK OF SUPPORT FOR SMEs



A.1. EU ENTERPRISE POLICY

Enterprise Policy is a wide-ranging topic which covers a number of areas of Community responsibility set out in the Treaty of Rome, although, as it is the case in most national administrations, it was not given institutional form at Community level until recently.

Member States and the Community have tried in the past to unlock the potential of SMEs through an array of measures, but many of these initiatives were narrowly targeted and too disparate to be easily accessible by most SMEs. Maintaining coherence between these initiatives and, in a rapidly changing economic environment, ensuring that the different actions are directly relevant to SMEs and their problems, remain a political priority for the Commission.

In its December 1995 Madrid SME Policy Paper, the Commission stated that, although SME policy now ranks higher than ever on the political agenda, much more could be achieved by a fresh approach focusing on a number of priority issues. It confirmed that SMEs, in particular those at the smaller end, now play a key role in terms of growth and of generating new jobs:

- **SMEs as job creators**

- SMEs account for 99.8% of all companies, 66% of total employment and 65% of business turnover in the European Union.
- Net job creation in SMEs has more than compensated for job losses in large companies during the period 1988 to 1995. During that period, firms with fewer than 100 employees have been responsible for almost all job creation.

The Madrid SME Policy Paper stressed that European SMEs' full potential for growth and employment creation has not been properly realised and that growth and job creation in SMEs have been inhibited by basic market and policy imperfections and failings which have not yet been adequately addressed. These imperfections were analysed and the following remedial measures proposed:

- **Priority Recommendations from Madrid SME Policy Paper**

- Reduce red tape which hampers European Entrepreneurship
- Ensure better involvement of SME Organisations in the decision-making process
- Help finance SMEs which create new jobs
- Reduce market distortions and inefficiencies
- Vigorous action to promote research, innovation and training to assist SMEs
- Enhance competitiveness and internationalisation of SMEs

In endorsing this Report, the Conclusions of the Presidency following the Madrid European Council called on the Commission to put these aims into practice as speedily as possible in the framework of the next Integrated Programme for SMEs.

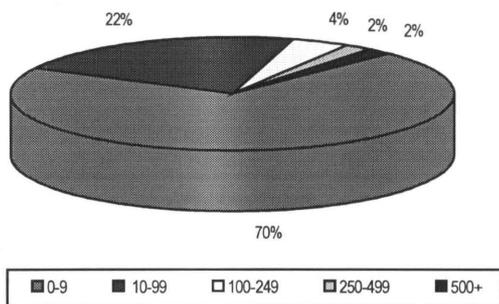
In July 1996, the Commission adopted a Communication to update and develop its first Integrated Programme. This **1996 Integrated Programme for SMEs** follows the methodology of the 1994 one and allows for continued implementation of actions under that Programme while aiming at new objectives and presenting an array of new measures. In December 1996, the Council adopted a Decision on a **Third Multiannual Programme for SMEs in the European Union (1997-2000)**, with a financial reference amount of 127 MECU. This new Programme, which replaces the 1993 Programme, which expires on 31 December 1996, fits within the 1996 Integrated Programme framework, providing the legal and budgetary basis for the Community's specific SME policy actions.

Concerning the Chemicals industry, joint actions promoted by CEFIC (European Chemical Industry Council) and the European Commission have also identified measures to improve the Chemicals sector's competitiveness. These remedial actions, described in the April 1996 Commission Communication Paper entitled « A Competitiveness Policy for the European Chemical Industry: A Model » correspond to the key priorities developed in the Integrated Programme.

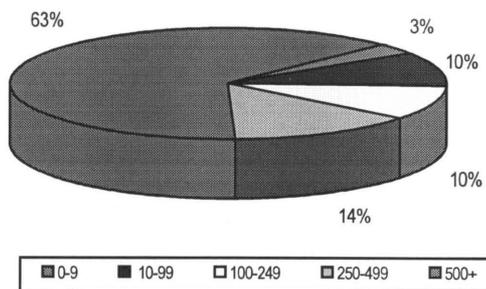
Chemicals SMEs: Quantitative importance
<ul style="list-style-type: none"> • 98% of the 33 000 chemicals companies have less than 500 employees • 39% of the employment, i.e. 800 000 jobs • 44% of the sector turnover, i.e. ECU 175 bn.

Sou ce: CE IC

Number of enterprises by employment size-class in the EU Chemicals industry (1992)



Sales by employment size-class in the EU Chemicals industry (1992)



Sou ce: CE IC

The following synoptic table sets out the main features and specific policy actions of the updated Integrated Programme for SMEs.

1996 integrated PROGRAMME FOR SMEs

Concerted Actions with Members States	Actions under other Community policies	1997-2000 Multiannual SME Programme
I. SIMPLIFY AND IMPROVE THE ADMINISTRATIVE AND REGULATORY BUSINESS ENVIRONMENT		
<ul style="list-style-type: none"> • Committee on Improving and Simplifying the Business Environment 	<ul style="list-style-type: none"> • Guidelines for regulatory policy (including better consultation) • Pilot action for simplifying Internal Market legislation (SLIM) • Follow-up to Molitor report • Simplify new common VAT system 	<ul style="list-style-type: none"> • New approach to Business Impact Assessment System (inc. Methods for cost/benefit evaluation) • Transfer of businesses • Dispute settlement procedures • Appropriate legal instruments
II. IMPROVE THE FINANCIAL AND FISCAL ENVIRONMENT FOR SMEs		
<ul style="list-style-type: none"> • Better access to finance and capital markets 	<ul style="list-style-type: none"> • Better targeting of Community support for SMEs, including EIF loan guarantees for employment at reduced rates (ELISE), EIF equity support for SMEs, and reorientation of Structural Funds' support, EIB loans • Fiscal environment of businesses • Introduction of the Euro 	<ul style="list-style-type: none"> • Late payment • Round Table Bankers and SMEs • SME capital markets, including EASDAQ • Mutual Guarantee Schemes • Factoring and credit insurance
III. HELP SMES TO EUROPEANISE AND INTERNATIONALISE THEIR STRATEGIES, IN PARTICULAR THROUGH BETTER INFORMATION AND COOPERATION SERVICES		
<ul style="list-style-type: none"> • Administrative co-operation - Single Market 	<ul style="list-style-type: none"> • Access to the Single Market <ul style="list-style-type: none"> - More competition and encourage reduction State aid - Cross-border public procurement - Standards and certification - Transnational investment within the EU • Access to third countries <ul style="list-style-type: none"> - Reduce trade barriers - Improve multilateral rules on FDI - Facilitate international co-operation with enterprises in Third Countries 	<ul style="list-style-type: none"> • Information services: EICs as first stop shops • Co-operation through business search networks • Direct contacts through partnership programmes • Subcontracting partnerships • Access to new markets

IV. ENHANCE SME COMPETITIVENESS AND IMPROVE THEIR ACCESS TO RESEARCH, INNOVATION, INFORMATION TECHNOLOGIES AND TRAINING		
<ul style="list-style-type: none"> • Business services (including in the field of innovation) • SME actions in the field of research (CREST) • Access of SMEs to the Information Society • Adapt training to the needs of SMEs 	<ul style="list-style-type: none"> • Competitiveness and modernisation of SMEs <ul style="list-style-type: none"> - Structural Funds (incl. SME Initiative) - Industrial competitiveness - Local development initiatives • Action Plan for Innovation • Access to R&TD <ul style="list-style-type: none"> - access to Community R&TD Programmes - market-oriented technological development • Access of SMEs to the Information Society • Environmental requirements, energy saving • Access to training including in the area of new technologies 	<ul style="list-style-type: none"> • Increasing the Innovation potential of SMEs (e.g. New Technology Based Firms) • Management training for SMEs • Adaptation to environmental requirements
V. ENTREPRENEURSHIP AND SUPPORT SPECIAL TARGET GROUPS		
<ul style="list-style-type: none"> • Entrepreneurship • Forum on Craft and small enterprises • Forum on Commerce 	<ul style="list-style-type: none"> • Follow-up White Paper on Education • Access of craft enterprises to Single Market • Women entrepreneurs 	<ul style="list-style-type: none"> • Promote entrepreneurship • Craft and small enterprises • Commerce and distribution • Women and young entrepreneurs

A.2. EU PROGRAMMES AND MEASURES TO SUPPORT SMES

EU PROGRAMMES AND MEASURES TO SUPPORT SMEs: OVERVIEW

Sector	Tools	Support	Contacts
FINANCE	REGIONAL POLICY	Structural Funds Community Initiative European Invest Bank loans Cohesion Fund	DG XVI regional authorities EIB
	FINANCIAL INSTRUMENTS	Eurotech Capital European Invest Fund Seed Capital	DG II BEI DG XVI
EUROPEANISATION		AL-INVEST ASIA-INVEST Europartenariat Interprise EGEI J.E.M. EXPROM JAPAN Promote export to 3rd countries. ECIP	DG I - DG XXIII DG I - DG XXIII DG XXIII DG XXIII DG XXIII-DG XV DG I DG I DG I DG I
INTERNATIONALISATION		EU Development fund Centre of Ind. Development	DG I DG VIII CID
		STABEX SYSMIN MEDA PHARE TACIS JOP BC-Net EIC ECIE IBEX	DG VIII DG VIII DG I DG I DG I DG XVIII DG XXIII DG XXIII DG XVI DG XXIII

RESEARCH		Information technologies BRITE EURAM III Normalisat., measures, test. Environment and climate MAST II	DG III DG XII DG XII DG XII DG XII
	Framework Programme	Biotechnology BIOMED II Agriculture and Fishing Non-nuclear Energy Transport	DG XII DG XII DG XII DG XII DG VII
AND	Measures in favour of SMEs	Exploratory Subsidy Co-operative research	DG XII DG XII
		Innovation IRC	DG XIII Network
DEVELOPMENT		EUREKA LIFE SAVE	Eureka DG XI DG XVII
	Applied Research	MLIS INFO 2000 TEN TELECOM	DG XIII Luxembourg DG XIII
TRAINING		ADAPT	DG V
		LEONARDO DA VINCI	DGXXII
		NOW EMPLOI	DG V DG V

1 - FINANCIAL MEASURES FOR BUSINESSES AND ESPECIALLY SMEs

FINANCE	REGIONAL POLICY	Structural Funds	DG XVI
		Community Initiative	regional authorities
		European Invest Bank loans Cohesion Fund	EIB DG XVI-DG II
	FINANCIAL INSTRUMENTS	Eurotech Capital	DG II
		European Invest Fund	BEI
		Seed Capital	DG XVI

1.1 - Regional Policy:

1.1.1 - Structural Funds:

These funds include the European Regional Fund (ERDF), the European Social Fund (ESF) and the European Agricultural Guidance and Guarantee Fund (EAGGF). All these instruments have been designed to reduce disparities between the different regions of Europe and to bring about better economic and social cohesion. So, six main objectives have been defined as follows:

- 1 - support for regions of low industrial development
- 2 - support for region in industrial decline
- 3 - to reduce long-term unemployment and facilitate the integration of young people
- 4 - to ease workers' adaptation to industrial and technological development
- 5a - to support the development of agriculture and fishing
- 5b - to help the development of rural areas
- 6 - to help the economic adaptation of specific areas

Subsidies available are not repayable. They may cover 15 to 85 % of the budget required for the project and they are disbursed to public organisations and to businesses, whatever their size.

1.1.2 - The Community Initiative for SMEs:

Connected with the Structural Fund, the aim of this initiative is to support SMEs, essentially for the first objective, in order to help them to be more competitive. Seven main priorities have been defined:

- 1 - improvement of SMEs' production and organisation systems
- 2 - promotion of environment protection and the rational use of energy
- 3 - stimulating co-operation between SMEs, research Centres and universities
- 4 - improving accessibility to new markets
- 5 - developing co-operation between SMEs, and improvement of networks
- 6 - professional skills upgrading
- 7 - improving access to finance and credit.

1.1.3 The European Investment Bank for SMEs (EIB):

This bank finances investments for regional development aiming to protect the environment and to improve industrial competitiveness and the European telecommunication networks. Two financial instruments are: Global Loans, providing financial support to SMEs (fixed assets < ECU 75m.; employees < 500); and EIB low rate Loans for SMEs creating jobs.

1.1.4 The European Social Fund and Cohesion Fund:

The ESF provides financial support for professional training and helps job creation. The CF helps countries like Ireland, Greece, Portugal and Spain, to achieve conformity with the Union Treaty.

1.2. Financial instruments for enterprises:

1.2.1 Eurotech Capital:

This programme promotes investment of European venture-capital companies in enterprises and, especially in SMEs developing trans-national and high-tech projects. At present, 14 venture-capital companies may invest a minimum of ECU 50 m. within this programme. They commit to devoting 20% of their financial capacity to SMEs developing such projects.

1.2.2 European Fund for Investment:

The EIB and 76 financial establishments of the Member States compose this structure. They support projects in two principal fields: Trans-European networks, and access to such networks (transport, energy and telecommunications) and SMEs (especially if they are located in supported regions). They give guarantees to banks and financial institutions financing projects.

1.2.3 Seed Capital:

Under the responsibility of 24 seed capital contact points, the objectives are to encourage enterprise creation in the Community and improve the results of new businesses. Firms must be legally and financially independent and must meet the following criteria: investment in venture capital should not exceed ECU 50 000, annual turnover less than ECU 100 000, less than 10 employees, total value of capital should not exceed ECU 1 500 000.

2 - EUROPEANISATION AND INTERNATIONALISATION:

EUROPEANISATION	AL-INVEST ASIA-INVEST Europartenariat Interprise EGEI J.E.M. EXPROM JAPAN Promote export to 3rd countries. ECIP	DG I - DG XXIII DG I - DG XXIII DG XXIII DG XXIII DG XXIII-DG XV DG I DG I DG I DG I
	EU Development fund Centre of Ind. Development	DG I DG VIII CID
INTERNATIONALISATION	STABEX SYSMIN MEDA PHARE TACIS JOP BC-Net EIC ECIE IBEX	DG VIII DG VIII DG I DG I DG I DG XVIII DG XXIII DG XXIII DG XVI DG XXIII

2.1 - AL-INVEST (1996-2000):

AL-INVEST promotes industrial co-operation and investment in Latin America by facilitating commercial exchanges, technology and know-how transfer between SMEs from the two areas.

2.2 - ASIA-INVEST (1996-2000):

This programme is designed for SMEs and promotes industrial co-operation and investment in Asia by specific initiatives:

- ASIA-INTERPRISE and ASIA-PARTENARIAT may co-finance meetings
- the Business Priming Fund may finance training, technology transfer, market research
- the Asian Investment Facility may finance dissemination of information on potential investments

2.3 - EUROPARTENARIAT

EUROPARTENARIAT is a programme of co-operation between SMEs carried out in disadvantaged countries, in agricultural areas or in areas of industrial decline. It is now open to Baltic States and Mediterranean countries. It organises two special days per year in order to develop co-operation between firms of a specific area and other partners selected through networks such as BC-Net or national organisations.

2.4 - INTERPRISE

INTERPRISE is an Initiative to encourage partnerships between Industries and/or Services in Europe. This programme is not specific to problem countries or special areas previously defined; it covers smaller initiatives than the previous programme.

2.5 - European Group of Economical Interest (EGEI):

ECEI is a legal instrument to support trans-national co-operation, facilitate co-production and help SMEs in specific actions like responding to Calls for Proposals.

2.6 - J.E.M:

JEM promotes trade and investments between Europe and Asia by establishing links between industrial, commercial and economic partners. It facilitates training exchanges for any kind of companies in these two areas. This initiative is the result of an agreement between the European Commission and groups of companies.

2.7 - EXPROM JAPAN:

EXPROM JAPAN promotes European exports to Japan through three programmes: Management Training Action in the Japanese Business environment, promotion campaigns in Japan, setting up an agreement with the Japanese Authorities to facilitate the establishment of small enterprises in Japan.

2.8 - Promotion to third countries:

This programme promotes European Exports to third countries by providing support for exhibitions, seminars, conferences, missions and market studies. Focused areas are Asia, Far East, Arabian Gulf and possibly South America. Industrial sectors concerned are energy, information technology, biotechnology, industrial sectors open to innovation and exports.

2.9 - ECIP (1996-1999):

ECIP aims to facilitate the creation of Joint Ventures between European businesses and those from Latin America, Asia, North Africa and South Africa. It may cover up to 50% of pre-investment activities (e.g. market studies), support capital requirements and training & management assistance. Priority is given to SMEs.

2.10 - European Development Fund: (EDF)

EDF reinforces industrial companies from Africa, Caribbean, Pacific and Ultramarine Territories and Countries by developing partnerships with economic actors of the European Union. Sectors concerned are agriculture, fisheries, industrial development, energy and mining, transport, communications, commerce and tourism, professional training, social and cultural co-operation, the environment.

2.11 - Centre for Industrial Development

Connected to the EDF, the Centre for Industrial Development aims to improve development of SMEs in A.C.P. States and facilitates connections with European States through JVs, management contracts, marketing agreements, sub-contracting, licencing etc..

2.12 - STABEX

STABEX is a part of the co-operation policy programme between the European Commission and countries of the A.C.P. States. It aims to limit the effects of declining exports (decrease in price or volume) of certain products to the European Union, by compensating financial transfers. It is like an insurance against potential recession for ACP States.

2.13 - SYSMIN

SYSMIN covers ACP States with a major mining sector and which export mining products to the European Community. It provides financial support to maintain production levels or to help firms wishing to diversify.

2.14 - MEDA

MEDA aims to support co-operation to develop the competitiveness of SMEs in Mediterranean third countries. Activities may be commercial, financial, social, technical, industrial or political.

2.15 - PHARE

PHARE supports 12 partner countries of Central and Eastern Europe in their process of economic and political transformation, via the EIB and the EBRD. It provides assistance services to SMEs, financial instruments or guidelines for policy definition.

2.16 - TACIS

It is a European initiative for the Commonwealth of Independent States (CIS), formerly the Soviet Union, and Mongolia. It aims to foster the development of economic and political links between the EU and these partner countries, by direct co-operation and restricted or open tenders.

2.17 - JOP

Integrated within the Phare and Tacis program framework, JOP aims to support the creation of joint enterprises in Eastern and Central Europe between Community SMEs and CEEC's partners. It also aims to encourage investment in Community SMEs abroad and prioritises SMEs with less than 100 employees. It may provide feasibility studies, participation in the capital of joint enterprises, staff training, information.

2.18 - The office of Connection for SMEs (BRE):

It aims to facilitate trans-national co-operation by supporting SMEs wishing to contract with

another partner in a different country (diffusion of information, advice).

2.19 - Business Co-operation Network (BC-Net):

The BC-Net groups together 460 private or public consultants with the objective of rapidly identifying potential partners for a project. In this case, the firm just contacts the intermediate to identify a possible co-operation project with another firm. This strategy is confidential.

2.20 - Euro-Info-Centres (EIC):

They are in charge of the dissemination and the treatment of community information through 210 sites in Europe. In conjunction with national organisations, these Centres answer any kind of questions about norms, tax, public markets, the Euro and other aspects of the common market. The EIC may facilitate co-operation contracts between businesses.

2.21 - European Centre of Innovation and Enterprise (ECEI):

It is a local organism connected with a private or public unit, and in charge of the implementation of national or European programmes for SMEs, at the local level. It provides commercial, financial or technical assistance to SMEs for specific projects, on R & D for example. The European network of business and innovation (EBN) has also been created in order to facilitate exchange of information at the European level. EBN supports the ECEI as well as other private or public organisations.

2.22 - IBEX:

The International Buyer's Exhibitions aim to facilitate contacts and relations between firms. During these exhibitions, large firms can meet SMEs interested in future co-operation. The European Commission brings technical and financial support. The organisation of an "IBEX3 exhibition must meet various criteria and be specifically planned.

3 - RESEARCH & DEVELOPMENT

RESEARCH		Information technologies BRITE EURAM III Normalisat., measures, testing Environment and climate MAST II	DG III DG XII DG XII DG XII DG XII
	Framework Programme	Biotechnology BIOMED II Agriculture and Fishing Non-nuclear Energy Transport	DG XII DG XII DG XII DG XII DG VII
AND		Exploratory Subsidy Cooperative research	DG XII DG XII
	Measures in favour of SMEs	Innovation IRC	DG XIII Network
DEVELOPMENT		EUREKA LIFE SAVE MLIS	eureka DG XI DG XVII DG XIII
	Applied Research	INFO 2000 TEN TELECOM	Luxembourg DG XIII

3.1 - Framework Programme IV

Below are listed programmes covered by FP IV. In the following pages, a summary of the main objectives of FP V (1999 - 2003) is presented. The details are not as yet all defined.

