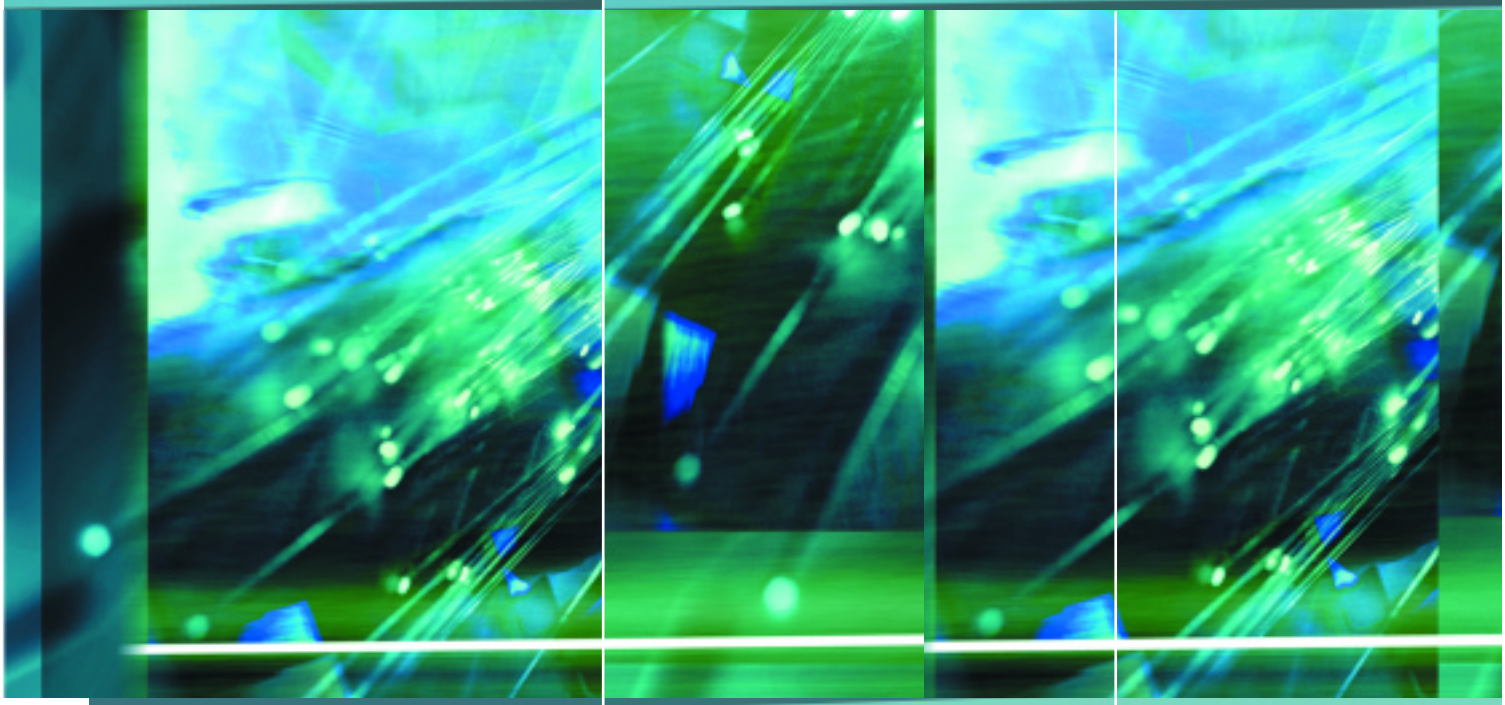

# EUREKA ANNUAL REPORT 2000/2001

Bringing European Innovation to a World Market

Contents



**EUREKA** *brings together different players:*

Eureka

Spanish Chair

Hellenic Chair

5th Framework programme

European Parliament

Innovation programme

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ΕΥΡΩΠΑΪΚΟ ΚΟΙΝΟΒΟΥΛΙΟ
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EUROPAPARLAMENTET

# EUREKA SPANISH CHAIRMANSHIP 2000-2001

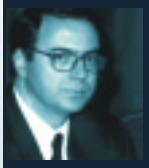
Anna Birulés, Spanish Minister for Science and Technology

In June 2001 the Ministerial Conference of the Spanish Chairmanship approved 190 new projects and 63 subprojects of the strategic cluster projects. Together they account for 4013 mEUR. A new umbrella project **"EUROTOURISM"** was started in the area of sustainable tourism and cultural heritage. The Spanish Chairmanship launched a new **EUREKA** award for a fast growing enterprise — the "Lynx Award". The MC also introduced a new strategy for non-European countries to participate in **EUREKA**. Special initiatives on venture capital and the service sector were started. Estonia and the Slovak Republic were accepted as new members of **EUREKA** by the Ministerial Conference.

