

EUREKA Finance

Exploring opportunities for funding

Obtaining funding for a EUREKA project and the launch of the resulting product, process or service into the marketplace remains a challenge as supreme as the R&D process itself for the majority of innovating enterprises. Traditionally, financial support is provided either through the partners' own means or in the form of grants and loans from national agencies. Now, more effort is being made to obtain funding from alternative sources, such as the private sector.

Nevertheless, the need for external funding for projects, especially for SMEs, has been a recurring theme for some time, not least because most member countries' public sector budgets are getting tighter. This year it has gained momentum with, for example, Research Commissioner Philippe Busquin recommending the combination of financial support under the Framework Programme with national support provided by EUREKA and the setting up of technical groups to exchange information on, among other things, project funding.

Following November's Hellenic Event, the Initiative set up the SYnergies Working Group to explore potential synergies between EUREKA and the EU's Sixth Framework Programme (FP6), the EU's Structural Funds, the European Investment Bank (EIB) and the European Venture Capital Association (EVCA). Its recently published report makes some valuable and practical observations.

Structural Funds

Structural Fund support programmes represent the EU's mechanism for encouraging development at a regional level in areas of Europe, which are suffering industrial decline, high unemployment or are lagging behind economically or in their response to industrial change. As such they can contribute to the creation or expansion of competitive enterprises, particularly SMEs, in the regions in which they are eligible (which currently excludes the Central and Eastern European Countries, as non-EU members). Assistance has shifted in recent years from the provision of capital grants to alternative funding sources, such as risk and venture capital, with areas in the services sector, specifically environment, transport, tourism and culture, identified as in need of special attention. These are areas in which EUREKA projects are already underway.

The SYnergies Working Group report recommended that the Initiative should closely monitor the current priority of using Structural Funds to promote research and innovation in these sectors and to their targeting of areas where the potential for job creation is high. National EUREKA offices also need to keep abreast of the possibilities of using Structural Funds to part-fund projects (e.g. constructing a prototype in an eligible country).

Sixth Framework Programme

EUREKA's cluster and umbrella programmes have particular relevance for FP6, which will be promoting large-scale projects focused on thematic research areas. In particular, integrated research projects, a key FP6 instrument, represent a logical route and, working together, the two organisations could give a real boost to European innovation and competitiveness. The process was set in motion at the beginning of 2002 when representatives of EUREKA's FACTORY umbrella and FP6 met to explore potential areas for collaboration. The Commission has also set up an Interservice Group, in which EUREKA has been invited to participate, bringing together representatives from different DGs to explore further opportunities.

The European Investment Bank

In 2000 the EIB, the EU's financing institution, launched its Innovation 2000 Initiative (i2i) to further the Lisbon EU Summit's guidelines for developing a knowledge-based society driven by innovation. This represents a new area of activity for the EIB, focusing as it does on sectors whose high technological value could have a great impact on the economy. The initiative makes finance available for R&D and the diffusion of innovation, as well as venture capital for high-tech SMEs through a combination of loans and equity investment in venture capital funds through the European Investment Fund.

The SYnergies Report concluded that the EIB must be made aware of key EUREKA projects likely to be of interest to them in pure investment terms. Similarly, the EUREKA network must gain a greater awareness of the potential and mechanisms of the EIB to provide loans and/or equity for R&D projects, research infrastructures and the promotion of high-tech companies and incubators. EIB loans could also prove an important source of funding for large-scale ERA-style projects.

Private investment capital

Professionally managed companies marketing EUREKA-derived products, processes and services have much to attract the attention of the venture capital industry, given their innovative nature, novel products and expectations of high growth and returns. However, EUREKA needs to work harder at devising mechanisms to bring projects to the attention of venture capitalists (the Lynx Award is a positive move in this direction). Equally, project partners need to understand the requirements of venture capital institutions as prerequisites for investment and seek to meet them.

EUREKA should continue to forge synergies with complementary bodies, such as the Biotechnology and Finance Forum (a joint initiative of the EC and the European Association of Securities Dealers) and also with the EVCA (which has offered to attend EUREKA partnering events) and other venture capital networks such as BUSANET (comprising business angels or private individuals who are prepared to invest capital at the early stage of a company's development).

Finally, EUREKA will be working to improve the quality of its project portfolio to make their commercial results more attractive to potential private investors by implementing better, more transparent project assessment and monitoring procedures (see page 12).

Alain Terrailon, European Investment Bank

The EIB is the long term financing institution of the European Union. Its objective is to implement EU policy objectives, of which foremost are fostering cohesion within the EU and the candidate countries and furthering a more balanced economic development. In the framework of its i2i initiative it is developing its lending to R&D infrastructure and activities, directly for investments over €25 million or indirectly through specialised intermediaries for lower amounts. Projects should have a promoter, complementary funding and a satisfactory business plan. All proposals undergo an initial screening and an appraisal, either by the Bank or by the intermediary.