3.1.1 - Information technology:

Information technology aims to develop the information infrastructure by improving accessibility and use possibilities. Fields covered by this programme are fundamental technologies (such as software technologies), long-term research and electro-magnetic wave science.

3.1.2 - BRITE-EURAM III

BRITE-EURAM III aims:

- to develop technologies required for the design of eco-compatible products or for production systems combining human factors and specific technology
- to strengthen industrial competitiveness
- to enhance the production of traditional sectors by promoting new product and materials technologies
- to provide solutions to the growing demand for effective and flexible transport systems
- to provide solutions in the medium and long term to the problems of energy consumption and pollution

Main fields covered are: Manufacturing technologies for the industries of the future; Materials and technologies for product innovation; Transport technologies.

3.1.3 - Normalisation, measurement and testing:

The objectives are:

- to improve the competitive level of all sectors of European industry
- to promote research and technical support for other European policies
- to promote research to support European quality research organisations
- to promote the future development of a European structure of measures, methods and advanced systems, and the harmonisation of the measures
- to promote best practice, especially for less favoured areas

Fields covered are: Measures for European product quality, Research on norms and technical support for trade, Measures relating to the company.

3.1.4 - Environment and Climate

Environment and Climate aims to protect the environment on a long-term basis. Themes of research are: Natural environment, quality and change at the world scale (climate change and consequences, physico-chemistry of the atmosphere and biospheric processes); Environment technology (environmental survey and protection; pollution prevention); Space technologies applied to the environment, Human consequences of environmental change.

3.1.5 - MAST III

MAST III aims to understand the functioning of marine systems. The objective is to prepare policies for world-scale sustainable development. Areas covered by these programmes are: Marine Sciences; Strategic marine research (specific research on the continental plateau and coastal seas and coastal engineering); Marine technology (specific research on generic technologies and advanced systems), Support initiatives to promote co-ordination, co-operation, training and exchange.

3.1.6 - Biotechnology

Biotechnology tries to understand the processes of living cells in order to make progress in the agricultural and industrial sectors by new applications. Community action is concentrated in the following areas: concentrated actions (Cellular processes, Genome analysis, Biotechnologies of animals and plants, Cellular communications in neurosciences); co-ordination of projects already financed by public or private organisations (Immunology and generic vaccinology, Structural Biology, Pre-normative research, Bio-diversity and social acceptability, Infrastructure).

3.1.7 - BIOMED II

BIOMED II aims to improve the development of the health industry and the fight against disease. The main area of research are: Pharmaceuticals, Biomedical engineering & technology, the Brain, Illnesses with a major socio-economic impact, the Human genome, Public health, Biomedical ethics, Cross-sector activities (ethics, legal and social aspects, training, demonstration).

3.1.8 - Agriculture and Fisheries

This programme aims to provide a scientific basis for rural development and to protect the rural and coastal environment.

3.1.9 - Non-nuclear Energy

Objectives are an optimum energy supply mix, at the best price, conforming to environmental protection and commercial priorities. The aim is to strengthen European competitiveness.

3.1.10 - Transport

The objective is the development of a European transport policy. Research aims to integrate the results of other programmes such as industrial technology, telematics, environment, non-nuclear energy or socio-economic research results.

3.2 - Measures in favour of SMEs

3.2.1 - Technological Stimulation: Exploratory Subsidy

This programme is a financial support for SMEs (limit = 500 employees, turnover < ECU 38m.) wishing to join a European research programme. Finance is used to carry out the technology feasibility study and to assess its eligibility for a specific programme within the fourth framework programme, and to prepare a detailed research proposal demonstrating the project's value.

3.2.2 - Technological Stimulation: Cooperative Research CRAFT

This programme covers some specific projects of the Fourth Framework programme RTD. It is a financial support for SMEs where they have technical problems they cannot resolve because they do not have the research infrastructure required, and where SMEs wish to cooperate with third parties in the scope of a research project. In this case, universities, research centres or industry organisations will carry out research for SMEs.

3.2.3 - Innovation: Diffusion and Valorisation of the results

This programme aims to diffuse RTD results, control their use and give a European scale to national initiatives. A special effort concerns SMEs.

3.2.4 - Innovation: validation of transfer of Technology

Objectives are the diffusion and exploitation of results of research, the diffusion of technologies to SMEs, the financial environment for technology diffusion.

3.2.5 - Innovation Relay Centre

This network helps enterprises to participate in the results of RTD research whatever their sectors of origin.

3.3 - Applied Research

3.3.1 - EUREKA

This initiative aims to facilitate co-operation between businesses, especially SMEs and SMIs, and research institutes. The project must use advanced technology, associate at least two partners of different Member States or Third States and create a significant improvement for the product, the process or the service provided.

3.3.2 - LIFE

This programme supports projects in relation to the environment by providing specific funding.

3.3.3 - SAVE

SAVE tries to improve energy management in order to contribute to environment protection by acting on emissions of CO2 or other harmful gases, and to improve energy supply security

3.3.4 - MLIS

MLIS aims to overtake linguistic barriers. Main actions are the creation of a European organisation of multilingual resources, the development of the language industry and the promotion of linguistic tools within the Community public sector.

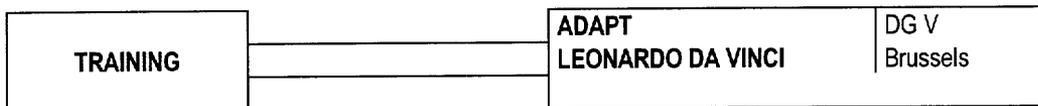
3.3.5 - INFO 2000

INFO 2000 aims to develop a European private industry for the creation and development of multimedia products and services, and to promote the use of such products and services.

3.3.6 - TEN-TELECOM

This programme concerns telecommunication networks. It is a trans-european network which aims to develop applications and services in order to facilitate the transition to the information society, to improve the competitiveness of European business, to strengthen economic and social harmonisation and to stimulate new activities.

4 - EDUCATION AND TRAINING PROFESSIONAL PROGRAMMES:



4.1 - ADAPT

This trans-national Community Initiative helps individual companies respond to the changing needs of the labour market.

4.2 - LEONARDO da VINCI

There are four kinds of measures covered by this programme:

- improvement in training systems and training availability within Member States
- improvement in training for businesses and employees, including co-operation between universities and companies
- linguistic skills development and diffusing R & D results into professional training,
- accompanying measures.

A.3. RECENT POLICY INITIATIVES AT MEMBER STATE LEVEL

Many specific programmes have been implemented in the different EU countries , in accordance with the priorities defined by each national government. For this study, about one hundred national support programmes from the following countries have been identified and analysed in terms of support provided to businesses, especially to SMEs:

- Austria
- Finland
- France
- Italy
- Germany
- Spain
- United Kingdom

Some initiatives, such as BRIGIT, concern several countries (Finland, Italy, the Netherlands, the United Kingdom) and are specifically dedicated to European chemicals industry SMEs. The BRIGIT programme (indirectly connected to the European Commission) aims to support SMEs seeking technological or financial support for project development.

This programme demonstrates the interest in developing such initiatives in the various EU countries in order to create European networks.

A.4. PHASE 1 KEY FINDINGS

350 SMEs, based in Europe (Nordic Countries, Benelux, Germany, France, United Kingdom, Italy, Spain), and belonging to one of the following chemicals sub-sectors, were interviewed:

- **Basic Chemicals**
 - Minerals and Inorganic Chemicals
 - Organic Chemicals
- **Fine Chemicals**
 - Paints, varnishes, printing inks and mastics
 - Pesticides and other agro-chemical products
 - Soaps and detergents
 - Photographic products
 - Perfumes and toiletries
 - Other sectors
- **Manufacture of rubber products**
- **Manufacture of plastics products**

Chemicals industry SMEs have to cope with many difficulties which are common with SMEs in other sectors, such as the complexity of legislation and administration, the lack of management and marketing resources, difficulties of access to long-term finance and to relevant information sources.

Their uniqueness lies in three challenges. They actively participate in the development of new products and processes and, more than in any other industrial branch, innovation is increasingly vital for them amid ever fiercer international competition. They are also strongly export oriented, with marketing investments to gain a foothold in new markets both in and outside Europe. And they are greatly hindered by a disproportionate burden of environmental legislation.

Key findings based on 350 interviews are described below:

1 - INTERNATIONALISATION

Chemical SMEs are strongly involved in the process of internationalisation, even more so than similar-sized companies in other industries.

Export figures are not much different from the industry-wide total (28% vs 36% of sales). 85% of chemical SMEs export, 67% more than 20% of their output and 31% export more than 40%.

The majority of our sample SMEs are trying to develop European sales (essentially SMEs in sectors organic chemistry and tyres & tubes, and in Northern Europe countries) but 58% of companies also export outside the European Union.

Given the characteristics of many chemical products (not suitable for transport, local markets), it appears that on average, SMEs are involved in the globalisation of markets to the same extent as large chemical groups, and far more than their cousins in other industries.

Main problems encountered by chemical SMEs vary sector by sector. The most common export-related complaints are: difficulties in finding suitable partners (33%), logistics and transport costs (25%), trade barriers (20%), problems with certification and registration.

The administrative and regulatory environment also generates excess costs: tax burdens and difficulties of access to the relevant information discourage business creation and development. This directly affects both R & D and employment creation.

2 - PRODUCTION

Overseas production represents a small proportion of SMEs' activities.

Only 8% of production takes place abroad, but a good 20% of companies have had this type of experience (11% outside Europe). These figures are not low and demonstrate that a significant proportion of SMEs has already dealt with the more complex form of internationalisation. For these companies, vicinity to markets is more of a determining factor than tax considerations or the cost of labour.

There are several barriers to access to the Internal Market for SMEs, and one of the most important complaints is the existence of differences in compliance, interpretation and enforcement of Community laws. The slow and complex procedures for obtaining European product standardisation and certification penalise SMEs, which do not have the time and money to meet all these specific certification and registration requirements.

Moreover, participation in public procurement among SMEs is weak, due to a lack of awareness of opportunities and to the difficulties of pre-qualification (shortage of financial guarantees, difficulties in coping with national technical standards where European-wide standards cannot be used, or difficulties in providing references). The opportunities for SMEs to relocate production are often hindered by costs and risks concerning travel expenses, local staff recruitment or national regulations.

In terms of subcontracting, most SMEs avoid sub-contracting production in order to avoid scheduling difficulties and quality problems. On the other hand, around 50% of our sample are themselves sub-contractors (with framework contracts) even if they admit planning difficulties and for most of them, the existence of low margins in sub-contracting. The main factor restricting flexibility is the lack of qualified temporary staff.

3 – INNOVATION

The level of innovation is significantly high (around 70% of interviewed SMEs have carried out one « sector leading » development programme over the last five years). 45% of SMEs have managed to patent their innovation. Main innovation projects concern products and processes, with an average of 6% of employees working in innovation.

Innovation and research are top priorities for chemical SMEs in Europe, as they are for the whole chemical industry. It is due to the fact that chemical SMEs are not –as often in other industries - just sub-contractors. Their objective is to be dynamic partners for both chemicals raw material suppliers and end users by enriching products with their own original contribution.

As in the rest of the industry, innovation is not easy for SMEs to assimilate from outside. It requires an effort in source identification and adaptation, originality and creative effort from within (in-house R&D). A growing number of chemicals companies see the need to put their research activities onto a more systematic basis.

But SMEs encounter difficulties in transforming scientific discoveries into marketable products, because access to finance is difficult (for 45% of them) and regulatory barriers are too high to promote real development of research results.

European SMEs are trying to work with universities (41%), research centres and laboratories (31%), and are aware that they need to seek partnerships.

But the awareness of networks, and the possibilities of exploiting synergies between businesses, universities and other organisations, is low.

In order to remain competitive, most SMEs need access to use readily available research results, but this potential is not available due to the lack of information, time, expertise and resources to apply such results, without specific support.

The complexity of the European Commission's programmes renders them ill-adapted to the needs of SMEs; they would like them to be simpler and more effective.

4 - INVESTMENT POLICY

SMEs are aiming to invest, mainly to increase capacity (for 56% of them), to launch new products (56%) and to develop R&D (42%).

SMEs are very dependent on their own capital structure and working capital. They have real difficulties of access to loans at low rates and often solve their financing problems by using informal funding sources, such as the family.

Self-financing is the most used source of investment financing (86%). The structure and the size of their assets make SMEs encounter more difficulties than larger firms, as they are perceived as higher-risk by banks. Through their answers, it appears that there is a lack of co-operation between SMEs needing long-term finance and investors willing to provide it. On the other hand, SMEs do not use grants from European institutions even where they are aware of them.

To cope with their investment financing problems, SMEs need easier access to long term finance, to venture capital and the creation of a SME European capital market.

5 - ENVIRONMENTAL ISSUES

Complying with legislation is an arduous task for chemical SMEs, and 44% of them mention this is a major area of investment. Basic compliance is actually an costly activity which limits resources for growth.

This is one of the most clear-cut result of the survey, and is confirmed by companies' rating of major problems. For 55%, it is too expensive to keep up with changes in regulations and standards; for 60% the rules are changed too often; for 48% interpreting the details of legislation is a problem.

SMEs consider they are burdened with rules and regulations designed - often wrongly - for much larger firms that have the internal resources to handle these issues. What are just costs for a large firm represent a real obstacle to growth for a small or medium-size business.

6 - HUMAN RESOURCES AND TRAINING

SMEs have a strong need for both commercial and well-educated science and technology employees, and would like to make more use of specific national and European training programmes.

70% of companies report difficulties finding personnel. The most critical areas are marketing and sales (34%), chemicals knowledge (31%), quality, logistics and processes (30%), foreign language competence, mobility, etc..

This corresponds perhaps to a much larger problem of industrial culture, where a technical school or university graduate in chemistry is looking for employment in a large firm and rejects small yet dynamic companies seeking good chemists.

The problem does not end with recruitment and permanent training is a priority request of SMEs, for whom in-house training infrastructure and means are often weak. Training topics in highest demand are quality, logistics, process (43%), marketing and sales (38%), foreign languages (30%), and chemicals science (30%).

These needs are grounded in the three main challenges of chemicals industry SMEs, i.e. internationalisation, innovation and the environment. To meet them, companies need not just capital but also professional skills.

7 - SMES BEHAVIOUR VS COLLECTIVE PROGRAMMES: EU PROGRAMMES ARE TOO LITTLE KNOWN

SMEs would like access to European support programmes, to complement those national programmes they already use.

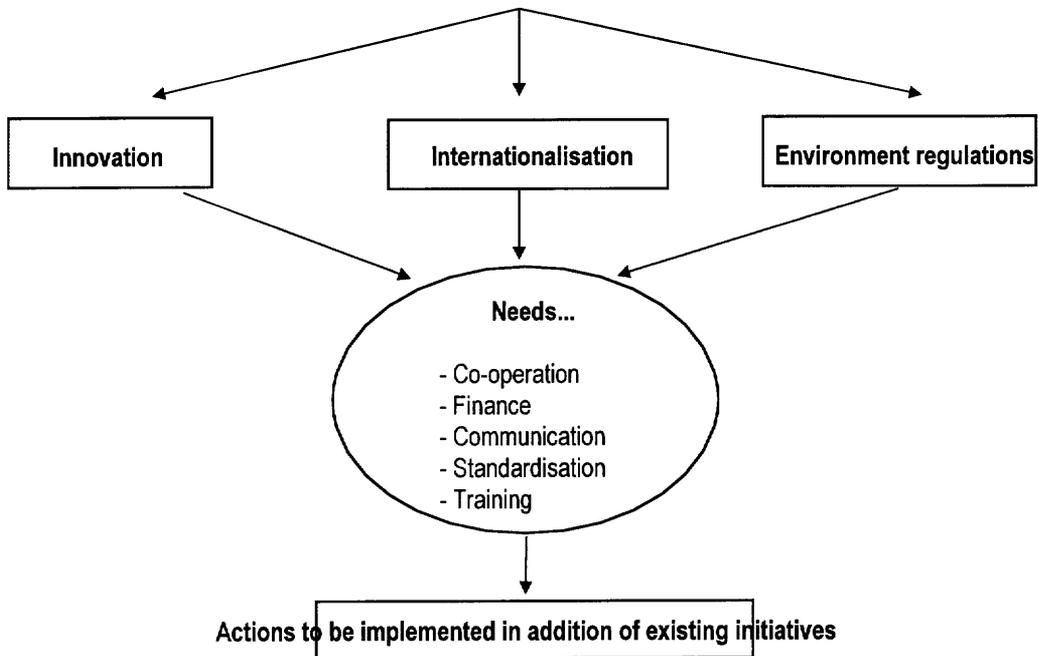
A small proportion of SMEs is in contact with the European Commission; most prefer to work through Chambers of Commerce and trade associations. Less than 30% of SMEs who were aware of European Commission programmes (essentially in the fields of industrial co-operation), use one or more of them; by comparison, nearly 60% of SMEs who are aware of national support programmes use them (mainly investment financing).

The Euro-Info-Centres are not widely known by SMEs and are very little used, mostly because of a lack of information and because the system is perceived as too bureaucratic.

During Phase 1 of this study, the project team also identified and analysed a large number of initiatives (about one hundred), set up by the European Commission or by National Governments, to support European businesses and especially SMEs. In practice, specific programmes for chemical industry SMEs are rare.

The objective of the second phase of this project was therefore to propose recommendations for the improvement of existing successful programmes, to adapt them to the specific needs of chemical industry SMEs.

Major challenges of SMEs in the Chemicals, Plastic, Rubber and Related Sectors



B. ASSESSMENT OF A SHORT LIST OF SUCCESSFUL INITIATIVES

National trade associations of European countries have, for this purpose, selected different initiatives as being well adapted to SMEs' needs, especially to chemicals industry SMEs one:

FIELD	PROGRAMMES
Finance	EUROTECH CAPITAL
Internationalisation / Europeanisation	ECIP
Competitiveness / R&D / Training <ul style="list-style-type: none"> • R&D • Environment • Training 	5 th Framework Programme LIFE ADAPT
Information on EC programmes	EURO-INFO-CENTRES

Instead of the *5th Framework Programme* which is not yet finalised, it was agreed to focus on innovation and especially on *the First Action Plan on Innovation*.

B.1. FINANCE: EUROTECH CAPITAL

1 - GENERAL OBJECTIVES

This programme encourages investment of European venture-capital companies in enterprises and, especially in Small and Medium Enterprises, developing trans-national and high-tech projects. These venture-capital companies may invest a minimum of ECU 50 m. and they commit to devoting 20% of their financial capacity to SMEs developing such projects.

The European Commission has set up this initiative. The objective is to stimulate private capital investment in high technology developments being undertaken by SMEs. A network of European venture capitalist has been created in order to cover the various stages of a project: seed-finance, start-up, early stage and expansion finance. The first network was created in 1990.

Venture capitalists may have different levels of participation in the business; it may be just as sleeping partners, or to become majority shareholders. Generally, they participate in the development and/or implementation of company strategy. In some cases, they may provide useful industrial and commercial information.

Those venture capitalists investing in trans-national high technology projects receive the « Eurotech Capital label ».

Moreover, EUROTECH gives access to the EUROTECH Data service, which provides SMEs with customised research reports covering research, market and competition in specific products and sectors of the projects concerned.