In addition, the Ministerial Conference unanimously supported the collaboration between **EUREKA** and the Framework Programme, as demonstrated by the joint working group set up with **EUREKA** and the European Commission. The Ministerial Conference further stated that **EUREKA** should be an important mechanism in ERA and that coordination with the Framework Programme, through the joint working group, should be a priority.

*European actors in European innovation policy*

**NIKOLAOS CHRISTODOULAKIS**



*Hellenic Minister for Development*

"The Hellenic Chair wants to support the Europe-wide creation of knowledge intensive fast growing SMEs in key technology fields and to mobilise the participation of existing SMEs in **EUREKA**."

**PHILIPPE BUSQUIN**

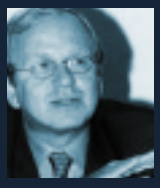
*Commissioner for Research*

"**EUREKA** and ERA are ideal partners"

**ERKKI LIIKANEN**

*Commissioner for Enterprise and Information Society*

"The cooperation between the IRC network and **EUREKA**



will benefit European industry to bring their innovations to the market."

**NICOLE FONTAINE**

*President of the European Parliament*

"Competitiveness is a key factor for growth and employment"

# EUREKA — A TOOL FOR INDUSTRIAL INNOVATION

*EUREKA is an ideal mechanism to support innovative projects, encouraging innovation across all sectors of European industry. With this in mind, EUREKA intends to build on its reputation as the tool of choice for Europe's innovative companies.*

EUREKA is **decentralised**, with much of the operation of the Initiative handled in the member countries. These national offices work in partnership, to coordinate national funding among the countries involved in a specific project. Whilst the national offices are close to participating companies, the network is backed up by a secretariat at European level, which is continuously evaluating EUREKA's performance, looking at the results of individual projects.

The **bottom-up** principle is fundamental to EUREKA. Companies approach EUREKA for support for their ideas at the time which suits them, rather than waiting to respond to a call for proposals.

This approach is widely supported in industry, but EUREKA wants to build on this by developing much closer links with all the organisations involved in innovation at local level. For example, the EU's Innovation Relay Centres network, and the TAFTIE network of national innovation agencies are just two with which EUREKA is working. Greater **interaction and cooperation** between local and European agencies will be a step forward. But more concrete relations will be required to realise the full benefits, and overcome the barriers between different organisations. To this end, EUREKA and the Commission expect to agree on a range of initiatives, including project exchange and the sharing of tools to help innovative SMEs.

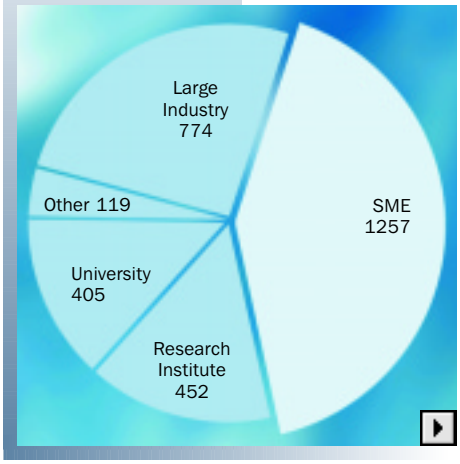
With the addition of two new members, the Republic of Estonia and the Slovak Republic, the EUREKA **network** now includes 31 countries and the European Union as full members. Participating in EUREKA projects is helping to prepare companies from the Central and Eastern European countries, which will soon join the European Union, for the new commercial environment they can expect. Even non-members of the EU, like the Mediterranean countries, can become involved in EUREKA projects and are likely to benefit both technologically and economically.

# SMEs IN EUREKA

*The European Commission and* **EUREKA** *have agreed that helping innovative SMEs is one of two areas for strengthening cooperation in the European Research Area.*

Europe's small companies make up the lion's share of the economy, of jobs and of production. Thousands of small companies supply vital components and services to large companies. Without these, new products would be more expensive and slower to come to market. **EUREKA's** flexible and bottom-up structure presents an ideal opportunity for small high-tech companies wanting to develop and launch new technology in a rapidly changing marketplace.