2 - RECIPIENT COMPANIES

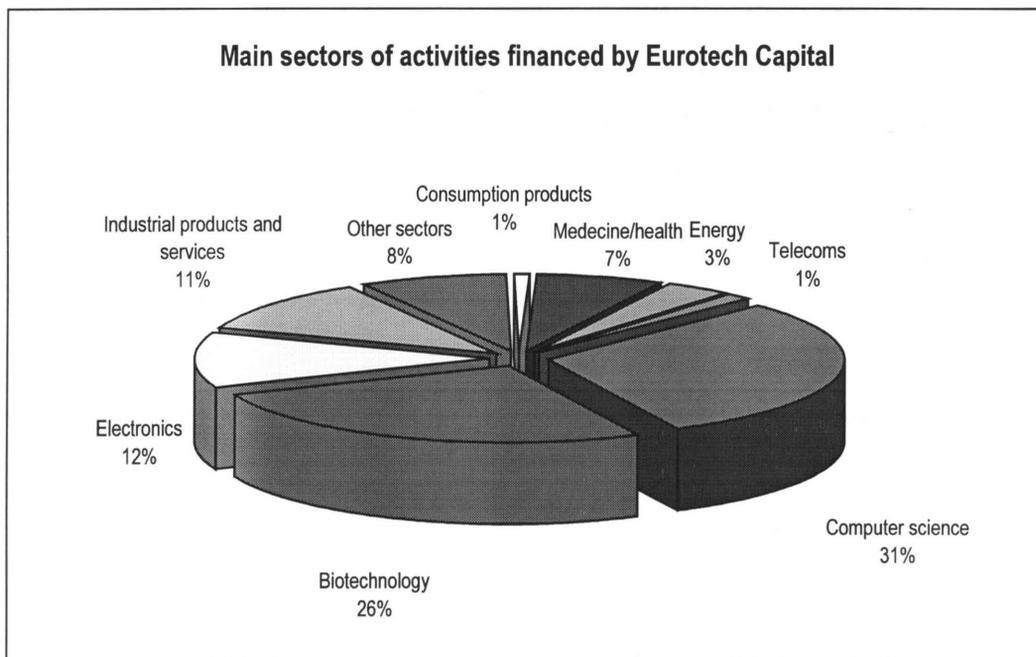
Firms and especially Small and Medium Enterprises.

Three main characteristics have been chosen to select companies seeking to be selected for this programme:

- **Size:** financing is granted in priority to SMEs of the Member States (maximum of 500 employees, fixed assets do not exceed ECU 75 m. and 1/3 maximum may be controlled by one or several larger companies). More than 50% of their capital must be controlled by community shareholders
- **Trans-nationality:** i.e. a European research programme, proposed by a trans-national European company or financed by a venture-capital company of another Member State. Projects having a research stage and an industrial application stage in two or more European countries, or projects proposed by a company whose shareholders originate from at least two European countries,
- **High Technology:** the company must develop a high technology product or process. If the company has already obtained support from a structure like «ANVAR» in France, this programme may cover it. In fact, it systematically covers projects derived from a Community or European R&D programme, projects arising from national R&D programmes, and projects which constitute a significant advance on existing technology.

This programme concerns SMEs looking to co-operate with partners from another country, in the field of research or finance. In practice, nearly 95% of partners are SMEs.

It is difficult to isolate statistics relating to the sectors concerned by this funding because chemicals sectors may be subsumed into one of the large sectors selected in the following graph. Nevertheless, around 35% of industrial SMEs financed in 1996 are in the chemicals or related sectors.



3 - BUDGET AVAILABLE

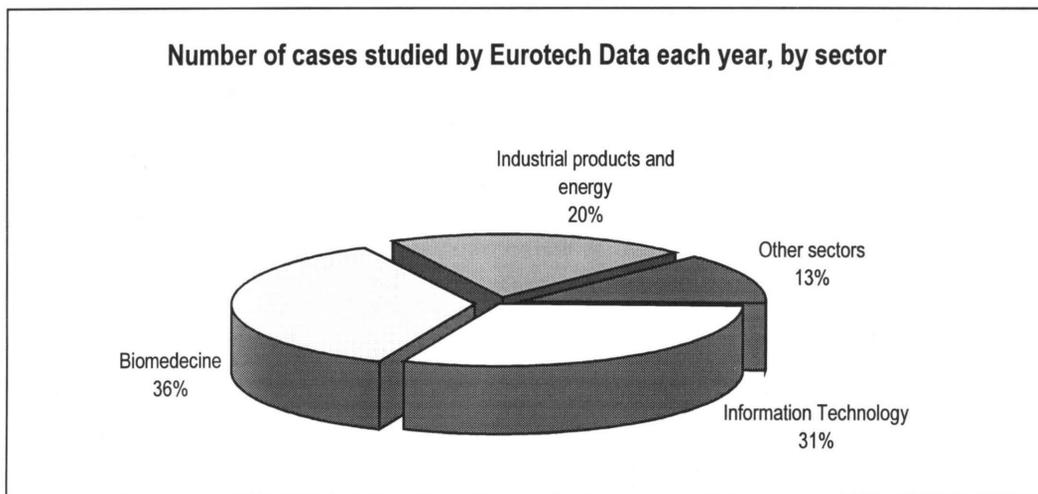
3.1 Total budget available

Venture capitalists must have a minimum capacity of ECU 50 m., and commit to dedicating at least 20% of their financial capacity to SMEs developing a Trans-national High Technology Project. In addition, the European Commission gives a financial contribution representing 4% of the funding provided to THTPs, via a five year contract. It is essentially a symbolic contribution, because the European Commission does not ask for repayment if the project falls through.

The DGII provides other kinds of support:

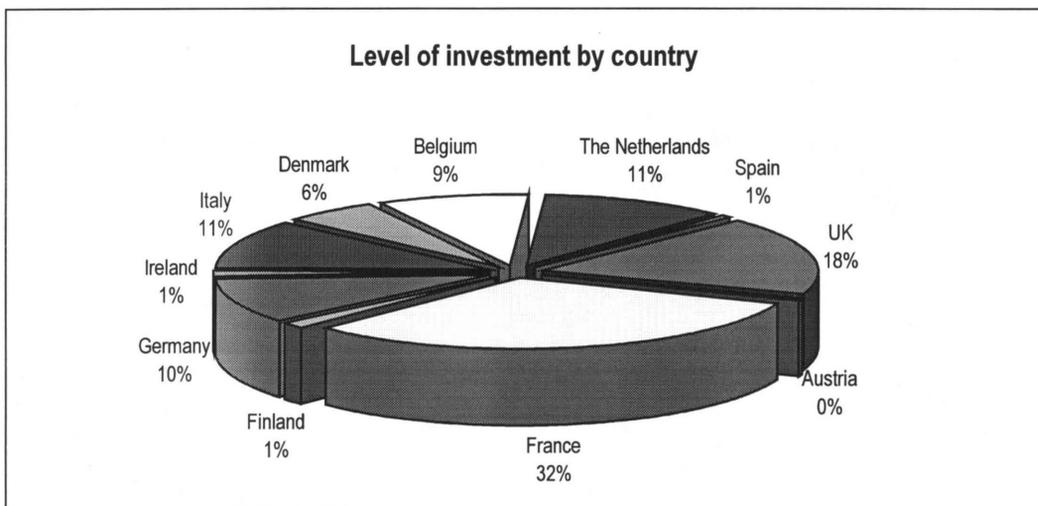
- it co-ordinates relations between members of the network
- it has developed « Eurotech data », created in 1991, which provides commercial assistance to members of the network. This structure researches information concerning the technology, patents, European market trends, the state of competition. In fact, they give future investors all the information required in the scope of the project within a maximum of 15 working days. The first objective is to help the Venture Capitalists where the team has to take an investment decision without full knowledge of the project environment.

Eurotech Data studies around 500 cases each year. They use electronic sources such as databases, CD-ROMs and the Internet, paper sources and contacts with European Services, industry associations, universities, research centres or universities. Cases analysed cover the following sectors:



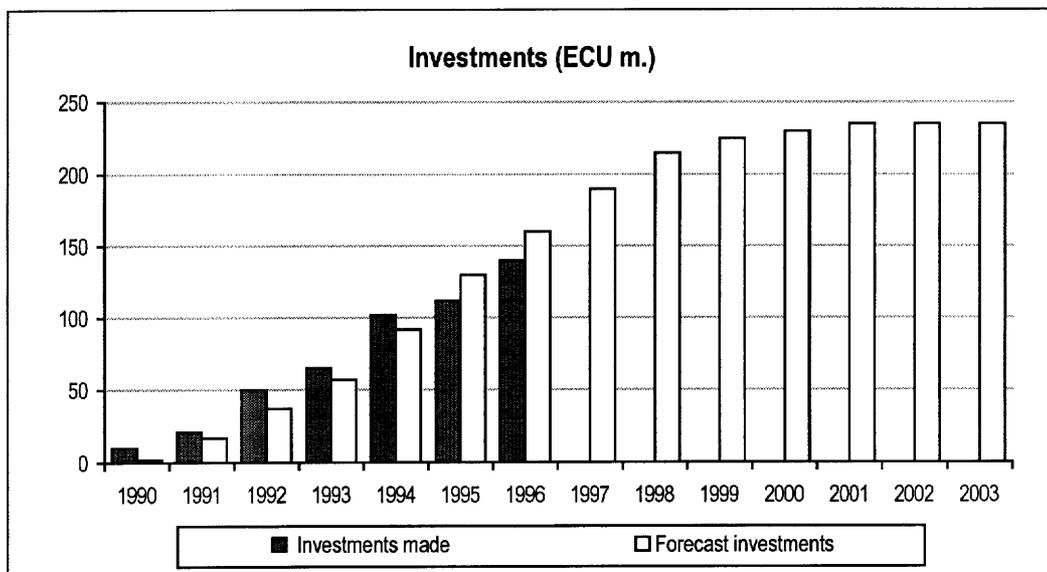
Eurotech Data has a multilingual and multi-skilled team of seven people in liaison with DG XIII, the I-tech network and the Brite-Euram programme.

Investments vary by country. The largest investments in 1997 were in France, the United Kingdom, the Netherlands and Germany.



3.2 Current situation

The level of investment defined for the next five years will reach ECU 230 m., dedicated to SMEs. The total investment capacity of the network is ECU 2400 m..



4 - MEANS OF ACCESS AND PARTICIPATION CONDITIONS

• For SMEs

SMEs seeking financing from such a programme need to make direct contact with one of Eurotech Capital's members. In general, it is better and easier to contact the nearest one, at national level where one exists. In Portugal, as there is no financial structure, a SME may contact a Venture Capitalist from another country.

Information is disseminated through national, European or professional organisations: the Internet, the European Commission, national institutions like ANVAR in France, and professional networks or trade associations may guide SMEs in finding the appropriate contact.

The proposal must be structured following a specific format provided by the venture capitalist. The total duration of the procedure depends on the structure and project concerned. The average period is 3 months.

• Eurotech Capital

At present there are 15 financial institutions in the network; the last joins this year. Countries covered are: Austria, Benelux, Denmark, Finland, France, Germany, Italy, the Netherlands, Spain, Sweden, the United Kingdom. Each venture capitalist is specific and targets its investments on two or three sectors of activity and at different stages of the project: start-up, development and/or buy out. When a Venture Capitalist invests in a project, it becomes a full shareholder with the right to be involved in the SMEs' strategy. A venture capitalist estimates in general that of ten projects financed, five will lose money, two will break even and only three will provide a good return. A French venture capitalist met in Brussels told us that of

around 400 applications examined each year, and only 10 are in the end financed. On the origin of SMEs they backed, 30% were French, 30% were other European and 30% were non European, essentially from Israel, Canada or the United-States.

Two meetings per year are set up to reinforce the network. Venture Capitalists present their projects and may suggest a specific case to a suitable financial institution.

5 - POINTS OF INTEREST

Eurotech Capital is an efficient network which has an information service through Eurotech Data. It assists members in their investment decisions concerning THTPs and may provide a customised file on a sector of interest containing information on levels of technology, markets or the structure of the sector.

Each member can refer an SME to one of the other members if he estimates that his own institution is unable to finance the project. It is not easy to get venture capitalist members to specialise because they are all private companies. They prefer to adopt a geographic specialisation and possibly to give priority to one or two sectors, where the team is sufficiently specialised.

Eurotech Capital is more efficient than an annex of a large company. Some large chemicals companies have developed a Venture Capital service to support smaller firms. But this operation is often carried out to benefit from other research facilities. In practice, SMEs would not trust being financed by a large group.

The Eurotech Capital team is in liaison with all the European Commission services, the EVCA, the European Venture Capital network, I-Tech, and the European Investment Fund. JEV was been created in March 1998 with their co-operation. The procedure is quite different and the fund provides 50% of its budget in feasibility studies. I-Tech is implemented by DG XIII and provides financial support to Venture Capital firms.

6 - IMPROVEMENT AREAS

There is a lack of information for SMEs seeking a Venture Capitalist. Professionals of the sector reckon nevertheless that SMEs are becoming more professional than before.

To increase the number of SMEs financed by such structures and the number of chemicals SMEs cases studied it would be necessary to improve dissemination and awareness of the programme.

SMEs often have difficulties in accepting outside shareholders. Moreover that supposes an investment in the definition of the firm's strategy. Professional associations may promote such structures, and at the same time point out the difficulties.

Compared to the American situation, Europe is not well positioned in terms of Venture Capital. In the United States, 25% of companies creating jobs each year are supported by Venture Capital funds. In Europe, this percentage is around 15%. In 1996, Venture Capital companies invested around ECU 3 bn. in Europe against nearly ECU 9 bn. in the United States.

In order to improve the overall system, a general effort must be made at two levels:

- *European entrepreneurs must have better access to funding at the best price, the best time and the best place, whatever the stage of the project (bottom-up, start-up and development).* In a large majority of cases, they are very dependent on bank loans, which are less flexible than venture capital. For high technology and small company start-ups, it is not the best solution
- *European Venture Capital funds need to identify opportunities for profitable activity. For this, the development of the EURO, which will facilitate exchanges and harmonisation, and the dynamism of financial markets are positive indicators. For this reason national, European and professional institutions need to work to improve contacts between venture capitalists and SMEs developing THTPs.* The number of businesses so far created is small. Measures to stimulate Venture Capital Investment within Europe are necessary to limit the placing of European businesses on the American market, via NASDAQ.

Several obstacles have to be overcome in order to facilitate the financing of SMEs by Venture Capital companies:

- *cultural: promoting entrepreneurship through exhibitions, close contact between trade associations and Venture Capitalists in order to present the advantages of Venture Capital and develop networks of venture capital partners to spread the word;*
- *environment: reducing capital gains tax, facilitating investments in Venture Capital companies, developing information and statistics concerning national financial markets and limiting the duplication of Stock Exchange transactions.*

The Eurotech Capital Initiative has already created an efficient network to keep in contact contractors and investors in venture capital. *The should now be to improve communications, to co-operate with national and professional structures and to promote such funding to SMEs from the chemicals sector.*

7 - CONTACT

European Commission (Bâtiment Wagner - rue Alcide de Gasperi, L-LUXEMBOURG):

		Phone number	Fax number
Information	DG II, Mr BERGER	352 4301 36 246	352 4363 22
	Mr CHIARON CASONI	352 4301 36 404	352 4363 22

E-mail: giorgio.chiarion-casoni@sof.dg2.cec.be

B.2. EUROPEANISATION - INTERNATIONALISATION: ECIP

1 - GENERAL OBJECTIVES

ECIP (European Community Investment Partners) is a financial programme operating since 1988, which offers 5 financing facilities to support the successive stages of joint-venture investment creation between Community companies and firms in the developing countries of Asia, Latin America, the Mediterranean and South Africa (which are called Alamedsa).

ECIP facilitates the various stages of a business investment: project identification and search for potential partners, preparation prior to the setting-up of a partnership, financing of capital requirements, and training, technical and management assistance.

The table , next page, summarises ECIP's five types of facility.

1.1 EC Development Policy

The European Community aims to support companies' growth: internationalisation is one way to achieve critical size. The European Community aims to support the sustainable economic growth of developing countries in Asia, Latin America, in the Mediterranean area, and South Africa by promoting trade, investment, research and human resources development.

Like ECIP, the JOP Programme (Joint Venture Programme included in the Phare and Tacis Framework: ECU 720 m. used during 1991-1994), and more recently JEV (Joint European Ventures) have the same goal, but the recipient countries are Central and Eastern European countries and the CIS for the first one, and other EU Member States for JEV. These programmes provide grants, reimbursable under certain conditions, to assess the feasibility of planned joint-ventures.

1.2 Relations with the European Investment Bank:

Another source of financial support is the European Investment Bank (EIB), which is an autonomous institution set up by the Treaty of Rome, to finance capital-investment projects that promote the balanced development of the EU.

The Commission co-operates and co-ordinates its activities with the European Investment Bank. This is in accordance with a « Gentleman's Agreement » concluded in 1992 between the EIB and ECIP which provides for systematic co-ordination and exchange of information on financing proposals, projects and FIs in the Mediterranean region. The Commission takes care to reinforce co-ordination with other Commission-managed investment promotion actions, such as JOP projects for PHARE countries.

EIB loans may be granted to public or private borrowers in support of projects in all sectors of the economy, ranging from communications, environmental and energy infrastructure to industry, services and agriculture.

EUROPEAN COMMUNITY INVESTMENT PARTNERS

	Facility 1	Facility 2	Facility 3	Facility 4	Facility 1B
Type of operation	Identification of potential Joint Venture projects and partners	Feasibility studies or pilot projects	Joint Venture capital requirements	Training, technical or management assistance	Preparation of a privatisation or a Build Operate Transfer (BOT) or a Build Operate Own (BOO) scheme in private infrastructure, utilities or environmental services
Beneficiaries	Chambers of commerce, professional associations and ECIP Financial Institutions representing a group of companies Individual companies may not benefit from this facility	Companies wishing to undertake a Joint Venture, a privatisation or a private infrastructure project	Joint Ventures established in the ALAMEDSA countries with locals by EU partners, or local companies which operate under a licensing and technical assistance agreement with an EU company		ALAMEDSA governments and public agencies
Type of ECIP finance	Grant of up to 50% of the eligible costs	Interest-free advance of up to 50% of the eligible costs	Equity holding or equity loan of up to 20% of the incremental capital of the Joint Venture	Interest-free loan for large companies, or a grant for small and medium-sized companies, of up to 50% of the eligible costs	Grant of up to 100% of the eligible costs
			The Financial Institution must cofinance the project		
Maximum amount available	100,000 ECU	250,000 ECU (within this amount 50% of pre-feasibility travel costs may be financed up to ECU 10,000)	1,000,000 ECU	250,000 ECU	200,000 ECU
		The maximum total support per projects is 1,000,000 ECU			
Access	The beneficiary may apply either directly to the ECIP Technical Assistance Unit (TAU) or through an ECIP Financial Institution	Application must be made through an ECIP Financial Institution			ALAMEDSA governments and public agencies should apply directly to the EC

1 ECU = approx. US\$ 1.09, May 1998

Typical projects:

- The EIB finances large-scale projects through individual loans (upwards of ECU 25 m.), contracted directly with promoters or through financial intermediaries.
- Small and medium-scale projects are funded indirectly through global loans, made available through banks or financial institutions operating at European, national or regional level.
- As a complementary source of financing, the EIB contributes to financing a part of the investment costs (up to 50%, as a rule), supplementing the borrower's own funds and other sources of finance.

Interaction with other Community financial instruments

The EIB helps to finance investment programmes in conjunction with the operations of the Structural Funds and of the other Community financial instruments. Loans from the EIB may be used in association with national or Community grant aids, particularly in assisted areas.

As a financial intermediary operating on a non-profit-making basis, the EIB lends funds at a rate reflecting its excellent position on the markets, plus a small margin to cover its operating costs. Rates (fixed usually, but also revisable, variable or convertible) may be set either upon signature of the finance contract or upon each disbursement (open-rate contract). The adopted rate setting method is the same for all countries and sectors.

2 - RECIPIENT COMPANIES**Special supports for SMEs**

For European SMEs, investment overseas is not simple. Many programmes at the European Union level support SMEs wanting to invest abroad. Besides the simple provision of information on investment conditions and opportunities, SMEs have access to a number of services, notably the European Business Information Centres, the Euro-Info centres, and the various activities that are covered by the Asia-Invest programmes, while match-making is facilitated by the Enterprise and Partenariat programmes.

ECIP is focused mainly on SMEs

ECIP supported joint venture must include at least one Community partner and one company from the country concerned.

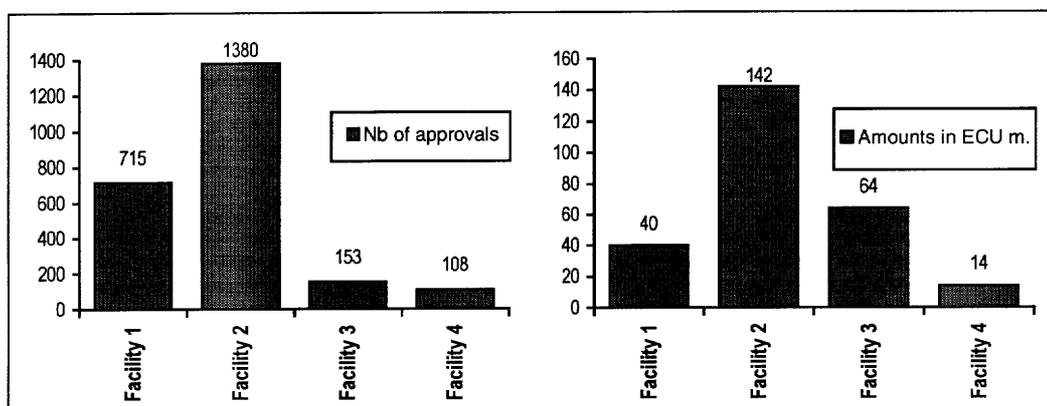
- ECIP is specifically dedicated to small and medium sized companies
- Large companies can also be ECIP financed if their projects are particularly interesting for the development of the host country.

All Facility 1 actions (grants for identification of projects and partners) are orientated towards SMEs but the grants are not directly collected by the companies, but by Chambers of Commerce, trade associations or ECIP FIs.

Since January 1994, as regards to Facilities 2, 3 and 4, 84% by number of projects approved have had SMEs as beneficiaries.

Cumulative approvals by facilities 1988-1997:

All regions					
	Number of		Approved amounts in ECU m.		Average project size in ECU
Facility 1	715	30%	40	15%	55 940
Facility 2	1 380	59%	142	55%	102 900
Facility 3	153	6%	64	25%	418 300
Facility 4	108	5%	14	5%	129 630
	2 356		260		110 356



Facilities 1 and 2 are the most used, accounting for nearly 90% of approvals. Facility 3 accounts for 6% but the average project size is the highest. This is due to the type of project financed by Facility 3: capital requirements for setting up a joint-venture greatly exceed pre-start up costs.

Approvals by region 1988-1997:

		%	ECU m.	%
Africa	52	2	10	4
Asia	1 033	44	118	45
Latin America	782	33	80	31
Mediterranean area	486	21	51	20
Multiregional	3	0	1	0
	2 356	100	260	100

The geographical scope of ECIP was originally limited to 28 countries in Asia, Latin America and the Mediterranean area. It now extends to 59 countries in those regions and to South Africa.

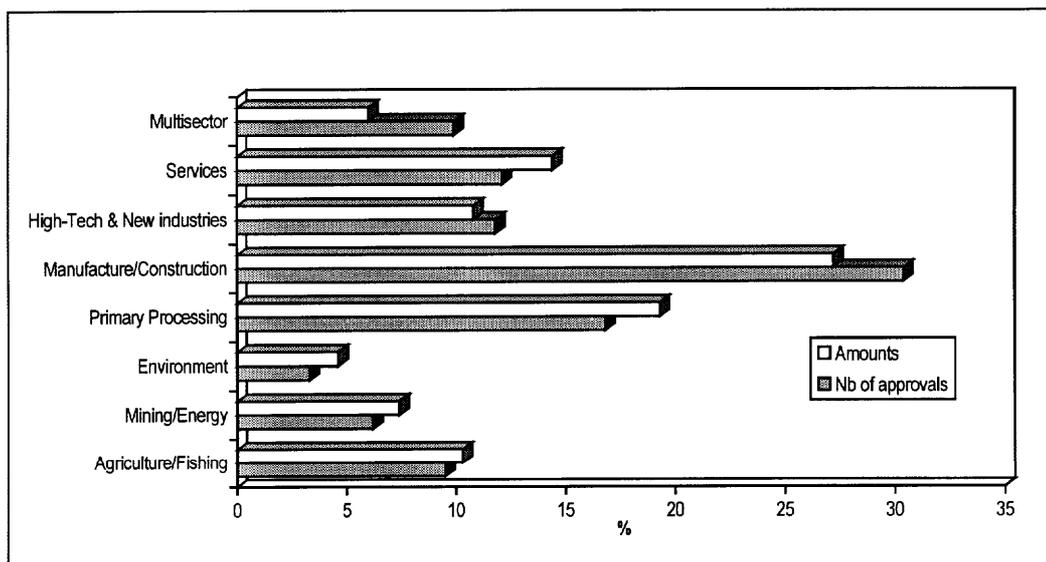
Asia is the leading region for ECIP actions. This is not surprising because Asia accounts for 78% of the population of the Alamedsa countries and 40% of GNP.

The Latin American region ranks second, due to the most widespread network of local Financial Institutions (22 compared to 16 in Asia).

Deals approved by aggregate sector 1988-1994:

	Number of approvals	Amounts in ECU	% of total
Agriculture/fishing	103	12 432 404	10.26
Mining/Energy	67	9 027 462	7.45
Environment	36	5 541 119	4.57
Primary Processing	182	23 429 302	19.33
Manufacture and construction	330	32 910 625	27.15
High-Tech and new industries	128	13 063 029	10.78
Services	131	17 425 071	14.37
Multisector	107	7 402 496	6.11
-	1 084	121 231 507	100

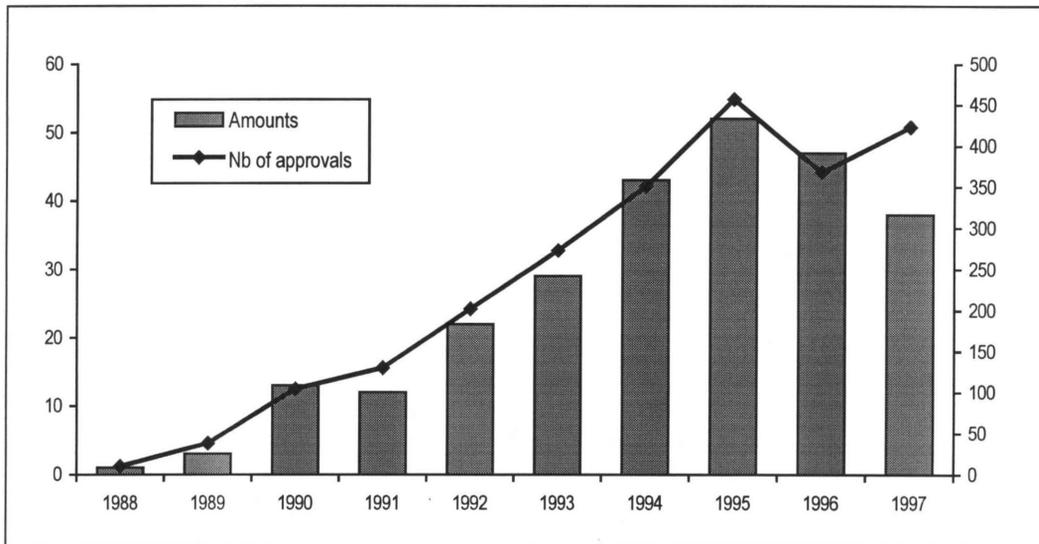
Manufacturing is the leading sector, accounting for 30% of projects approvals and 27% of funding approved (42% and 38% respectively if you also include high-tech industries in manufacturing). The chemicals industry is included in this sector.



3 - BUDGET AVAILABLE

Over 2 300 projects totalling ECU 260 m. have been approved for ECIP financing between 1988 and 1997.

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Number of approved projects	10	38	104	130	202	273	351	457	368	423
Amounts approved (ECU m.)	1	3	13	12	22	29	43	52	47	38
Budget allocation (ECU m.)	(30	For	1998	-1991)	31.4	39	40	50	50	50



The increase in financing approved between 1991 and 1995 can be explained in part by a certain standardisation of projects and an increasing simplification of the application process. Also, FIs have become more familiar with Commission priorities and have improved the quality of their applications.

4 - MEANS OF ACCESS AND PARTICIPATION CONDITIONS

ECIP is managed from Brussels by the European Commission in a decentralised way through its network of ECIP financial institutions and investment promotion agencies. 111 Financial Institutions are included in the ECIP network (55 in the European Union, 22 in Latin America, 16 in Asia, 11 in Mediterranean Area, 3 in South Africa and 4 multilateral areas).

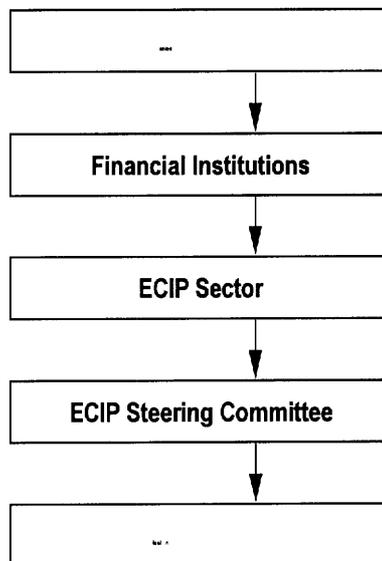
Applications for financing originate from companies in the EC or in an eligible country but they must be presented through one of the Financial Institutions.

- Applications for financing under facilities 2, 3 and 4 must be made through one of the financial institutions of the ECIP network.

- Applications for facility 1 (support for projects and partners identification) may be made by the beneficiary organisation directly to the EC or through an ECIP financial institution.
- Applications for facility 1B regarding the preparation of a privatisation or a Build Operate Transfer (BOT) or a Build Operate Own (BOO) scheme in private infrastructures, utilities or environmental services may be made by Alamedsa governments or public agencies directly to the Commission, or through an financial institutions, which are commercial, merchant or development banks.

The presence of FIs in all the Alamedsa countries helps local businesses seeking to attract foreign investment to gain access to ECIP through an institution close to their place of business.

ECIP application process:



The financial institution will only submit to the EC applications covering the following criteria: good standing and financial capacity of the applicant and of its partners, joint-venture's commercial and business plan viability.

The application has to include the project evaluation of the FI. If not, the application may be refused automatically.

The ECIP steering Committee is composed of ECIP personnel, country desk-officers, representatives of the Directorates General for the various sectors concerned, representatives of the Directorates General for Financial Control and for Economic and Financial Affairs. They write recommendations to the EC and meet once or twice a month.

The Project selection criteria are as follows:

- Basic eligibility (joint-ventures in developing countries, direct investment under licensing agreements)
- Quality of the project, of partners, of operation
- Developmental aspects, employment, technology transfer, effect on balance of payments, effect on the environment
- Target companies: small and medium sized. Larger firms are also eligible, but not multinational groups

The Steering Committee's deliberations on an application may have three possible outcomes:

- Approval recommendation to the Commission
- Suspension, where the Committee needs further information
- Rejection, which is final. Ground for refusal are indicated: project ineligible, quality of project, policy concerns

It is the Commission of the EC which takes the final decision.

5 - POINTS OF INTEREST

- The Commission has implemented a programme of promotion through a widespread dissemination of documentation (introductory leaflet, user guide, procedures manual, a slide show and a video) and through the organisation of information and training seminars for interested FIs and members of the business community.
- ECIP is a complete package covering all the stages in the creation of a joint-venture, from project identification, feasibility study and equity financing through to training. The coherence of the instrument must be maintained by keeping together the four facilities which make it up. The existence of ECIP is necessary because this programme satisfies a need, covered poorly or not at all, by the other financial measures currently available in the international market.
- ECIP is integrated in the multiple actions of the EC in favour of SMEs, especially DG XXIII programmes (BRE, BC-NET, Europartnership, Euro-Info-Centres) and other DG I initiatives (Medinvest, Alinvest). ECIP should maintain the priority of the scheme's application to SMEs. Large multinational firms are excluded from the programme by regulation.
- Applications come from private sector operators and cover all activities (industry, services, agriculture...) in eligible countries. No priority sectors are identified, there are no geographical quotas, no quotas in number of projects per facility. Each project is assessed according to its business viability and its accordance with the regulations.
- The application procedure is simple, thanks to the FIs which are close to the beneficiaries. The Commission tries to ensure a good geographical spread of effective FIs in its network. Where FIs are seen not to be giving a high priority to ECIP (as evidenced by low levels of ECIP activities), the Commission investigates the reasons for their inactivity and may choose not to renew its Framework Agreement.

6 - IMPROVEMENT AREAS

Even where information on a potential investment opportunity is available, many SMEs have still difficulty in assessing it.

In particular, SMEs may find it difficult to evaluate their own capacity to undertake an

international project, due to a lack of experience.

- A description of the various countries covered by ECIP (business and economic environment, country risk assessment, market potential and attractiveness) has to be included in the package provided by ECIP's communication service. The purpose of such information is to give reference marks to SMEs which are just starting to considering a project
- For each country, the package has to be complemented by a description of the various financing schemes which are most frequently used - in that country - by ECIP's financial partners.
- The fact that Facility 1 (identification of potential JV projects or partners) is not directly open to single companies penalises some SMEs, who want to be involved at the pre-feasibility stage because they are on a niche market. This rule has to be made more flexible; the more so as it is easily feasible thanks to the good geographical spread of the ECIP FI network.

These improvements are proposed because an analysis of ECIP results historical trends shows that annual disbursements always remain always lower than amounts approved. The proposed efforts, which correspond to a more focused promotion effort ("business oriented" rather than "procedures focused"), aim to reduce these differences.

7 - CONTACT

		Phone number	Fax number
Information	DG I Mr Thomas ROE	322 299 09 26	322 299 10 54

B.3. INNOVATION: THE FIRST ACTION PLAN FOR INNOVATION

In spite of its excellent scientific capabilities, Europe's level of innovation is lower than that of its main competitors: USA and Japan. At a time when innovation is becoming a driving force in economic competitiveness, this has serious implications for employment and economic prosperity in Europe. The European Councils of Amsterdam and Luxembourg gave an undertaking to stimulate research and innovation in order to help to reduce unemployment in Europe.

Approved by the Commission at its meeting of 20 November 1996, the Action Plan for Innovation proposes actions for tackling Europe's « innovation deficit » by mobilising the Community instruments, in particular the Framework Research Programme and the Structural Funds. The Action Plan sets out a limited number of priority measures to be launched rapidly at Community level. It also incorporates measures already underway or announced since the launch of the Green Paper and identified in it as being essential to the innovation process.

The three main areas for action are:

- promoting a genuine innovation culture:

Education and training have a crucial role on innovation. The Commission proposes to set up a permanent « training and innovation » forum to stimulate the exchange of experience and best practice in this area. Links between schools will also be fostered as part of the « Learning in the Information Society ». Mobility of researchers and engineers is also highlighted as an area to be further developed.
- establishing a favourable legal, regulatory and financial environment for innovation:

Emphasis is put on the need to improve the existing European patent system making it more efficient, more accessible and less expensive. In particular, it is proposed to launch a Green Paper on the European Patent in 1997, the main proposal of which will be the option of converting patent law into a Community instrument.

With regard to finance, the Commission will support more European Investment Fund (EIF) intervention to promote innovation and will seek to strengthen co-operation between the European Investment Bank (EIB) and the Structural Funds in order to develop financial instruments for the benefit of innovative enterprises and projects in the least favoured regions.

The Commission also recommends that the Member States set themselves quantified objectives and a timetable for cutting the formalities, costs and delays involved in starting up businesses. The Green Paper on Innovation in Europe had compared different countries' performances in this area and revealed that there was considerable room for improvement in many countries.
- improving the links between research and innovation:

At national level, the Commission proposes that the member States encourage research carried out in businesses, encourage the setting-up of technology-based business and intensify co-operation projects involving public research bodies, universities and industry. Encouragement to spin-off activities have to be given at local, regional and national level. At Community level, participation of SMEs will be promoted by implementing administrative changes.

Outside the Framework Programme, all Community instruments will be mobilised to support innovation, for example Structural Funds and international co-operation.

Implementation at Community level began in 1997 and advances to improve innovation have been made in:

- protecting intellectual property rights
- financing innovation
- administrative simplification
- training and education
- gearing research to innovation

1 - PROTECTION OF INTELLECTUAL PROPERTY

Europe shows a stagnating patenting levels in comparison to Japan and the United States. This trend, confirmed by the worsening balance of trade in technology, reveals a deterioration in the European ability to innovate.

The Action Plan for Innovation identified the causes of this handicap: the European system patent suffers from a profound weakness. It is at once complex, expensive (despite recent changes) and only relatively effective because of national fragmentation and the twin tracks of European patent/National patent approval.

The European Union seeks to provide its businesses with an environment at least as favourable as that in competing geographical areas. This is why the Commission has launched a large-scale debate with all the actors concerned by adopting the Green Paper on patents on 24/6/97. On the basis of the results of this consultation (completed in November 1997), the Commission intends to propose in 1998 an in-depth reform of the European patent system which would lower the costs, reduce time scales and provide a more certain and consistent legal environment.

The Commission is aiming to improve the information and the awareness of the protection of intellectual property amongst participants in the Framework Programme of Research and Development by setting up a web site and an Intellectual Property Right (IPR) Help Desk which will provide advice.

2 - FINANCING INNOVATION

The inadequacies in innovation funding are recognised as one of Europe's main weakness. Awareness of this challenge is increasing at both national and Community level, as witness the European Parliament's Resolution on the Action Plan for Innovation and the Resolution of the European Council of June 1997 on growth and employment, calling upon the EIB to look into the setting-up of funding facilities for high-tech projects for SMEs, as well as the conclusions of the extraordinary European Council on employment in Luxembourg.

The measures under the Action Plan are essentially aimed at attracting private capital (financial markets, venture capital) towards young high-growth businesses and innovative projects in the start-up phase. The project aims to combat the shortage of private capital investment in technologically innovative SMEs, this being one of the main obstacles to innovation in Europe.

Under the Innovation Programme, 2 projects have been developed:

- the I-TEC (Innovation and Equity Capital) pilot project, launched in July 1997 in collaboration with the European Investment Fund (EIF), helps the managers of venture capital funds to acquire a lasting ability to assess and manage this kind of project. To obtain the Commission's support, the funds must agree to devote at least 25% of their newly-collected capital to early-stage investment in technologically-innovative SMEs. The project benefiting from the investment must meet at least one of the following two conditions:
 - ability of achieving a commercial application on the basis of R&D work carried out under a Community or national research programme
 - demonstration of a high level of technological innovation in the form of the product, service or process

The first nine funds to benefit from the I-TEC project account for a total investment capacity of ECU 380m. The venture capital funds plan to invest at least 1,5 million in each of the some 150 innovative SMEs making up their portfolios and specialised in one of the following fields: information technology, health/life sciences, material science, measuring and testing technologies, chemistry. An initial sum of ECU 7,5 million has been allocated to the I-TEC project through the Innovation programme. The I-TEC project covers a maximum of 50% of the initial assessment and active management costs incurred by such investments. Its maximum contribution through venture capital funds is 5% of the investments made, with a ceiling of ECU 500 000.

- the LIFT (Links to Innovation Financing for Technology) project aims to bring together investors and promoters of technology projects. A Help-Desk will operate as a facilitator to interconnect financiers and actors, e.g. participants in Community RTD.

Through a series of investment forums, meetings between investors and businessmen have also been held in 1997 under the Innovation and Brite-Euram programmes, as well as under those programmes concerning information and communications technologies (ESPRIT, ACTS, Telematics Applications). Other meetings between researchers, businessmen and investors have taken place, in particular under the Biotechnology Programme and in the field of life sciences. The objective of these activities is to stimulate an entrepreneurial culture and the creation of start-up companies by creating networks between different players, by exchanging views and best practise and by designing specific measures that support the creation of start-ups and technology investments.

3 - REGULATORY FRAMEWORK AND ADMINISTRATIVE SIMPLIFICATION

Simplification of administrative procedures and the establishment of suitable legal forms are essential to develop the spirit of enterprise.

The excessive complexity of administrative procedures costs European industry between ECU 180 and 230 bn. annually, thereby damaging its competitiveness. At the invitation of the Amsterdam European Council, the Commission set up a task force (Business Environment Simplification Task Force: BEST) on administrative simplification.

The Commission wants also to promote a new form of enterprise, the European Economic Interest Grouping (EEIG), the only legal instrument currently in existence for trans-national co-operation of a Community nature. For example, under the Third Multi-annual Programme for SMEs, the REGIE initiative (European Network of EEIGs), launched in 1995, has fostered the internationalisation of the activities of SMEs through the EEIG structure. The results and the experience gained will be included in a Practical Guide to EEIGs intended for SMEs.

4 - EDUCATION AND TRAINING

Investment in know-how, the ability to combine disciplines, developing creativity and the sense of initiative, facilitating social, geographical and professional mobility are the basis of a culture of innovation and the spirit of enterprise.