*Types of organisation in ongoing projects*




**EUREKA** is a network that is perfectly positioned to help Europe's innovative small companies, with its decentralised and pragmatic approach responding to industry's needs. Its wide membership, covering practically all the continent, and its network structure, has proved ideal at bringing together companies from across Europe. This not only helps in establishing research partnerships, but, just as importantly, opens doors to new markets.

## ACTIVATING FINANCIAL SUPPORT

**EUREKA** aims to support the creation of knowledge-intensive, fast-growing SMEs in key technology fields, as well as to encourage the participation of existing companies.

Information and communications technologies, biotechnology, biomedical engineering and telemedicine are all knowledge-based industries of importance to **EUREKA**, as evidenced by the number of projects already supported in these fields. But these fields also currently attract much of the private investment, and specifically venture capital, in Europe. **EUREKA's** intention is to identify how to institutionalise the participation of private investors in **EUREKA** projects. The starting point will be those sectors of the market which currently have strong venture capital involvement. To promote this initiative, the "Lynx Award" was created during the Spanish Chairmanship, which goes to a high-growth small or medium-sized company *(see page 6)*.

# EUREKA — THE LYNX AWARD

## FAST GROWING ENTERPRISES

*The* **EUREKA** *Lynx Award was established in 2001 during the Spanish Chairmanship to highlight fast-growing, high-tech SMEs which offer good prospects for private investors. Companies eligible for the Award had increased turnover by 25% or more in each of the preceding three years, helped by participation in a* **EUREKA** *project. The Award is worth €50,000 to its winners, who also gain valuable exposure in the investment community.*

The 2001 Lynx Award winner was the French company, Coheris, which is just seven years old, but its growth rates in that time are phenomenal. Turnover has increased by an average 83% each year since 1995, while growth in profits has been even steeper, at 91%. Employment has grown too, from 50 posts in 1997 to over 430 in mid-2001.

Customer relationship management software is central to many of today's service industries, which aim to offer customers a personal service from a distance by telephone or e-mail. Coheris has built its success through a suite of software products which have, so far, been installed in over 700 companies. To take one example, Wanadoo, France Telecom's internet portal, uses Coheris software for its call centre, in which 25,000 calls per day are handled by 1,500 operators. Unlike those of many competitors, Coheris's products are off-the-shelf packages and so can be up and running in client's premises within a month.

Coheris's big break came from participating in a **EUREKA** project, in 1997. With Belgian software company EMD, the **MAIGRET project (E! 1815)** aimed to industrialise know-how from establishing call centres, resulting in a suite of software packages.

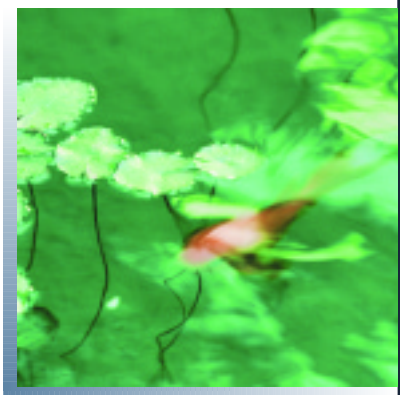
"MAIGRET allowed Coheris to find its feet, grow into a software publisher and turn ourselves into the major European player we now are." Coheris's chief executive, Jean-Pierre Créput, explains how **EUREKA** participation was so significant for the company.

# EUREKA — THE LILLEHAMMER AWARD

## IMPROVING EUROPE'S ENVIRONMENT

*Every year,* **EUREKA** *recognises the contribution made by a project to improving Europe's environment, developing sustainable solutions to the problems of waste and pollution. The Award was established in 1994 by the then Norwegian Chair, in the town whose name it bears. The winner receives €10,000, together with a painting by Norwegian artist Jakob Weidemann, a resident of Lillehammer.*

The 2001 Lillehammer Award was shared by two projects in the field of water treatment, both under the **EUREKA** **EUROENVIRON** umbrella. While both will help communities ensure cleaner supplies of water, the technologies behind each project are quite different.



### AUTOMATIC MONITORING

Deliberate polluters, whether industrial or agricultural, will always try to beat the system. New, more robust and more mobile monitoring equipment is required to ensure that such discharges of waste do as little damage as possible to water supplies, while offering a better chance of catching the culprits. The **AUTORES project (E! 853)** has developed a system which provides automatic round-the-clock protection for rivers and water treatment systems. A core system provides basic function, while a range of add-on modules allows detection of many specific chemical and biological pollutants. A mobile unit permits the tracing of discharges upstream to identify the source. "Working with **EUREKA** gave us self-confidence, and helped us when approaching potential customers," says Zsigmund Kovacs, of Spanish lead partner, Aquatec.

### NATURAL CLEANING

A constructed wetland (CW) is a simple, natural way to clean waste water. The **SECONWET project (E! 1393)** has developed and implemented CWs in Slovenia, Italy and Croatia. The CW consists of a series of beds of soil sand and gravel, planted with native plants such as reeds. Waste water is filtered through the beds, where the plant roots and micro-organisms clean it, producing a reusable resource at the end of the process. A CW the size of a football pitch is sufficient to clean the waste water of a town of 10,000 people. Best of all, the CW requires no machinery, power or buildings. "In fact," says Tjasa Bulc, of Slovenian lead partner, Limnos, "a CW is designed to merge imperceptibly with its surroundings."

# EUREKA CLUSTERS
## — NETWORKING FOR EUROPEAN SUCCESS

***EUREKA** has always been an instrument for industry, but most importantly, industry has been responsible for the definition of much of **EUREKA**'s structure.*

The definition of the aims and management of the clusters is undertaken by the partner companies themselves, **EUREKA** being a facilitator. Having defined their aims, the clusters' managements are best placed to identify the companies — large or small — to do the development work required to meet specific goals. The result is that, through strong coordination, the clusters effectively produce better results than would their participants working separately.

Europe's information and communications technology industry has, so far, been the sector most involved in **EUREKA's** clusters, although other industries are starting to take up the cluster format. Timing is vital in IT development, with the first to market gaining a huge advantage over competitors. EICTA, the European industry association for the sector, believes that public support for R&D should concentrate on generic technologies and applications, stimulating industry to cooperate. **EUREKA's** cluster structure provides just this environment, and it is no coincidence that the experience gained will give **EUREKA** a strong role in encouraging similar initiatives, such as integrated projects, in the European Research Area.

*The value of cluster projects in EUREKA:*

| * ongoing projects at 30 June 2001 | | Total budget mEUR | Number of ongoing projects* | Value of ongoing projects* mEUR |
|---|---|---|---|---|
| MEDEA+ | microelectronics | 4000 | 26 | 1082 |
| EURIMUS | microsystems | 400 | 12 | 65 |
| PIDEA | electronics packaging and interconnection | 400 | 13 | 96 |
| ITEA | embedded software systems | 3200 | 24 | 519 |
| SCARE | electronic waste recycling | 101 | 5 | 14 |
| EUROFOREST | sustainable forestry | 100 | 11 | 3.5 |

The microelectronics sector has reaped the benefits of the MEDEA cluster which ended in December 2000, and its forerunner, JESSI. In 1990, European manufacturers had just 5% of the world market in semiconductors. Today, thanks in great part to the results achieved through MEDEA and JESSI, European companies account for more than twice this market share, up to around 10%. MEDEA's work is continuing in the MEDEA+ cluster project, which will have a higher value than any previous cluster project.

# PROJECT GENERATION
## — MEETING OUR TARGETS

*The Turkish and German Chairs have began to implement initiatives to rejuvenate* **EUREKA**, *to keep it in the frontline of European innovation. The Spanish Chair has developed these initiatives, seeking to generate momentum.*

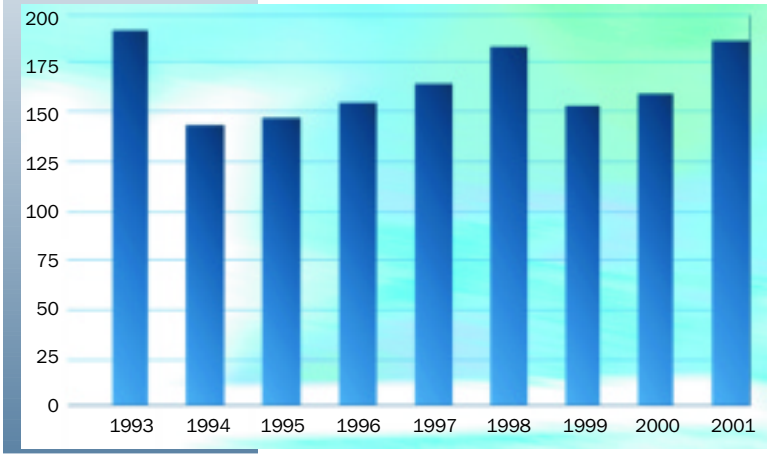
One of the successes of the past year has been the agreement by member countries to set themselves targets for generation of new projects. In large part, these targets were met, resulting in the highest number of new projects for many years. The total of 187 new projects, with a combined value of €499.4 million, ups the gradient in **EUREKA's** recent positive trend in new projects. It represents, furthermore, a solid foundation for coming years as **EUREKA** takes its position in the European Research Area.