Actions in this direction will be strongly supported. The training and mobility measures are mainly directed at researchers, managers in business and entrepreneurs, and aim to strengthen the innovation culture in conjunction with projects for the exploitation of research.

5 - GEARING RESEARCH TOWARDS INNOVATION

Innovation is mainly based on research and technological development. Four handicaps characterise European research: insufficient investment, fragmentation of efforts, a deficit in identifying the needs of society and emerging markets, insufficient linkage between research and its application.

The Commission has taken steps to achieve more effective industrial exploitation of the results obtained by its own programmes and by its own research establishments.

To make it easier to concentrate the Community's research efforts, the Commission has proposed that the Fifth Framework Programme will be organised in seven major programmes: four thematic programmes and three horizontal programmes. The innovation objective would therefore be fundamental within the thematic programmes. These would include « innovation cells » whose role would be to promote innovation in each of the thematic programmes.

Taking into account that innovation is a key factor for SMEs, the horizontal programme « Innovation and participation of SMEs » under the Fifth Framework Programme must promote the innovative objective and co-ordinate the account taken of it in the thematic programmes, while increasing the involvement of SMEs.

The participation of SMEs will be encouraged by introducing incentives such as the « one-stop SME shop », exploratory grants to make the preparation of applications easier, and co-operative research projects carried out by third parties.

The thematic programmes should implement stimulation measures for SMEs: the exploratory awards would enable SMEs to receive financial support to prepare proposals for co-operative or collaborative research, through partner search, market research and feasibility studies etc.

The co-operative research would enable groups of SMEs with common technological requirements to entrust research activities to other entities which would carry them out on their behalf.

Outside the Framework Programme, the Commission is setting up a number of sectoral workshops and networks aimed at increasing SMEs' awareness of what is at stake in industrial innovation.

B.4. RESEARCH AND DEVELOPMENT / ENVIRONMENT: LIFE

1 - GENERAL OBJECTIVES

LIFE (Financial Instrument For the Environment) is the only financial instrument to support the development and implementation of Community environment policy, as described in the Fifth Community Action Programme, which was approved by the Council and the Representatives of the Governments of the Member States on February, 1, 1993.

The general approach and strategy of the Fifth Environmental Action Programme are the following:

- to maintain the overall quality of life
- to maintain continuing access to natural resources
- to avoid lasting environmental damage
- to consider as sustainable a development which meets the needs of the present without compromising the ability of future generations to meet their own needs

LIFE, Regulation 1973/92, was created on May, 21 1992. LIFE II, described in Regulation 1404/96, was established to continue and develop the activities implemented during the first phase (1992-1995) until 1999.

LIFE concerns three major areas of action: Environment, Nature and Third countries. While all three areas aim to improve the environment, each has its specific priorities.

LIFE-Environment supports innovative and demonstration projects designed to promote sustainable development in industrial activities and land use and for preparatory measures designed to implement Community policy and legislation.

LIFE-Nature actions aim at the conservation of natural habitats and of wild fauna and flora of EU interest.

LIFE-Third Countries actions provide technical assistance in the establishment of environment administrative structures, nature conservation programmes and demonstrations to promote sustainable development in Mediterranean and Baltic states and in Central and Eastern European Countries (Albania, Algeria, Bosnia-Herzegovina, Croatia, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, West Bank and Gaza, Syria, Tunisia, Turkey and the Baltic coast of Russia).

Comments on LIFE-Environment

LIFE-Environment finances preparatory, demonstration, technical assistance, support or promotional measures set up by businesses and local authorities.

Its main objectives are the following:

- To promote sustainable development and integration of environmental considerations in industrial activities
- To help local authorities to integrate environmental considerations in land use development and planning

To strengthen the link and complementarity between environmental regulations and structural financial assistance, in particular from Community funds and financial measures concerning

the environment.

2 - RECIPIENT COMPANIES

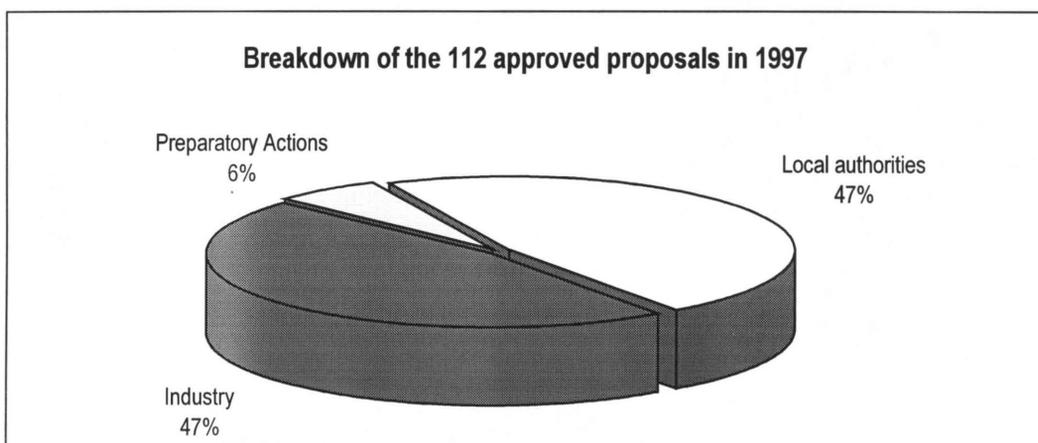
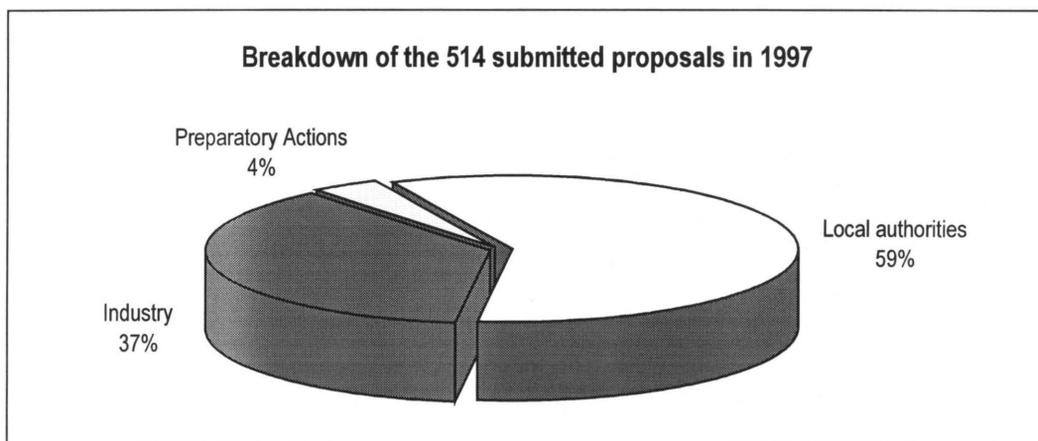
LIFE is accessible to all private or public entities.

LIFE-Environment particularly intended for the industrial sector and local authorities, i.e. public authorities responsible for land use development, established in the European Union.

Projects are characterised as below:

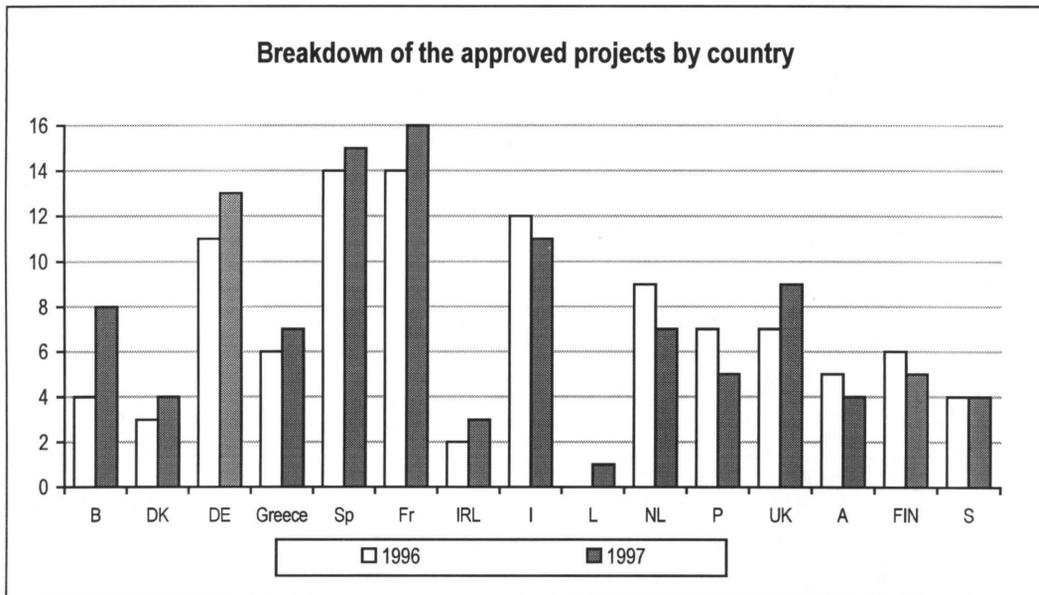
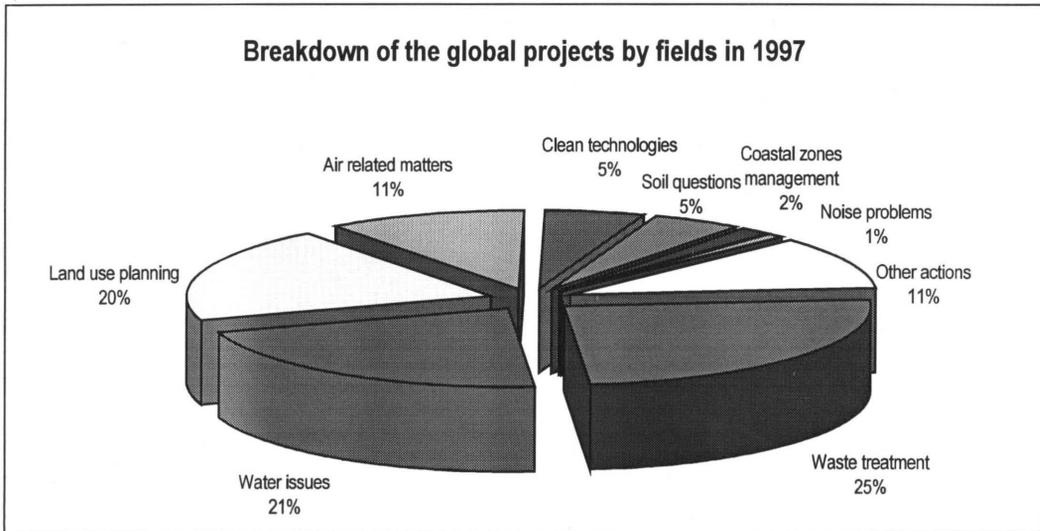
- pilot projects
- demonstration projects
- innovation programmes
- projects which can be reproduced elsewhere
- projects which present a specific interest for the Community.

Beneficiaries must furnish guarantees as to their technical and financial standing.



In France, SMEs account for only 30% of industrial projects for the period 1992-1997.

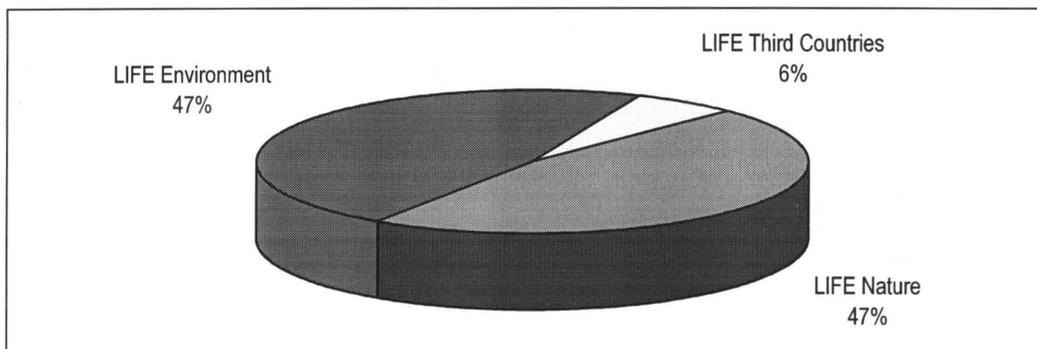
In 1997, waste and water issues dominated among industrial projects, whereas local authority projects focused on planning and water treatment. Three of the six preparatory projects related to the development of EU water policies.



3 - BUDGET AVAILABLE

3.1 Total budget available

For the period 1996-99, LIFE II has a total budget of ECU 450 m., of which 47% (ECU 212 m.) is for LIFE-Environment projects.



Financial support for LIFE Environment can take the form of joint financing or interest rebates and are subject to the following maximum limits in respect of eligible costs:

- 30% of the cost in the case of income-generating projects (e.g. clean technologies, recycling...),
- 50% of the cost of other projects.

The remaining funding may be provided from other public or private sector sources.

The financial contribution from the European Commission rarely exceeds ECU 1m. For reasons of limited available financial and project management resource, the Commission prefers projects with a total cost of between ECU 400,000 and ECU 10 m.

	Number of approved		Project totals (ECU m.)			
	1996	1997	Total amount		Life amount	
			1996	1997	1996	1997
Austria	5	4	8.56	8.46	2.45	1.16
Belgium	4	8	12.6	18	1.4	3.9
Denmark	3	4	4.13	6.24	2.1	2.3
Germany	11	13	17.6	16.3	5.0	4.8
Greece	6	7	5.1	6.3	2.5	2.8
Spain	14	15	12.9	19.4	4.8	3.9
Finland	6	5	4.7	6.2	2.0	1.9
France	14	16	35.2	23.9	6.7	5.7
Ireland	2	3	1.6	2.9	0.7	1.2
Italy	12	11	23.8	14.0	5.9	4.1
Luxembourg	0	1	-	1.0	-	0.5
The Netherlands	9	7	20.1	24.9	2.8	4.0
Portugal	7	5	4.8	3.4	2.3	1.2
Sweden	4	4	7.7	6.1	2.8	2.1
United Kingdom	7	9	4.5	9.1	1.8	4.2
-	104	112	163	163	43	43.6

3.2 Current situation

At the end of 1997, 32% of the LIFE-Environment budget was already allocated.

4 - MEANS OF ACCESS AND PARTICIPATION CONDITIONS

The selection of proposals for financial support under LIFE is based on an assessment of the proposal's merits, the procedure being as follows:

- The commission publishes calls for the submission of proposals in the Official Journal
- The proposals are collected by the Member States in November/December each year, and each country has to assess the admissibility of the proposals it receives
- Three copies of all admissible projects are sent to the Commission by the end of January.
- The submitted proposals are then assessed by both the Commission Services and the National Authorities. The aim of this initial assessment is to create a pre-selection and to establish a short list of projects, by country, which can then be compared, all nationalities taken together.

The assessment checks each project against two criteria, i.e.:

- preliminary examination criteria (conformity with the provisions of the Treaty and Community legislation and policy; community interest; contribution to the general objectives of LIFE; technical and financial capabilities of the candidate, maturity in terms of administrative procedures: authorisations, licences, impact studies etc.)
 - assessment criteria (for industrial activities: technological demonstration, innovative criteria, clarity of objectives etc.)
- Short listed proposals are then grouped by field of application and once again evaluated; this third time, by groups of independent experts from all member states. The expert evaluation takes place in May.
 - On the basis of the experts' and of the LIFE management committee's evaluations, the Commission select the projects to co-finance in July.

TIME TABLE

Final dates for presentation of projects to the competent national authorities	November / December
Closing date for presentation of projects to the Commission	31 January each year
Evaluation of projects	From February to May each year
Final selection of projects by the Commission and presentation to LIFE Committee	June each year
Decision by the Commission after financial control and approval by LIFE Committee	June each year
Beginning of projects	Between 31 January and 31 December in the year of submission of the project

5 - POINTS OF INTEREST

- LIFE is the only EU instrument to provide funding for environment projects throughout the EU and in bordering regions. The outcome of approved projects may guide the development of future environmental policy initiatives and the allocation of structural financial aid.
Support from LIFE also sets out to prepare the way for investment from other financial instruments, both at national and Community level and in the private sector.
- The following programmes are eligible:
 - innovative and demonstration projects designed to promote sustainable development in industrial activities
 - demonstration, promotion and technical assistance campaigns for local authorities to encourage the integration of environmental considerations into land use development and planning with a view to promoting sustainable development
 - preparatory projects designed to contribute to implementing community environmental policy and legislation, particularly:
 - protection and rational management of coastal areas, of rivers flowing into coastal areas, their wetlands and the sustainable management of those areas and rivers
 - reduction of waste, in particular toxic and hazardous waste
 - protection of water resources and water management, including waste or contaminated water treatment,
 - air pollution, acidification, tropospheric ozone

- Measures should preferably focus on industrial processes which have a significant impact on the environment. For example, for the chemicals industry, since production is complex and generates a wide variety of products, the waste produced is also heterogeneous and calls for special attention in installations and specialised treatment for waste water. End-of-pipe techniques integrated into an overall environmental approach, on-site re-utilisation of effluent, the re-use of secondary products as raw materials and changes in processes are needed to reduce the environmental impact. The chemicals industry is also a large consumer of energy and energy-saving has to be a target.
- Although open to any legal entity established in the European Union, LIFE-Environment is targeted at the industrial sector and local authorities. Those two beneficiaries are key actors in ensuring environmental protection. For companies, the LIFE programme can be seen as an encouragement for the industrial sector to take on board environmental aspects. LIFE programmes will support innovative demonstration or pilot projects with potential for transferability to the entire sector concerned and possibly to other industrial sectors throughout Europe.
For local authorities, they have a special responsibility for land use planning and set the tone for other players in local development.

6 - IMPROVEMENT AREAS

Projects must be conducted at a sufficient level to permit an assessment and the demonstration of their effectiveness. This point can be a brake on small projects, as data collection is time-consuming and expensive.

The number of SMEs involved in this programme is low. To generate more applications, the following improvement measures are proposed:

- To adopt the CRAFT approach, grouping several SMEs together for one application and for communications
- To encourage and/or organise, in co-operation with trade associations, direct contacts between SMEs, so partnerships can increase
- To provide assistance for filling application forms

7 - CONTACT

European Commission (rue de la Loi, 200 - B-1049 BRUSSELS):

		Phone number	Fax number
Information	DG XI Mr PLEINEVAUX	322 296 95 19	322 296 95 61

B.5. TRAINING: ADAPT

1 - GENERAL OBJECTIVES

ADAPT is a Community initiative within the objectives of the European Structural Funds. The last selection of projects was made at the end of 1997. Future initiatives on training have been defined in the Commission policy, under the name « AGENDA 2000 ». The objective of this section is to identify those successful programmes which it would be interesting to implement within the scope of the next programme.

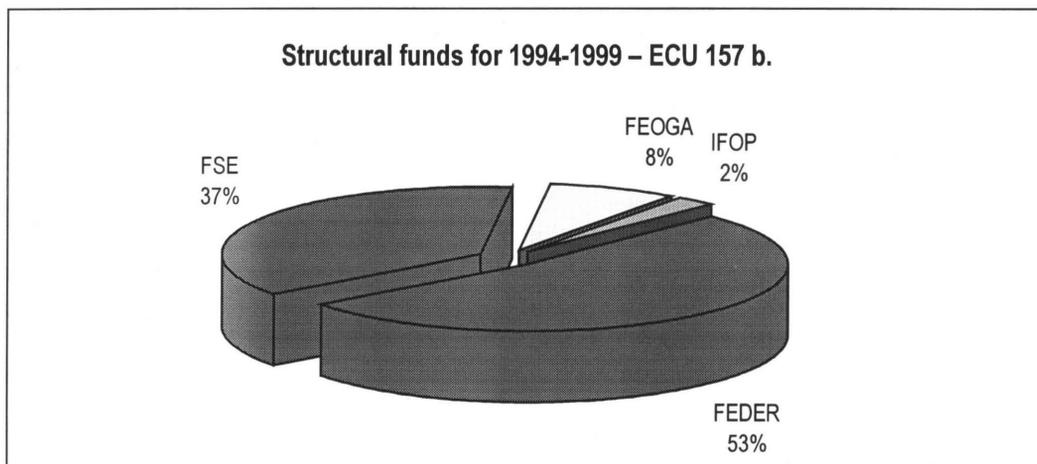
ADAPT was launched to help individual companies respond to the rapidly changing needs of the labour market. Its primary aims are to prevent unemployment and to create new jobs by improving the skills of the workforce through training and qualification schemes. Main objectives of this programme are:

- to accelerate the adaptation of the work force to industrial change
- to increase the competitiveness of industry, services and commerce
- to prevent unemployment by improving the qualifications of the work force, increasing internal and external flexibility and ensuring greater job mobility
- to anticipate and accelerate the creation of new jobs and new activities, particularly labour-intensive ones; this issue includes the potential represented by SMEs.