These figures do not include a major category of projects, representing a huge share of **EUREKA's** activity in recent years. The cluster projects, *as noted on page 8*, are managed by industrial participants themselves, and their sub-projects tend to have much greater budgets than the traditional **EUREKA** projects.

Umbrella projects (whose figures, on the other hand, are included with the "traditional" projects) work a little like cluster projects, but on a smaller scale. They are designed to generate projects in a particular sector, enabling the sharing of ideas and results. Wider goals than would be possible with lone projects can be achieved, and the umbrella projects have also made a major contribution to the generation of new **EUREKA** projects in recent years.

**EUREKA** projects are assessed informally on both their technological innovation and their market impact. The ideal project will score highly on both counts, since this is where a real contribution is made to Europe's economy. This assessment of the "quality" of ongoing projects is vital to ensure that the Initiative is meeting its objectives. A recent assessment shows that around 70% of projects have positive scores in both aspects, demonstrating that the emphasis on quality is not misplaced.

*Evolution of the yearly number of generated projects since 1993*



# PROJECT GENERATION

## — BUILDING BUSINESS PARTNERSHIPS

***EUREKA's** decentralised structure means that each member country runs its own system, and public funding in each is disbursed according to national rules. Whilst this structure allows the member countries maximum control over their own resources, it can create obstacles for individual partners in projects if their country's priorities do not correspond to those of their partner's country.*

These differences between countries go much further than **EUREKA** of course, and one of the challenges in creating an effective European Research Area will be to ensure sufficient coordination to surmount the obstacles thrown up by national (and regional) differences in policy, procedures and funding. **EUREKA's** experience in working with 31 different national systems will be invaluable in helping navigate the new landscape. But more than that, a Europe-wide strategy for research and innovation support needs to be established.

Each member country has a different industrial base, just as their procedures differ, so it is no surprise that levels of participation in **EUREKA** differ widely. The member countries with the highest numbers of projects generated in the past year were Spain, France and the Netherlands. Not far behind was the Czech Republic, proving that a strong performance in **EUREKA** is not the preserve of large, western European countries. Indeed the smaller members often perform strongly, and when their participation in **EUREKA** is compared with national research spending in proportion to population, this is demonstrated very well. Lithuania and Iceland are just two of the smallest members who are seen to be performing strongly measured in this way. Other countries, not mentioned above, also performed well.

# STATISTICS — 2000/2001 SIGNIFICANT FIGURES

## INTRODUCTION

*The tables in this section illustrate the balance of* **EUREKA**'s *project portfolio at the end of the Spanish Chair year — 28 June 2001. They show that the ongoing projects are spread across the technological sectors, and that funding is also well distributed.*

It should be noted that the cluster projects and their sub-projects are not included in the figures (Statistic 1 and 2). *Summary figures for these can be found on page 8.* The medical and biotechnology sector has the most projects, while four other sectors — information technology, environment, materials and robotics — all perform strongly. The highest value sector remains information technology, but in terms of average project cost, lasers has the biggest projects, with information technology, robotics and transport also above the overall average.

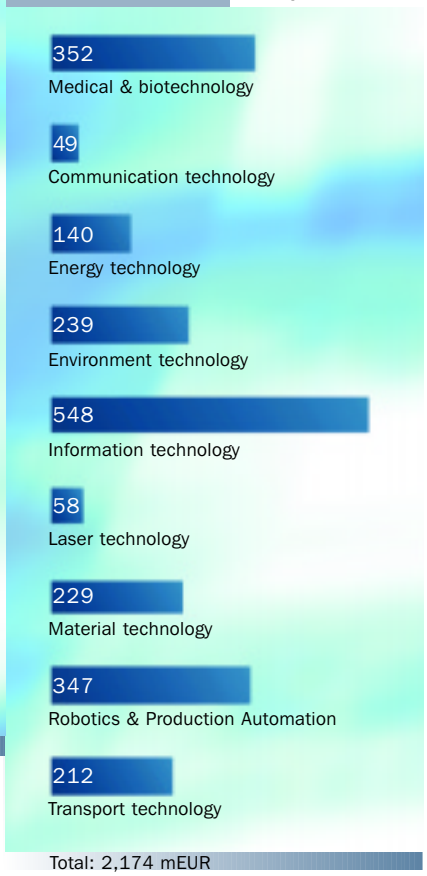
The number of organisations from each country (main partners and other partners) involved in ongoing projects is shown (Statistic 3). The important role of the main partner in project generation has to be stressed.