As such, ADAPT represents the next step after the Commission's White Paper on Growth, Competitiveness and Employment presented to the European Council in December 1993.

1.1 Role of the European Structural Funds

This structure constitutes one of the « Structural Funds » with FEDER, FEOGA, IFOP, representing one third of the European Union budget, i.e. ECU 156 b.. Although each fund has specific objectives, such as the development of agriculture or fisheries, they all aim to reduce the differences between the poorest and the richest areas in order to create social and economic cohesion within the European Union. The role of the ESF specifically concerns employment and human resource issues.

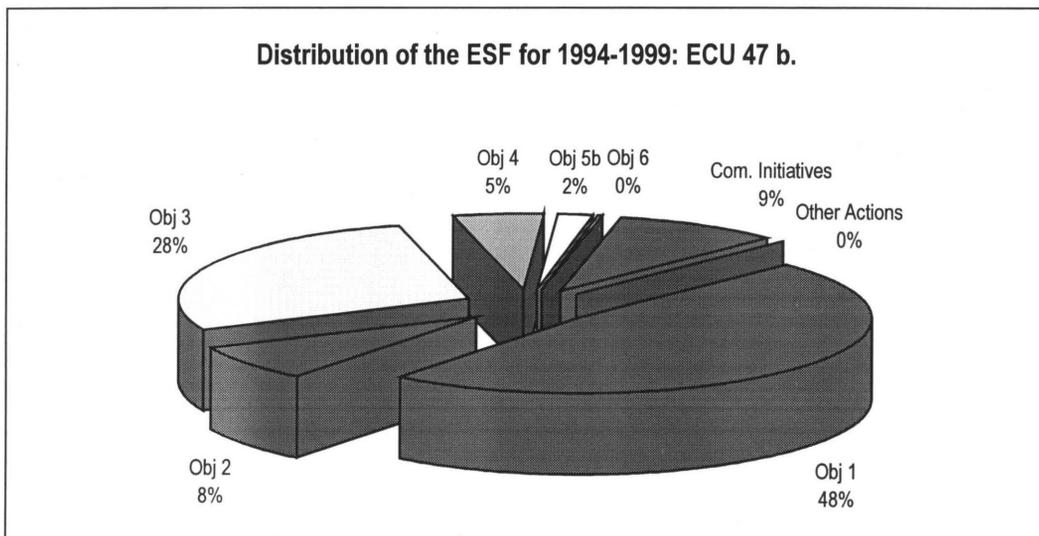


In co-ordination with the Member States, the ESF finances several programmes concerning professional training, professional experience, advice and support for research workers, programmes aiming to improve training systems in the workplace, employee research projects, reinforcement of education and training systems. For the period 1994-1999, the SFE has a budget of ECU 47 bn. to support national programmes.

This programme also supports trans-national and innovation projects such as ADAPT.

The Structural Funds' objectives concern six main areas:

- Objective 1: Support less-developed areas
- Objective 2: Restructure areas of industrial decline
- Objective 3: Act against unemployment, facilitate the insertion of young or handicapped people into the labour market, promote equality of opportunity for men and women
- Objective 4: Facilitate the adaptation of workers to industrial change and to changes in production systems
- Objective 5: Accelerate restructuring of agriculture and fisheries and promote rural development
- Objective 6: Contribute to the development of sparsely-populated areas.

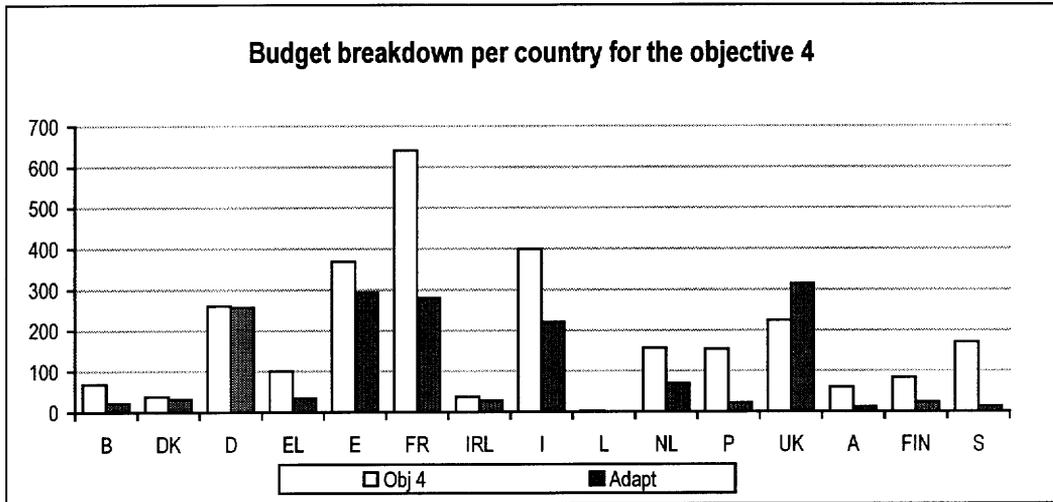


Objectives 3 and 4 are exclusively dedicated to the European Social Fund. In this sense, ADAPT is directly connected to Objective 4. It concerns every worker in the European Union, without geographic or economic limit.

Three main items have been chosen:

- trend forecasts for the labour market and the need for professional qualifications
- training and advice
- support for training systems designed to respond to industrial and technological change

The ESF provides financial support for the different countries of the European Union. The country breakdown is represented in the following graph.



1.2 Additional comments

The ADAPT initiative is the European programme designed to modernise and update the capacity of European companies and workers to adapt to change

It provides funding in priority to experimental projects covering one of the following areas:

- training, counselling and guidance
- anticipation, networking and employment creation
- adapting support structures and systems
- information, dissemination and awareness

ADAPT applies a number of principles, such as:

- trans-nationality: all projects have to include partners from different countries in order to develop the exchange of information and experience, whatever the stage of the project
- innovation: this concept concerns new ideas or methods. So qualification depends on the situation of the country concerned: an idea may be considered as an innovation for one country, even though it has been developed for a long time in another
- local impact: the project has to combine partners from different sectors of activities if possible (companies, trades unions, etc.)
- complementarity: all the possibilities of stimulating relations between different programmes are supported. So ADAPT is connected to LEONARDO or LEADER, for instance
- multiplier effect: results have to be disseminated

In fact, Member States' market and social conditions and needs are quite different. That is why the projects are selected against the priorities set out by each country through an Operational Programme (OP). It allows co-ordination of the objectives of ADAPT with national priorities.

2 - RECIPIENT COMPANIES

To be eligible for funding, projects have to be innovative and to have a trans-national dimension.

The following actors may participate in this programme:

- Companies, especially SMEs, groups of companies, trade associations, Chambers of Commerce, crafts and agriculture,
- Trade unions and other worker organisations
- Public and private training organisations and universities
- Local and regional authorities
- Local development agencies
- Non-governmental and voluntary organisations
- Organisations concerned with equal opportunities

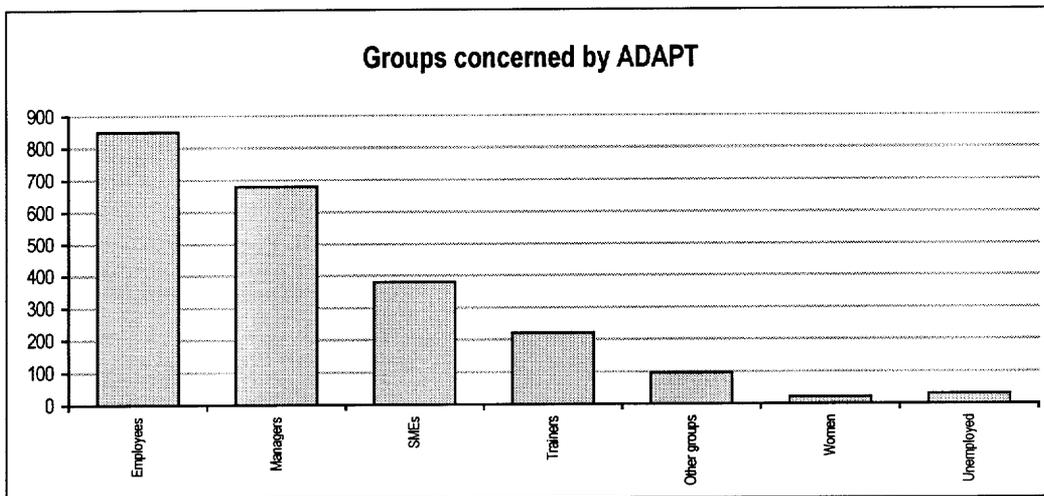
Workers covered by ADAPT are the following:

- Private sector employees especially in SMEs at risk of unemployment due to industrial change
- Long-term unemployed, caused by the restructuring of a company and/or sector. The objective is to support them in the possibility of becoming self-employed
- Workers whose employment contracts have been temporarily suspended as a result of problems linked to industrial change
- Workers in part-time employment as a result of reorganisation at the workplace
- Workers with prospects of employment in newly created jobs following counselling on job opportunities and retraining

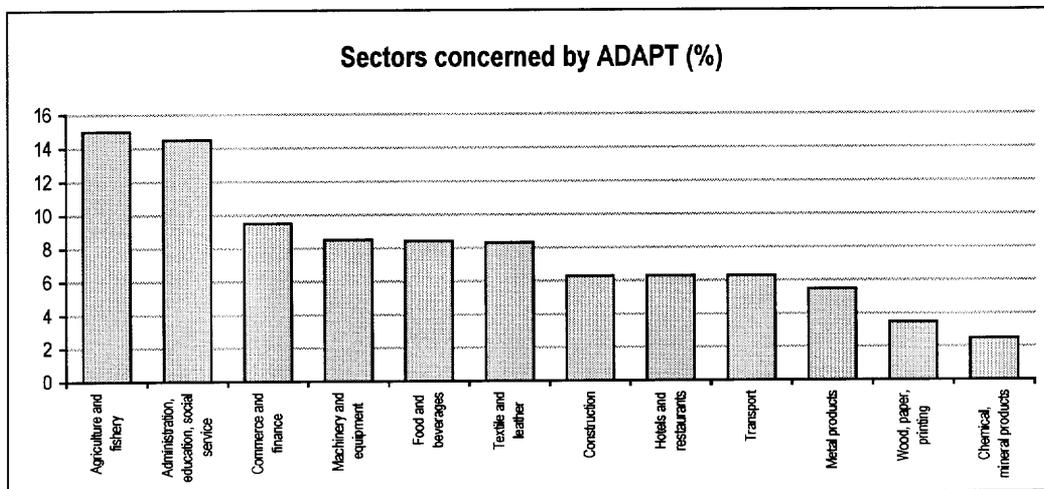
It is important to note that the size of SMEs is defined separately in each country. Some accept SMEs with more than 250 employees.

For these groups, ADAPT has been designed to provide a European, trans-national contribution to the modernisation of European companies and to the adaption of the skills of the European workforce to change. To this end, it contributes to achieving the objectives defined in the Confidence Pact « Action for employment in Europe », 1996:

- mobilising national, regional and local authorities, social partners, and Community institutions in a comprehensive strategy
- making better use of the multiplier effect, creating and preserving jobs by learning and building trans-nationality from national, regional and sectoral experiences and programmes
- incorporating the fight against unemployment in a medium and long-term view of society by anticipating the changes in both work and society as a whole



ADAPT covers all economic sectors in order to preserve the principle of equality of opportunity. So the chemicals and related sectors are not particularly well represented in the panel of projects.



3 - BUDGET AVAILABLE

3.1 Total budget available

All ADAPT projects are financed both by the European Commission and by Member States, the other part of the budget may be supported by the private sector. The overall budget for ADAPT is ECU 3300 m., of which the European Union contributes around ECU 1640m. All the budget for the period 1996-1999 has been allocated.

Estimated budget by Member State (ECU 1996)

Member States	Total (ECU 000)	EU Contribution (%)
B fr	70.756	31.6
B nl	44.220	36.8
DK	70.502	45.0
D	539.292	47.60
EL	47.691	70.03
E	421.806	69.50
F	679.127	41.00
IRL	37.253	75.00
I	414.515	53.00
L	813.000	37.50
NL	172.868	40.30
P	29.761	72.00
UK gb	712.011	44.00
UK ni	5.426	65.00
A	30.189	45.00
FIN	44.455	53.00
S	25.142	52.00
	3.275	50.02

3.2 Current situation

A first call for proposals has been launched in 1997. The next is due to be launched in 1999. One of the priorities is the campaign against social exclusion.

4 - MEANS OF ACCESS AND PARTICIPATION CONDITIONS

4.1 Selection process

ADAPT projects are selected in each country following national priorities. So innovation and trans-nationality are essential criteria.

Projects are selected after a call for proposals covering four stages:

- an awareness and information stage, during which all the interested players have been informed of the details
- a call for proposals stage, during which potential promoters develop and submit their project ideas
- an assessment stage, during which the national authorities define a pre-selection list of projects which are likely to have maximum impact on policy and practice in Member State
- the development and confirmation stage, allowing pre-selected projects to develop their proposals and confirm their trans-national partners, prior to final approval by their Member State authorities

The operating procedure for the first call for proposal:

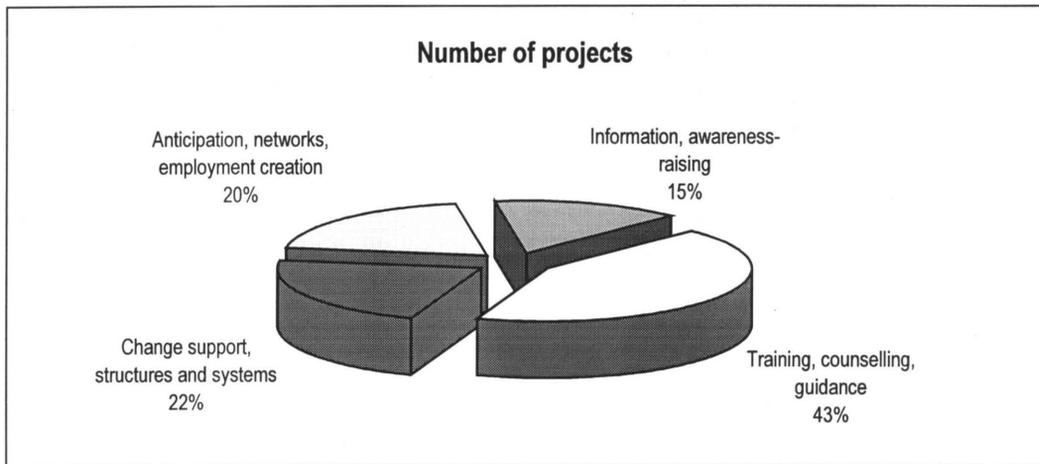
		Authority responsible
Planning	Awareness and information	Member States European Commission
Call for proposals (01/97 to 03/97)	Project ideas presented	Applicant National support structures
Assessment (04/97 to 07/97)	Assessment if the project is eligible for funding	Member States
	Approval for selection of	Monitoring Committee Member State
Development (08/97)	Transnational partnerships are formed and work programmes agreed by partners	Applicant National support structure EUROPS
Final Confirmation (12/97 at latest)	Approval of partnership and start of activities	Member States

For the first call for proposals, 1400 projects have been selected, and 1500 in 1997. National Support Structures have been set up by each Member State to support the work of the projects, especially in relation to trans-national activities. They also act as a link with the Commission 's Support Unit, EUROPS, based in Brussels.

4.2 Typical training projects

Projects selected for ADAPT may include four different kinds of measure:

- training, counselling, guidance
- changing support structures and systems
- anticipation, networks, employment creation
- information, awareness-raising



- training, counselling, guidance: this group of projects represents the most important area supported by ADAPT. It covers the development of joint training activities, relations between SMEs and the European training market, mobility and professional exchanges (for trainers, training managers, SME managers, and trainers in charge of the development of new training systems). Projects addressing new kinds of tele-training, connecting regional and training structures or liaising between SME managers, engineers, counselling, training units, technical institutes and social partners may also be selected
- changing support structures and systems: this category represents the second main group of projects supported. The objective is to improve co-operative structures in order to guide SMEs in their training needs or in order to develop exchanges between private and public partners
- anticipation, networks, employment creation: projects selected concern the creation of observatories and networks gathering data and experiences at the local, national and international level
- information, awareness-raising: this is the least-financed class of projects. It concerns support measures for the others: software and hardware support, studies on technical change, experience exchanges etc.

5 - POINTS OF INTEREST

- A newsletter « Initiative » was created in May 1998 in order to disseminate information on the ADAPT and EMPLOI programmes. The aim of this publication is to draw lessons from previous programmes and to inform political bodies, social partners, NGOs, journalists and partners of the projects. Letters to the Editor are used to group the special needs of individuals looking for comment and advice.

- Nine work groups have been created by the European Commission and the Member States in order to assess the impact of ADAPT initiatives, to diffuse best practice and to define a practical framework up to the end of the period. They are connected to the four priorities defined during the employment meeting in Luxembourg: employability, new enterprise cultures, adaptability, equality of opportunity. Such measures enable better communication between the different partners of these initiatives. The proximity is essential to keep in touch with SME preoccupations.
- ADAPT is based on co-operation. The presence of intermediaries in each country constitutes an efficient and essential bridge between companies - and especially SMEs - and the European funds. For instance, the University for Industry, UFI, in the United Kingdom will support adults and SMEs seeking training in and after 2000. The objectives are to provide information and advice concerning training possibilities using innovative training programmes. ADAPT will support the creation of UFI.
- The creation of observatories gathering information on the workplace market is likely to be a structure of interest for SMEs, who face difficulties in putting together an overview of developments.
- The definition of the Operational Programme in each country gives specific priority to national needs in the social and economic field. For instance, United Kingdom has decided to give priority to SMEs, especially those with less than 50 employees and present in growth sectors of activity like services, tourism, the arts and culture.
- The Member States choose their priority promoters such as companies, especially SMEs, trade unions, public and private training organisations and universities, research institutes etc.. So this programme maintains communication between actors from various sectors. It is of value for SMEs, and especially SMEs from the chemicals sector which have difficulties in identifying partners.
- The training programmes really well-adapted to chemicals sector SMEs are the new technologies of information: Tele-learning in many cases. This is because it is difficult to convince programme members to propose flexible work planning to their employees.

6 - IMPROVEMENT AREAS

SME participation:

SMEs have difficulties in participating in such programmes because ADAPT initiatives involve several levels of regulation and scope (European and national), which increases the complexity of the approach. It is the reason why SMEs need time to understand the operating procedures.

Moreover, the duration of the application procedure is important, even if the time varies country by country. So a firm which has to adapt to a sudden industrial change is likely to prefer a more flexible training structure.

SMEs do not really understand the objectives of ADAPT and especially Objective 4.

Proposed improvement actions

- Better communication is essential to promote these programmes
- It is necessary to simplify the procedure in order to increase the number of SMEs and Non Governmental Organisations accessing these initiatives

The programme:

ADAPT programmes interact closely with Objective 4 of the European Structural Funds covering the theme « Facilitating adaptation of the workforce to industrial change and changes in production systems ». So the level of funding provided by the European Commission is related to the development level of the area concerned: regional characteristics play a key role.

In most cases, the training organisation tries to convince SMEs to participate in a project. It would be the role of national organisations to mobilise company initiatives and to promote them by proximity.

This programme is well adapted for chemicals industry SMEs. At present, trans-national co-operation on training and experience would satisfy these companies. It would be worthwhile for SMEs to turn first to national observatories and possibly to translate their forecasts into practical terms. There appear to be a number of worthwhile initiatives awaiting trial.

Future programmes on training are defined in « AGENDA 2000 » covering the period 2000-2006. « AGENDA 2000 » summarises the overall thrust of Commission policy and develops three main points: to reinforce European Union policy, to face the expansion of the EU, and to set up a financial framework.