The national shares are shown by participant and we can see that industry is in the majority, with a very strong proportion of smaller companies (Statistic 4).

The assessment of competitiveness of new projects table aims to demonstrate the quality of **EUREKA** projects, in terms of their making a strong contribution to developing Europe's economic performance (Statistic 5).

*Statistic 1: Number of ongoing projects by area*

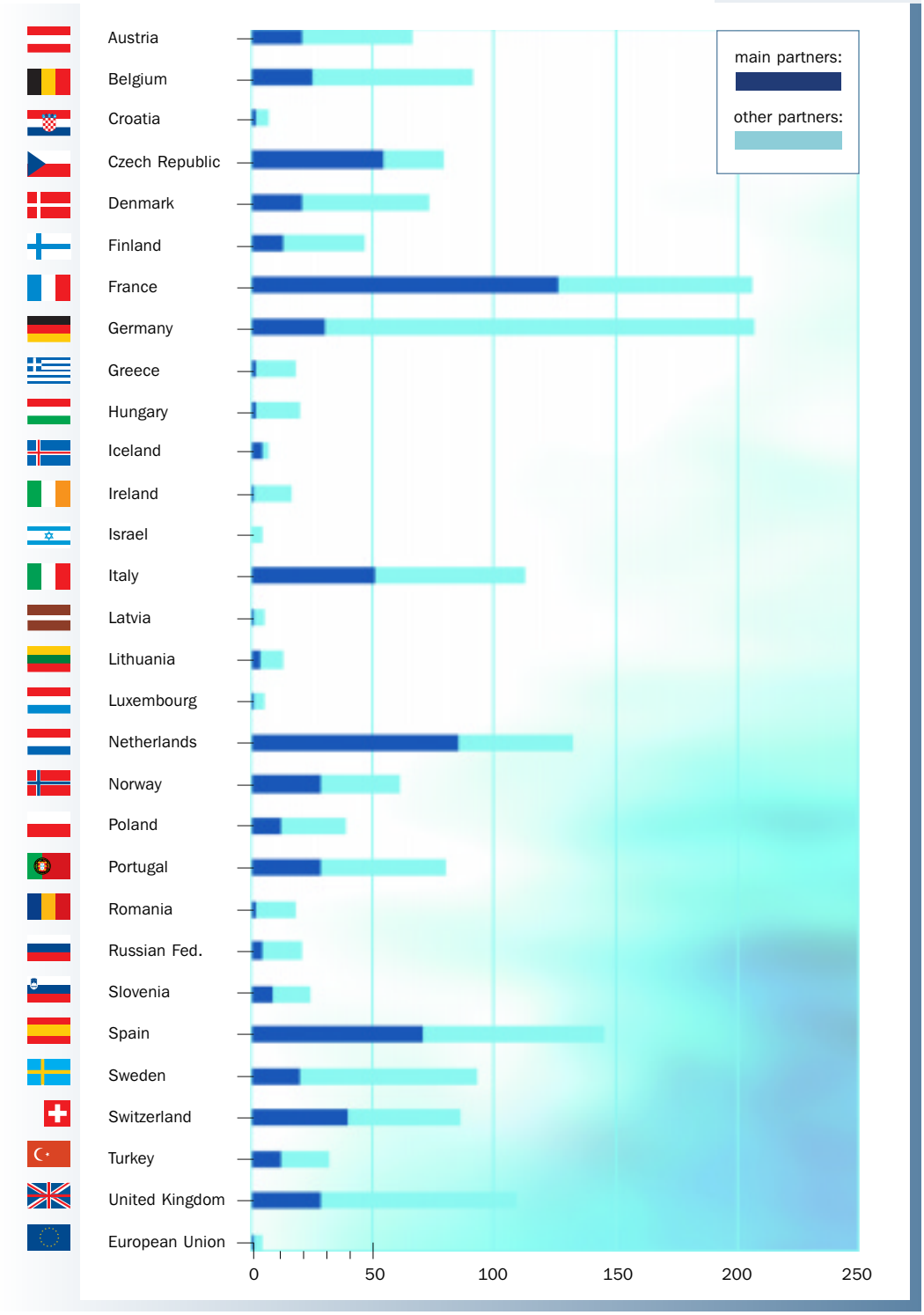

*Statistic 2: Cost of ongoing projects by area (mEUR)*