The future orientation given to the structural funds will influence the training policy and the level of funding provided by the European Social Fund.

The development of human resources is a key element in improving access to employment, the development of life-long learning and the promotion of local employment initiatives.

A new Objective 3 will be introduced for regions not covered by Objectives 1 and 2, in order to help Member States to adapt and modernise their systems of education, training and employment.

Objective 3 will promote activity in four areas which will complement the guidelines developed as part of the European Employment Strategy: accompanying economic and social change; implementing lifelong education and training systems; developing active labour market policies to fight unemployment; combating social exclusion.

It is important to integrate the results and objectives of ADAPT into the scope of the new policy.

From a more operational point of view, and taking into account some recent observed trends, future training programmes will have to focus on the following points:

- Improving quality, i.e. the fit between training products and specified needs (supply vs demand issues)
- Rationalising the training product range
- Investigating and proposing “alternative training services and products”, e.g.
 - Assistance for trainers and expert networks with the support of trade associations
 - trans-national experience exchanges (e.g. Swedish SMEs vs Spanish SMEs)
 - SMEs – large company experience exchanges

7 - CONTACT

European Commission (avenue de Beaulieu 9, 1160 BRUSSELS):

		Phone number	Fax number
Information	DG V Mrs Manuela GELENG	322 296 21 02	322 296 90 22

C. Key findings and recommendations

The last part of this report aims to highlight the results of the two phases of this study. It gives more details than the executive summary and a detailed description of how some national SME contact points work, and why this should be extended to all communities.

C.1. CHEMICALS AND ALLIED SECTOR SMES: SPECIFIC ISSUES

SMEs in the chemicals, plastics, rubber and related sectors

The chemicals industry is a major contributor to employment, technology and wealth-creation in Europe. Contrary to popular belief, small and medium-size enterprises (SMEs) constitute a major component of this European industry. More than 95% chemicals industry companies have fewer than 250 employees and these SMEs account for about 30% of jobs and outputs in Europe (more than 50% for the rubber and plastics processing SMEs).

A major error would be to think of this part of industry as a mere processor of the output of large chemicals firms, who constitute the sole source of know-how and the only engine of growth. These companies are actually responsible for spreading technology throughout European industry, by enriching and personalising the output of bulk chemicals products. Mostly, it is these companies that have to work on a daily basis with tens of thousands of European customers in order to create value and a competitive edge.

Chemicals industry SMEs play an important role in every European country. They are dominant in certain activities such as paints, cosmetics, speciality chemicals, fine chemicals pharmaceutical precursors.

In the European Commission Report of May 1996, entitled "Industrial competitiveness for the European chemical industry: an example", the role of SMEs was pointed out clearly, along with the need to pinpoint further action in a setting of industrial policy benchmarking.

An important step in this direction came in 1997, when the DGIII promoted this study "To improve the framework for SMES in the chemicals, plastics, rubber and related sectors".

The aim of this study, which gave national and European associations a major role in each of its phases, was to understand the specific needs of the European chemicals and allied sector SMEs, in order to identify a set of actions to improve their economic framework.

Characteristics of chemicals and allied sector SMEs

Chemicals industry SMEs have to cope with many difficulties which are common with SMEs in other sectors, such as the complexity of legislation and administration, the lack of management and marketing resources, difficulties of access to long-term finance and to relevant information sources.

Their uniqueness lies in three challenges: Internationalisation, Innovation and the Environment.

They actively participate in the development of new products and processes and, more than in any other industrial branch, innovation is increasingly vital for them amid ever fiercer international competition. They are also strongly export-oriented with marketing investments to gain a foothold in new markets both in and outside Europe. And they are greatly hindered by a disproportionate burden of environmental legislation.

Key findings based on 350 interviews are described below:

Internationalisation

Chemical SMEs are strongly involved in the process of internationalisation, even more so than same-size companies in other industries.

Export figures are not much different from the industry-wide total (28% vs 36% of sales). 85% of chemical SMEs export, 2 out of 3 more than 20% of their output and 31% export more than 40% of their output.

The majority of our sample SMEs is attempting to develop European sales (essentially SMEs in the organic chemistry and tyres & tubes sectors, and in Northern Europe countries) but 58% of companies also export outside the European Union.

Given the characteristics of many chemical products (not suitable for transport, local markets), it appears that on average, SMEs are involved in the globalisation of markets to the same extent as large chemical groups, and far more than their cousins in other industries.

Problems encountered by chemicals SMEs vary sector by sector. The most common export-related complaints are: difficulty in finding suitable partners(33%), logistics and transport costs (25%), trade barriers (20%), problems with certification and registration.

The administrative and regulatory environment also generates also excess costs: tax burdens and difficulties of access to the relevant information discourage business creation and development. This directly affects both R & D work and employment creation.

Production

Overseas production represents a small proportion of SMEs activities.

Only 8% of production takes place abroad but a good 20% of companies has had this type of experience (11% outside Europe). These figures are significant and demonstrate that a significant proportion of SMEs has already dealt with the more complex form of internationalisation. For these companies, vicinity to markets is more of a determining factor than tax considerations or the cost of labour.

There are several barriers to access to the Internal Market for SMEs, and one of the most important complaints is the existence of differences in compliance, interpretation and enforcement of Community laws. The slow and complex procedures for achieving European product standardisation and certification penalises SMEs, which do not have time and money to cope with all these specific certifications and registration requirements.

Moreover, participation in public procurement among SMEs is weak, due to a lack of awareness of opportunities and to the difficulties of pre-qualification (shortage of financial guarantees, difficulties in dealing with national technical standards where European-wide standards cannot be applied, or difficulties in providing relevant references). The opportunities for SMEs to relocate production are often hindered by costs and risks concerning travel expenses, recruitment of local staff and national regulations.

In terms of subcontracting, a most SMEs avoid sub-contracting production in order to avoid scheduling difficulties and quality problems. On the other hand, around 50% of our sample are themselves sub-contractors (with framework contracts) even if they admit planning difficulties and, for most of them low margins on sub-contract work. The main factor restricting flexibility is the lack of qualified temporary staff.

Innovation

The level of innovation is significantly high (around 70% of interviewed SMEs have carried out one « sector leading » innovation programme over the last five years). 45% of SMEs have managed to patent their innovation. Most innovation projects concern products and processes, and an average of 6% of employees worked on innovation.

Innovation and research are top priorities for chemical SMEs in Europe, as they are for the whole chemical industry. It is due to the fact that chemical SMEs are not – as often in other industries - just sub-contractors. Their objective is to be dynamic partners for both chemical raw material suppliers and end users by enriching products with their own original contribution.

As in the rest of the industry, SMEs do not find it easy to assimilate R&D results from outside. It requires an effort at source identification and adaptation, originality and a creative effort from within (in-house R&D). A growing number of chemicals companies have seen a need to put their research activities onto a more systematic basis.

SMEs encounter difficulties in transforming scientific discoveries into marketable products, because access to finance is difficult (for 45% of them) and regulatory barriers are too high to promote practical development of research results.

European SMEs are trying to work with universities (41%), research centres and laboratories (31%), and are aware that they need to seek partnerships.

But the awareness of networks, and of the possibilities of exploiting synergies between enterprises, universities and other structure, is low.

In order to remain competitive, most of SMEs need to use readily available research results, but this potential is not available due to the lack of information, time, expertise and resources to apply theresults, without specific support.

The complexity of the European Commission's programmes makes them ill-adapted to the needs of SMEs; they would like them to be simpler and more effective.

Investment Policy

SMEs would like to invest, mainly to increase capacity (for 56% of them), to launch new products (56%) and to develop R&D (42%).

SMEs are very dependent on their own capital structure and working capital. They have real difficulties of access to loans at low rates and often solve their financing problems by using informal funding sources such as the family.

Self-financing is the most used source of investment financing (86%). The structure and the size of their assets make SMEs encounter more difficulties than larger firms, as they are perceived as higher-risk by banks. Through their answers, it appears that there is a lack of co-operation between SMEs needing long-term finance and investors willing to provide it. On the other hand SMEs do not use grants from the European institutions, even where they are aware of them.

To cope with their financing problems, SMEs need easier access to long term finance, to venture capital and the creation of a SME European capital market.

Environmental Issues

Complying with legislation is an arduous task for chemicals SMEs, and 44% of them mention this is a major area of investment. Basic compliance is actually an costly activity which limits resources for growth.

This is one of the most clear-cut result of the survey, and is confirmed by companies' rating of major problems. For 55%, it is too expensive to keep up with changes in regulations and standards; for 60% the rules are changed too often; for 48% it is hard to understand and interpret the legislation, etc.

SMEs consider they are burdened with rules and regulations conceived - often wrongly - for much larger firms that have the internal resources to handle these issues. What are just costs for a large firm represent a real obstacle to growth for a small or medium-size business.

Human Resources And Training

SMEs have a strong need for both commercial and well-educated science and technology workers and would like to make more use of specific national and European training programmes.

70% of companies report difficulties finding personnel. The most critical areas are marketing and sales (34%), chemicals knowledge (31%), quality, logistics and processes (30%), foreign language competence, mobility, etc.).

This corresponds perhaps to a much larger problem with the industrial culture, where technical school or university graduates in chemistry look for a positions with a big firm and snub small yet dynamic companies seeking good chemists.

The problem does not end with recruitment and permanent training a priority request of SMEs, of which in-house training infrastructure and means are often weak. Training topics in highest demand are quality, logistics, process (43%), marketing and sales (38%), foreign languages (30%), and chemicals science (30%).

These needs are grounded in the three main challenges of chemical industry SMEs, i.e. internationalisation, innovation and the environment. To meet them, companies need not just capital but also professional skills.

SMEs behaviour w.r.t. collective programmes: awareness of EU programmes is low

SMEs would like access to European support programmes, to complement those national programmes they already use.

A small proportion of SMEs is in contact with the European Commission, though most prefer to work through Chambers of Commerce and trade associations. Less than 30% of SMEs who were aware of European Commission programmes (essentially in the fields of industrial co-

operation), used one or more of them; by comparison, nearly 60% of SMEs who were aware of national support programmes used them (mainly investment financing). Euro-Info-Centres are not widely known by SMEs and are very little used, mostly because of a lack of information and because the system is perceived as too bureaucratic.

C.2. AN IDENTIFIED NEED FOR A SET OF NATIONAL SME CONTACT POINTS

As mentioned, chemicals industry SMEs are interested in European support programmes, to complement the national programmes they already use, but the Community programmes and instruments are often regarded as being impenetrable, as a result of their complexity, size, or range, etc.

The detailed assessment of 5 existing EC support initiatives, perceived as well adapted to SMEs specific needs, (Eurotech Capital/Finance; ECIP/Internationalisation; First Action Plan for Innovation/R&D; LIFE/Environment; ADAPT/Training) has demonstrated that even these programmes have to be improved in terms of promotion, user-friendliness, access procedures.

So the purpose of these proposed “**national contact points**”, specifically targeted at the needs of chemicals industry SMEs is:

- To gather, select and up-date information concerning local, national and European support programmes and instruments for which chemicals SMEs are eligible
- To guide (interface role) SMEs in their search for potential support

In fact, such contact points have already been set up in some countries within national trade associations or at their initiative, but it is not the case everywhere.

1 - UNITED KINGDOM: CIA / SOCSA-SORIS

The Chemical Industries Association (CIA) has a one-stop-shop for specialised organics/fine chemicals sector SMEs (not for the whole industry). This focal point is SOCSA/SORIS whose staff comprises 2 managers, 1 secretary, and 2 part-time administrative assistants.

SOCSA has now been operating for five years. Its work programme is directed by the SOCSA management committee, which includes 12 elected members plus co-opted members from DTI, HSE, the Environment Agency and SORIS.

The SOCSA innovation group, an interest group, has made large progress in developing activities of interest to smaller companies, including representation to government funding sources.

Established in 1980 as the Specialised Organics Information Service, SORIS, based in Macclesfield, is thriving as an efficient networking and introduction service which provides “soft” chemical information, on a confidential basis where appropriate, for its subscribers, most of whom are in the specialised organics sector and beyond.

SORIS now has 70 members many of whom are very small businesses and are not CIA/SOCSA members. In addition, it has over 50 companies as members of BORIS, a parallel biotechnology service set up in January 1997 with financial support from the DTI.

The service package offered to SORIS/SOCSA subscribers includes amongst others:

- Professional, tailored and confidential sourcing and introduction to customers and suppliers
- Market research and intelligence
- Access to a complete range of UK chemicals and processes, including toll and custom synthesis

- Advance notification of regulatory issues, market opportunities and threats
- Special interest groups
- Enhanced networking opportunities through institutional and trade body affiliations, etc

SOCSA/SORIS are also in liaison with other UK Focal Points for detailed guidance on the best route to further information and funding options (e.g. BETA Technology Ltd - CRAFT National Focal Point; ACTIVATE; Business Link (200 local offices throughout the UK). These structures offer services to the chemicals industry but the reality is generally a low level of knowledge and interaction, especially ACTIVATE and Business Link. BETA do have specific responsibilities for industrial materials, which includes chemicals.

SORIS and SOCSA rely on a European institutional network of about 15 organisations and are also founder members of BRIGIT, a European technology networking project to help SMEs funded by the European Commission. Other BRIGIT partners are in Holland, Italy and Finland.

2 - ITALY: FEDERCHIMICA / CIRC

In the Italian trade association FEDERCHIMICA, the Direction of Economics Analyses and Studies is currently acting as the SME contact point with the support of the market research and consulting company, CIRC.

CIRC srl has been created at the initiative of FEDERCHIMICA, of ASSOLOMBARDA (Association of the Lombardian Entrepreneurs) and of the Chambers of Commerce of Milan and Turin. Its aim is to reinforce and promote the international development of Italian SMEs in the chemicals sector.

The service package offered includes consulting activities in 3 areas:

R&D

- Market assessment for R&D projects
- Funding search, management of R&D projects, evaluations
- Training workshops
- Search for resources and potential partners

Technology transfers

- Marketing analyses (products, processes), endogenous technological development
- Setting up international partnerships, technical/commercial agreements, evaluations
- Search for resources and potential partners

Technical assistance

- Implementation of technology transfers in developing countries
- Training: search of chemical expertise for development projects

CIRC's five man team relies on a network of 1000 experts which enables this structure to manage a given project from beginning to end.

Its institutional network includes amongst others CEFIC (Brussels, B), CISE (Milan, I), CNR

(Rome, I)), C.R.I.T.T. (Marseille, F), SYNERCHEM (Leidschendam, NL), T.T.I. (Luxembourg), ...and SORIS (U.K.).

3 - THE NETHERLANDS: VNCI / SYNERCHEM

Founded by the Association of the Dutch Chemical Industry (VNCI), with the support of the Ministry of Economic Affairs, SYNERCHEM is the contact point for chemicals industry SMEs.

SYNERCHEM is the Dutch Technology Centre for the chemical industry and operates as an intermediary for knowledge transfer and also as a knowledge centre. It also acts as a broker between knowledge and research centres and the chemical industry.

This centre is financed 25% by the VNCI, 25% by Dutch research institutes, and 50% by the selling of consulting services.

SYNERCHEM is located in the premises of the VNCI, where other associations related to the chemical industry are also located. Through the many contacts of VNCI with its members, the organisation's 3 full-time experts are very well informed regarding all matters of interest related to the chemical industry.

For example, VNCI sees the needs of SME's in the chemical industry both for new technologies which are more efficient and cheaper and for sustainable production methods. SYNERCHEM is the organisation bringing companies in contact with, for example, universities or knowledge centres.

SYNERCHEM's activities are:

- Formation of R&D consortia
- Provision of subsidy information
- Organisation of symposia
- Participation in European programmes
- Organisation of co-operation of chemical technology centres within the EU.

Another activity is the development of a database which can be used for searching and matching suitable partners (skills in terms of know-how or technology in relation with products and/or processes)

At national and European levels, SYNERCHEM co-operates with governmental bodies, especially the Ministry of Agriculture, The EC DG XIII (Brigit contact) and with organisations which are active in the same field, such as other technology and innovation centres.

4 - BELGIUM: FEDICHEM

At the Association of the Belgian Chemical Industry (FEDICHEM), a full-time expert acts as the SME contact point since 1984.

This expert, with the support of the 80 FEDICHEM staff, provides SMEs with information covering all matters (social, fiscal, technical, environmental, legal issues). FEDICHEM has recently been given subsidies from the Belgian government to help SMEs finding partners in Far-East, Asia and Africa.

FEDICHEM does not provide financial support. This association has neither contact with the European Commission nor other national associations (no network).

5 - GERMANY : VCI

VCI has one dedicated full-time person to operate as the contact point for German SMEs. VCI provide SMEs with information, at its own initiative or upon request, whenever possible. This information covers almost everything.

VCI does not seek business and co-operation partners for its SMEs. "This is regarded a sole company responsibility. There are several other institutions (e.g. chambers of commerce, offices of national industries) helping with co-operation and business contacts abroad".

6 - FRANCE: UIC

There is no SME contact point at national level. This situation is due both to the existence of various sub-sector associations, and to the existence of a network of "chemicals industry geographical associations".

The importance of these geographical associations is increasing versus that of the national associations, because of the support of DRIRE (Directions Régionales de l'Industrie, de la Recherche et de l'Environnement) and of the Chambers of Commerce.

These regional associations are located in the premises of various employers' associations and co-operate together in order to answer SME requests.

They have specialised themselves by key issues or technical matters. For example, the Lyon chemical industry geographical association is the national expert organisation on soil pollution issues.

According to current procedures, an SME has to contact its regional association first, before contacting the national body.

In terms of financing, the chemical industry regional associations are financed by their member companies.

The creation of a centralised SME contact point is relevant according to UIC, given that proximity services would remain the role of the regional associations ;

Some topics such as access to funding mechanisms, human resources policy which depends on UIC, information on new markets and internationalisation, etc, could be defined as within the remit of this new structure.

It is worth noting that some French initiatives, defined on the same basis as the EC IBEX International Buyers' Exhibitions, have been organised with success by French private organisations (e.g. CHIMINOV'98). Such exhibitions could also be supported by the French SME contact point.

7 - SPAIN : FEIQUE

As in France, there is no SME contact point at national level. However, because many members of FEIQUE are sectoral or regional association of chemical companies, FEIQUE represents both large Spanish chemical companies and SMEs as a whole.

A significant number of SMEs are members of the following associations:

- AVEQ Vizcaya Association of Chemical Industries
- FEDEQUIM Catalonia Chemical Federation
- ADEMA Association of detergents, cleaning agents and related products manufacturers
- AEPLA Association of Agrochemicals manufacturers
- AFAQUIM Association of Fine Chemicals manufacturers
- ANFFECC Association of enamels and ceramic colours manufacturers
- ASEFAPI Association of paints and printing inks manufacturers
- FARMAINDUSTRIA Association of Pharmaceutical industry
- VETERINDUSTRIA Association of veterinary preparations manufacturers

These associations are members of FEIQUE, but have their own legal personality, and in terms of procedures, contacts between SMEs and FEIQUE have to be carried out through the association to which the SME belongs.