# STATISTICS

*Statistic 3: Participation by members in ongoing projects*

**The number of organisations from each country involved in ongoing projects is shown here; firstly counting participants as main partner, i.e. one per project, and then all other participants in the project.**



# STATISTICS

*Statistic 4:*
*Types of organisation in ongoing projects by members*

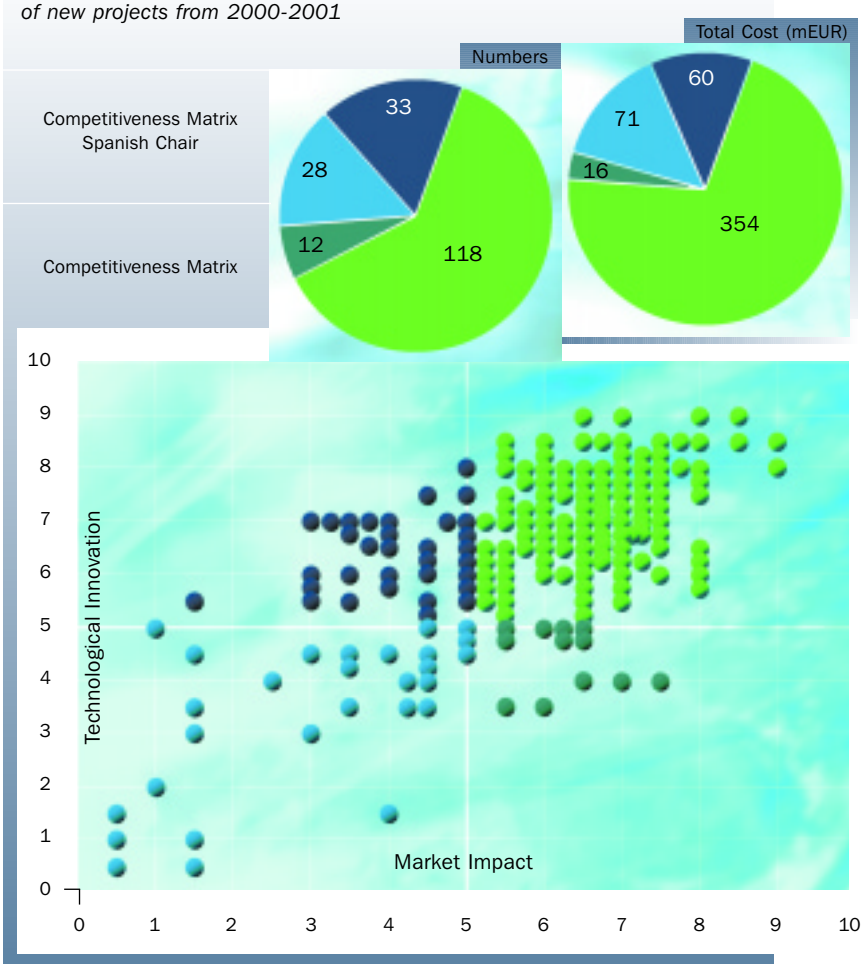
**Industry, of which two thirds are SMEs, accounts for two thirds of all participants.**

| | | Industry | | Research | | Gov't./ | Total |
|---|---|---|---|---|---|---|---|
| | | *All* | *SME* | *All* | *Univ.* | admin. | |
| Austria | — | 58 | 35 | 32 | 23 | 3 | 93 |
| Belgium | — | 88 | 53 | 42 | 28 | 10 | 140 |
| Croatia | — | 2 | 2 | 6 | 3 | 0 | 8 |
| Czech Republic | — | 74 | 51 | 47 | 25 | 2 | 123 |
| Denmark | — | 73 | 50 | 24 | 14 | 8 | 105 |
| Finland | — | 54 | 23 | 29 | 11 | 1 | 84 |
| France | — | 297 | 180 | 81 | 23 | 3 | 381 |
| Germany | — | 227 | 115 | 81 | 36 | 11 | 319 |
| Greece | — | 7 | 4 | 11 | 6 | 0 | 18 |
| Hungary | — | 12 | 8 | 17 | 10 | 5 | 34 |
| Iceland | — | 10 | 10 | 6 | 1 | 0 | 16 |
| Ireland | — | 15 | 10 | 5 | 3 | 2 | 22 |
| Israel | — | 3 | 2 | 2 | 0 | 0 | 5 |
| Italy | — | 139 | 68 | 52 | 24 | 4 | 195 |
| Latvia | — | 0 | 0 | 4 | 3 | 0 | 4 |
| Lithuania | — | 11 | 9 | 14 | 9 | 0 | 25 |
| Luxembourg | — | 5 | 1 | 0 | 0 | 0 | 5 |
| Netherlands | — | 154 | 88 | 10 | 1 | 4 | 168 |
| Norway | — | 70 | 44 | 26 | 5 | 5 | 101 |
| Poland | — | 18 | 7 | 35 | 18 | 3 | 56 |
| Portugal | — | 88 | 71 | 53 | 28 | 10 | 151 |
| Romania | — | 14 | 11 | 12 | 6 | 2 | 28 |
| Russian Federation | — | 12 | 9 | 20 | 7 | 1 | 33 |
| Slovenia | — | 23 | 16 | 11 | 4 | 5 | 39 |
| Spain | — | 169 | 124 | 60 | 27 | 11 | 240 |
| Sweden | — | 75 | 53 | 23 | 9 | 2 | 100 |
| Switzerland | — | 120 | 80 | 73 | 34 | 8 | 201 |
| Turkey | — | 29 | 21 | 18 | 13 | 0 | 47 |
| United Kingdom | — | 167 | 99 | 43 | 28 | 12 | 222 |
| European Union | — | 0 | 0 | 3 | 0 | 4 | 7 |
| Non member countries | — | 17 | 13 | 17 | 6 | 3 | 37 |
| Total | — | 2031 | 1257 | 857 | 405 | 119 | 3007 |

# STATISTICS

This matrix plots all the new projects from the past year, on the basis of an independent assessment of the expected technological innovation and market impact. Technological innovation is measured on the novelty of the technology or process expected, on the technical capabilities of the consortium involved, and on the costs devoted to the project. Market impact is assessed on the breadth of application across industry for the new product or process and its expected geographical application, as well as the market presence of the consortium.

*Statistic 5: Assessment of competitiveness of new projects from 2000-2001*




Those projects which will contribute most to Europe's competitiveness are those which score highly on both technological innovation and market impact, i.e. those in the top right-hand quadrant, where the majority of **EUREKA** projects are located.

## EUREKA — A FLEXIBLE AND DECENTRALISED STRUCTURE

**EUREKA** *is a decentralised network, bringing together 31 European member states plus the European Union, with the aim of fostering cooperative projects in research and innovation. Whilst each member controls its own funding,* **EUREKA** *facilitates the coordination of national funding.*

**THE EUREKA SECRETARIAT (ESE)** in Brussels is the central support unit, managing the **EUREKA** project database and undertaking marketing, communication and network development activities. A new website will help to improve communication and efficiency throughout the **EUREKA** network.

**FULL MEMBERS:** Austria, Belgium, Croatia, Czech Republic, Denmark, Estonia, European Union, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, The Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom.

In addition, 3 countries across Europe participate in **EUREKA** projects through a network of **NATIONAL INFORMATION POINTS (NIPS):** Albania, Bulgaria, Ukraine.

**MINISTERIAL CONFERENCE (MC):** a minister from each **EUREKA** member country and a Commissioner from the European Commission meet once a year at the Ministerial Conference, the political body of **EUREKA**.

**HIGH LEVEL GROUP (HLG):** meets three or four times a year. Each **EUREKA** member appoints one representative to this group which takes decisions on the management of **EUREKA** and prepares policy discussions for the MC.

**NATIONAL PROJECT COORDINATORS (NPC):** meets four or five times a year and is responsible for project generation and contacts with project participants in each member country.

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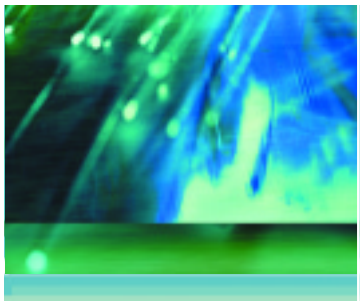
**EUREKA Secretariat**



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