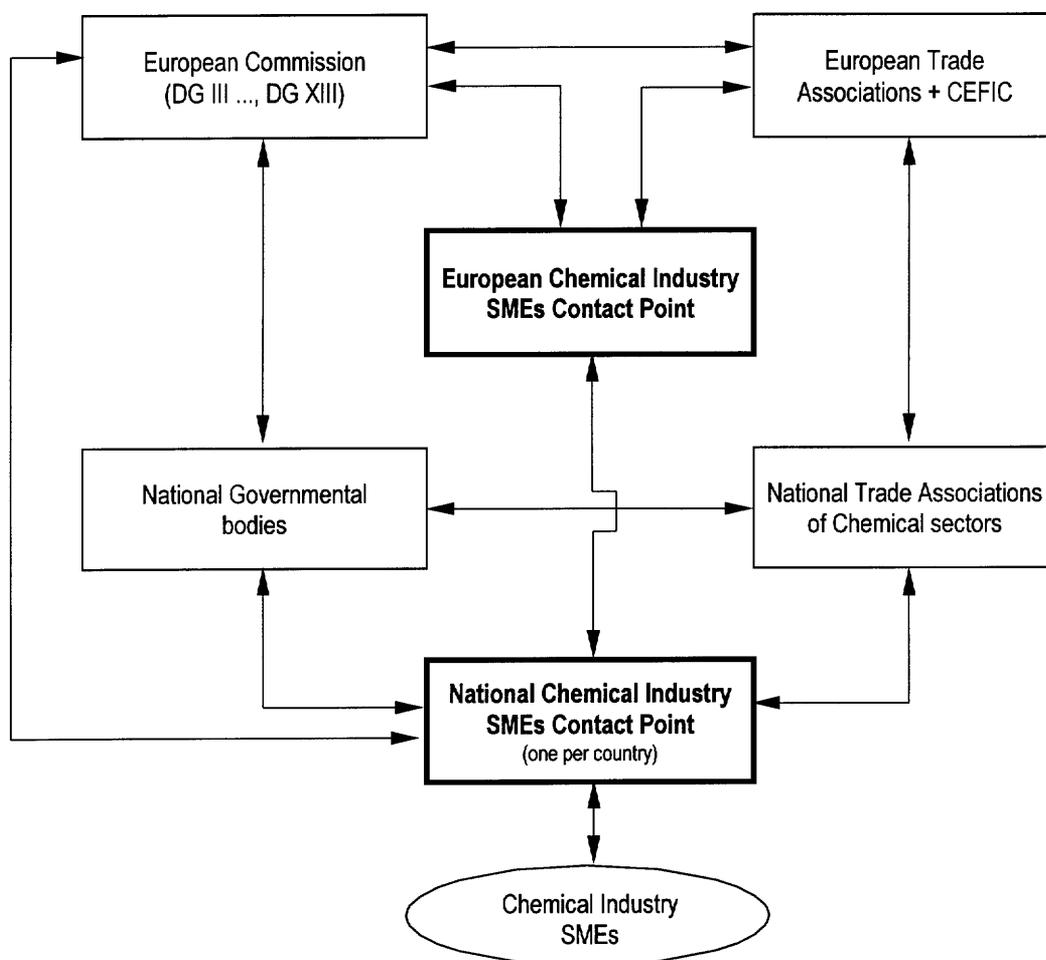
The FEIQUE network includes:

- ICCA International Council of Chemical Associations
- UNICE Union of Industrial and Employers' Confederations of Europe
- CEFIC
- Multi-sectoral companies
- Regional associations
- Sectoral associations
- Associated members

In terms of establishing a Spanish SME contact point FEIQUE, due to its central position and its network at national and European level, seems to be the relevant organisation.

C.3. COORDINATION AT EUROPEAN LEVEL

1 - ESTABLISHMENT OF A NETWORK OF NATIONAL CONTACT POINTS



As mentioned before (C.1.) the purpose of these proposed “**national contact points**”, specifically targeted to the needs of sectoral chemical industry SMEs is:

- To gather, select and up-date information concerning local, national and European support programmes and instruments for which chemical SMEs are eligible
- To guide (interface role) SMEs in their search for potential support

In terms of implementation, it appears this type of structure would require minimum staffing for each country as follows :

For local and national programmes analysis and average support services : 1 to 2 full-time experts (cf. VCI, FEDICHEM: 1; SOCSA/SORIS: 2; SYNERCHEM: 3; CIRC: 5)

- *For EC support programmes analysis, follow-up and support services: 1 to 2 full-time experts*

In our assessment, even in those countries where such contact points already exist, **the means devoted to European support programmes analysis are under-dimensioned.**

2 - FUNCTIONS TO BE CARRIED OUT BY NATIONAL CONTACT POINTS

From the analysis results, the task of national contact points should be focused in the short term on:

- The absorption of the Phase 1 report, including the description of the various existing EC programmes (about 50)
- An in-depth knowledge of a short list of EC support programmes or measures (e.g. the 5 programmes described in this Final Report) which refers to the notion of “small victories vs no end large projects” .

This last point implies a certain number of specific actions w.r.t . the EC which are described below:

- **EUROTECH:** this programme can be considered as a significant success and has been implemented in various versions (ECIP, JEV, etc.) which need to be strongly followed up by the contact points. On the other hand, it is important to maintain relationships with the EUROTECH venture capitalists, each of whom would be in charge of 4-5 projects.
- **ECIP:** Even when information on a potential investment opportunity is available, many SMEs still have difficulties in assessing it. In particular, SMEs may find difficult to evaluate their own capacity to undertake an international project, due to a lack of experience.
 - A description of the various countries covered by ECIP (business and economic environment, country risk assessment, market potential and attractiveness) has to be included in the documentation package provided by the ECIP communication service. The purpose of such information is to give some reference marks to SMEs which are just starting looking at internationalisation
 - For each country, this information package has to be complemented by a description of the various financing schemes which are the most frequently used - in that country - by ECIP's financial partners.

- The fact that Facility 1 (identification of potential JV projects or partners) is not directly accessible to single companies penalises some SMEs which want to be involved at the pre-feasibility stage because they are in a niche market. This rule needs to be made more flexible; all the more as it is easily feasible thanks to the good geographic spread of the ECIP FI network.
- **LIFE:** The number of SMEs involved in this programme is low. To generate more applications, the following improvement measures have to be proposed to the EC:
 - To adopt the CRAFT approach, grouping several SMEs together for one application and for communications
 - To encourage and/or organise, in co-operation with the trade associations, direct contacts between SMEs, so partnerships can increase
 - To provide assistance for filling application forms
- **ADAPT:** this programme will finish in 1999. It is important to draw lessons from the results of ADAPT to define what can be improved in the definition of the 2000-2006 training policy (AGENDA 2000), e.g.
 - better communication to promote training actions
 - procedure simplification in order to increase the number of SMEs and NGOs accessing these initiatives
 - quality improvement, generating a better fit between training products and specified needs (supply vs demand issues)
 - rationalisation of the training product range
 - investigation and proposition of “alternative training services and products”, e.g.
 - assistance to trainers and expert networks with the support of trade associations
 - trans-national experience exchanges (e.g. Swedish SMEs vs Spanish SMEs)
 - SME – large company experience exchanges

On the other hand, contact points will have to translate into normal language concepts such as “learning organisation” which are still not well understood

- **FIRST ACTION PLAN FOR INNOVATION:** this plan prominently features some existing programmes/instruments (ITEC, European Structural Funds, European Social Fund, BEI, etc.) and aims regularly to follow and up-date the various projects and results. The network of national contact points will of course have to be aware of all these programme modifications and opportunities.

3 - COORDINATION AT EUROPEAN LEVEL

It appears important to co-ordinate the network of these national SME contact points at European level.

This structure, which could be integrated with CEFIC in Brussels, would have as a duty to represent European chemicals industry SME interests to European government (Commission and Parliament).

Such a project was formally presented to all the European Chemical Industry Federations in Berlin on 11th June 1998, will be re-discussed in December and finalised at the beginning of next year.

In conclusion, the implementation of this series of identified measures should contribute to an improvement of the competitiveness of chemicals and allied sector SMEs in terms of internationalisation and innovation. Improved access to programmes like LIFE should also contribute to diminishing the burden that environmental legislation currently imposes on them.

APPENDICES

- 1 - Sources
- 2 - European Networks
- 3 - Euro-Info-Centres
- 4 - 5th R&D Framework Programme
- 5 - SME 's definition

SOURCES



The Phase 1 report entitled "Actions Aiming to Improve the European SMEs' Economic Environment" is available on Internet (INTERNET <http://europa.eu.int>) and is subdivided into four parts:

1. EU Enterprise Policy
2. EU Programmes and Measures to Support SMEs
3. Recent Policy Initiatives at Member State Level
4. Interviews' results

PART 1: The "EU Enterprise Policy" module has been written following information provided in:

- the Communication of the Commission, which described the 1996 Integrated Programme for SMEs and the Craft Sector - 10 July 1996 COM (96) 329
- the Explanatory Memorandum to the Commission Proposal for the 14 November 1996 Council Decision on the 1997-2000 Third Multiannual Programme for SMEs - COM (96) 98 final of 20.03.1996
- the 9 December 1996 Council Decision related to the a.m. 1997-2000 Third Multiannual Programme for SMEs
- the Commission Report for the December 1995 Madrid European Council - CSE (95) 2027
- the Commission Report on the Co-ordination of Activities in favour of SMEs and the Craft Sector - COM (95) 362 final of 08.09.1995
- the Communication of the Commission entitled « Industrial Competitiveness Policy for the European Chemical Industry: A Model » - COM (96) 187 Final of 30.04.1996
- various synopsis notes available on the DG XXIII Internet site.

PART 2: The Summaries of the various EU Programmes and Measures to Support SMEs presented in this report, comprise very practical information for more business-oriented purposes.

Their editing has been completed by gathering information from:

- the Paris Euro-Info-Centre,
- the French « Postes d'Expansion Economique »,
- the various European Commission DGs who have developed programmes involved in the implementation of the Integrated Programme,
- the French « Délégation à l'Aménagement du Territoire et à l'Action Régionale ».

PART 3: Information about the recent policy initiatives at Member State level has been gathered from various Commission reports, national surveys or "specific SME support measures or programmes" directories provided by national Ministries of Industry (e.g. in France or Germany). For a number of countries, the replies to our information request were very general.

PART 4: SMEs' behaviour w.r.t. collective programmes (face-to-face and phone interviews' results).

This module aimed to describe European Chemical Industry SME's behaviour w.r.t. the various collective programmes which have been set-up at European or national level

- Introduction
- Sales
- Production
- Innovation
- Investment Policy
- Human Resources and Training
- Environment
- SME's Behaviour w.r.t. collective Programmes

MAIN COMMUNITY NETWORKS

name	Number of Members & geographical coverage	Role
Euro-Info-Centres (EIC) DG XXIII	229 EU + EFTA 20 correspondence centres in CEEC, Med, countries	Information and advice to businesses, in particular SMEs on Community regulations & programmes
Business-Co-operation-Network (BC-Net) DG XXIII	300 advisers in 38 countries	Help businesses develop international partnerships through appropriate advice for, before and after the search of partners
Bureau de Rapprochement des entreprises (BRE) DG XXIII	500 correspondents in 70 countries in the world	Help SMEs to find partners through a very large broadcasting of their co-operation opportunities
EUROPARTENARIAT DG XXIII	60 National counsellors in 60 countries (EU, Med, CEEC, AL, Asia) promote 2 EUROPARTENARIAT events/year	Encourage co-operation between enterprises from assisted areas (objectives 1, 2, 5b & 6) and enterprises from other EU and non EU countries
INTERPRISE DG XXIII	200 partners of EU are involved in the organisation of 40-50 events per year	Promote transnational co-operation between SMEs in Europe
EC-Business Innovation-Centres (BIC) DG XVI	110 BIC (98 in assisted areas, others in Central & Eastern Europe)	Creation and development of innovative SMEs through provision of integrated services
Craft Network of Focal Points DG XII	200 Focal Points (23 National Focal Points), 18 points (EU+EFTA)	Disseminate information to SMEs on RTD programmes and help them in their applications for RTD programmes
Innovation relay Centres IRCs DG XIII	56 Members EU + Norway + Iceland	Promote innovation notably via technology transfer, exploitation of research results and promotion of EU-RTD programmes
Organisations for Promotion of Energy technologies (OPET) DG XVII + XIII	50 in Europe - New call for proposal in 1996	Build relations with the industrial world and SMEs
MIDAS (Multimedia Information Demonstration and Support Network) (will replace NAPs in 1997) DG XIII	22 centres in 17 countries (EU + EEA)	Raise awareness and organise information campaigns on new information services
NAPs (National Awareness Partners) DG XIII	30 Members EEA	Promote the use of electronic information services
EURES (European Employment Service) DG V	450 Euroadvisers in 15 MS + Iceland & Norway 12 cross-border structures	Facilitate freedom of movement for workers and help employers recruit at international level
European Crossborder Consumer Information Centres DG XXIV	21 Members in EU countries except Greece and UK	Information to consumers on crossborder activities linked to consumer issues
Rural Information Carrefours DG X	70 in EU countries	Community information to rural communities, stimulate exchange of experiences and partnerships between European and rural regions
Info-points-Europe ; Euro-libraries - DG X	all Members States	Information for the general public

EURO-INFO-CENTRES

General Objectives

The Euro-Info-Centres (EIC) are in charge of the dissemination and treatment of community information through 229 sites in Europe. In co-operation with the local organisations of each country, these Centres answer all questions concerning norms, tax, public markets, Euro and other aspects of conformity with the common market. The EIC may facilitate co-operation contracts between businesses and especially SMEs. Some third countries have created contacts with this network: Poland, Czech Republic, Slovak Republic, Norway, Switzerland, Israel, Jordan, Tunisia, Lebanon, Morocco and Malta.

Recipient companies

Companies and especially SMEs.

Projects Supported

SMEs may contact the local Euro-Info-Centre in their area in order to solve problems or to ask specific questions concerning their activities.

Mode of application

The Euro-Info-Centres have four main tasks:

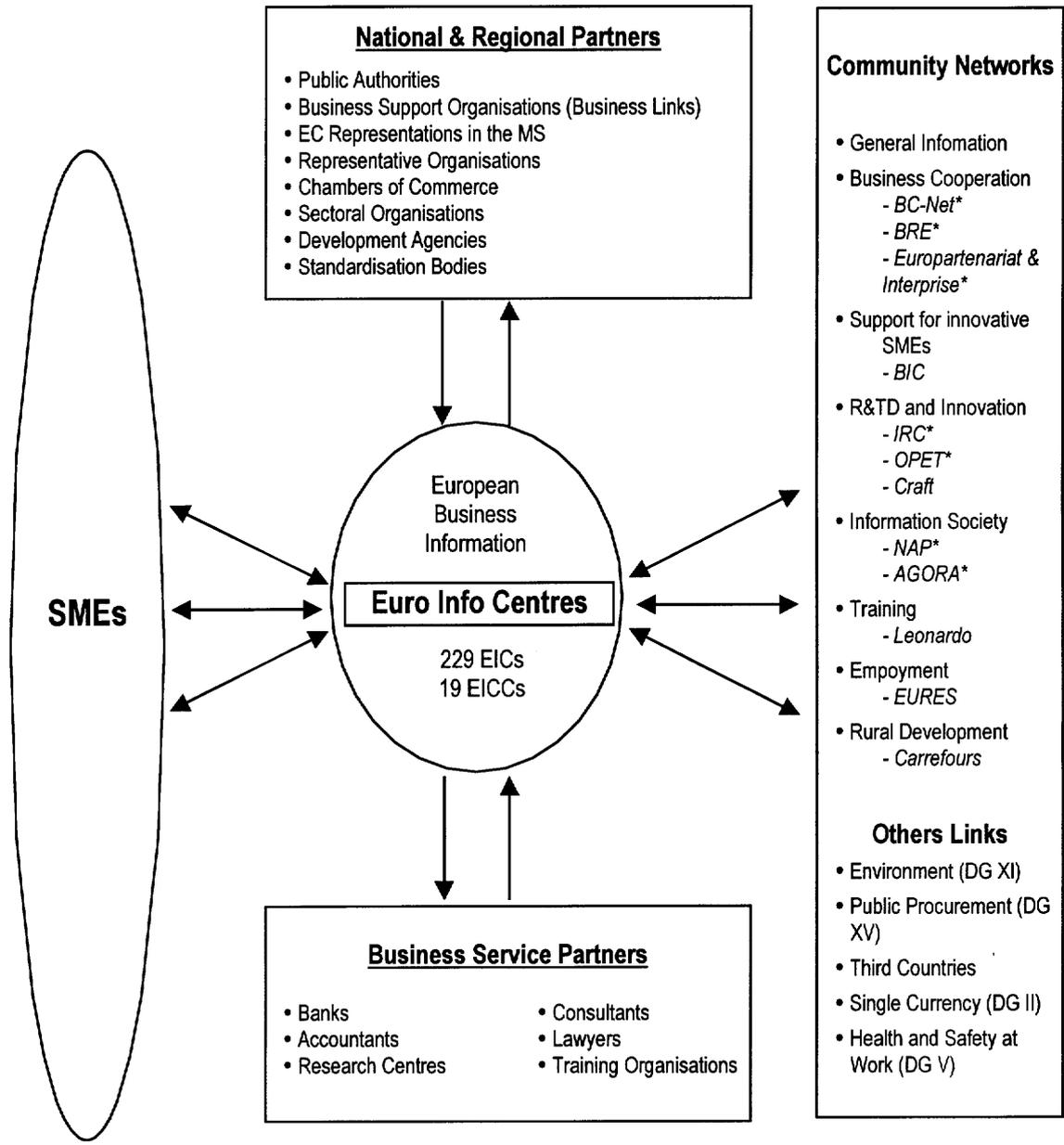
- the diffusion of information for companies via a special data base. Information may concern financial instruments, research and development programmes, technical norms or legislation of the different Member States
- the diffusion of community information through the organisation of special meetings like EUROPARTENARIAT or INTERPRISE
- advice for SMEs wanting to respond to Calls for Proposals to specific RTD programmes, to receive special financial grants, to study development opportunities or to facilitate transnational co-operation
- the EICs serve as an interface between SMEs and the Commission in order to identify their main problems

Contact

European Commission (rue d'Arlon, 80 - B 1040 - BRUSSELS):

		Phone number	Fax number
Information	DG XXIII Euro-Info-Centre Mrs DISS	322 295 12 23	322 295 55 40

EICS AS FIRST-STOP-SHOPS



* Some EICs act in synergy with these networks

Source : European Commission

5 ^HFRAMEWORK PROGRAMME (1998-2002)

Research remains a priority in order to improve competitiveness, promote innovation and create jobs. As with the previous programme, the fifth Framework Programme (1998-2002) provides strong support for research and technology development: ECU 16,3 bn. will be allocated, i.e a 3% increase compared with the previous one.

The programmes of which the new FP is composed are characterised by:

- the targeting of activities on major EU policy objectives (e.g. improving the employment situation, the quality of life of citizens, and the competitiveness of firms)
- the concentration of efforts on a small number of themes and activities so as to maximise the impact of the measures initiated and resources deployed

Compared with the previous one, a smaller number of programmes has been adopted (6 programmes within three major thematic programmes), in order to:

- concentrate a critical mass of human and financial resources on each subject addressed
- incorporate greater flexibility for taking account of the priorities to be covered and adjusting the budget where necessary
- adopt an integrated approach covering the full complexity and many and varied aspects of the economic and social issues targeted

The programmes are composed as followed:

- Programme I: « Unlocking the resources of the living world and the ecosystem » covers mainly the health, agriculture and environment dimensions. As instance, the key action « Health and food » covers the twin dimensions of health and agriculture. Environmental aspects are also included, with work on pesticide, fertiliser, and heavy metal residues in foods. The key action « Management and quality of water » combines the environment, agriculture (looking at both the water requirements in this sector and the effluent problem) and health (impact of water quality on health) dimensions.
- Programme II « Creating a user-friendly information society » reflects the convergence of information, communication and audiovisual technologies in a host of applications: the key actions « Systems and services for the citizen », « New methods of work and electronic commerce » and « Multimedia content » integrate the contributions made by digital and multimedia technologies in the development of services in a variety of fields: health, administrations and transport; trading in goods and services; publishing, education and language industries.
- Programme III: « Promoting competitive and sustainable growth » is designed to take account of the close integration, in many fields of activity, of industrial production, transport, energy and sustainability. For example: the key actions « The city of tomorrow » and « Products, processes and organisation » cover various aspects of industrial production and sustainability (one key objective being to reduce environmental impact) as well as the reduction of energy consumption (an objective which also applies to the transport-related key actions). The key action « Sustainable mobility and intermodality » touches on industrial production and energy aspects (optimum use) in addition to the development of a sustainable intermodal transport system.

SME DEFINITION

It seems important to state the precise definition adopted by the European Commission concerning SMEs, on 7th February 1997. This definition will be applied in legislative texts and community programmes destined for SMEs, even if the current project is not modified. Of course, Member States have the possibility of adding to this definition, to take account of national characteristics or priorities.

The European Commission has decided to consider three main criteria: employee numbers, annual turnover, independence.

- a medium enterprise has less than 250 employees, a turnover less than ECU 40 m. or a balance sheet of less than ECU 27 m. with no corporate shareholder holding more than a 25% interest
- a small enterprise is an independent enterprise employing less than 50 persons and having a turnover of less than ECU 7 m. (or balance sheet of less than ECU 5 m.).
- a micro enterprise has less than 10 permanent employees.

Nevertheless, some programmes include as SMEs firms up to 500 employees. Generally, these variances are specified in the general eligibility conditions.