EUREKA Network

A flexible network for co-operation

EUREKA's flexible, bottom-up approach is a blueprint for collaborative, market-oriented innovation, which contributes to the creation of jobs, economic growth and prosperity. It is increasing the Initiative's influence in the European R&D community and has led during the past year to some very productive synergies with complementary bodies. All to the benefit of projects and their partners, who are free to use their own initiative in formulating, developing and financing R&D projects, in the knowledge that EUREKA is there to provide support, information and contacts when required.

EUREKA's flexible framework allows innovators to participate in three different categories of project, individual, cluster or umbrella projects, each having their own form of management and their own objectives.

Individual projects

Forming the core of the EUREKA portfolio, individual projects are originated by teams of two or more participating organisations who pool their resources and expertise to develop products, processes or services which represent a significant technological advance in their sector.

During the Hellenic Chairmanship 169 new projects were launched, amounting to €410 million in value. Of the approximately 570 organisations participating as partners, almost half are SMEs, around 120 are large companies and around 160 are universities and other research institutions. The technology sectors submitting the highest number of projects were IT (24.3%), Medical and Biotechnology (21.9%), New Materials (16.6%) and Environment (13.3%).

Cluster projects

EUREKA's cluster projects set a practical framework for co-operation, managed entirely by industry itself. They are longer-term, strategically significant projects, aimed at developing generic technologies of key importance for enhancing European competitiveness. Deliberately flexible so that they can respond to rapid advances in global technology and changes in market demands, they typically begin with a set of objectives, which are filled in over the ensuing years with scores of individually defined and funded sub-projects involving hundreds of different participants. The past year has been a productive one for EUREKA's clusters:

For example...

E! 2023 ITEA, one of Europe's principal collaborative R&D programmes focusing on software-intensive systems for the telecoms, automotive and consumer electronics sectors, is approaching the halfway stage of its eight-year duration. The ITEA Rainbow Book and the ITEA Technology Roadmap on Software Intensive Systems have been acclaimed for their strategic vision of the technological developments European manufacturers must bring about in the next few years to keep competitive. Projects are currently under consideration for the fifth call for projects - ITEA's first four calls attracted a total of 36 projects, with more than 245 partners from 18 countries taking part.

E! 2365 MEDEA+ continues to build on the impressive achievements of its predecessors, MEDEA and the pioneering JESSI which, since the latter's launch in 1989, have helped European manufacturers to significantly increase their market share of the global semiconductor market. With more than 35 projects already underway, MEDEA+ will help to strengthen key high-growth sectors. Extreme UV lithography is just one of the several challenging areas of new technology being explored, while new applications include high speed and mobile consumer electronics with multimedia and internet capabilities, automotive electronics focusing on communication and engine management and smart cards and associated safety and security solutions.

Ongoing cluster projects at 30 June 2002

	Potential budget m€	Number of ongoing projects	Value of ongoing projects m€
CAPE.21 computer Aided Process Engineering	0.5	-	-
EURIMUS microsystems	400	16	88
EUROFOREST (IMP) sustainable Forestry	100	11	4
FACTORY DNA sustainable Manufacturing	101	-	-
ITEA embedded Software Systems	3200	37	642
MEDEA+ microelectronics	4000	35	1829
PIDEA electronics Packaging and Interconnection	400	17	154
SCARE electronic Waste Recycling	101	8	22
TOTAL	8302	124	2739

Ongoing umbrella projects at 30 June 2002

	Number of ongoing projects	Value of ongoing projects m€
EUOMAR marine technology	3	7
EUROENVIRON environmental engineering	53	76
EUROAGRI food industry	40	97
CARE ELECTRONICS environmental performance of electronic products	3	7
FACTORY industrial production systems	62	305
MULTIMEDIA multimedia equipment	12	38
WOOD-INITIATIVE wood industry	3	5
LOGCHAIN sustainable freight mobility	11	23
EUROTOURISM tourist, leisure and culture industries	10	22
EULASNET Laser Technology Network	4	6
TOTAL	201	586

Umbrella projects

Umbrellas are thematic networks, which focus strategically on a specific area of technology or a challenge facing an industry. Co-ordinated by a working group of EUREKA representatives and industrial experts, their key objective is to facilitate the generation of individual EUREKA projects in their own target area.

During the Hellenic Chairmanship two new umbrella projects were launched. E! 2713 EUROLEARN will promote the development of the networks, solutions, tools and methodology needed for Europe to benefit from the significant market opportunities offered by the fast expanding e-learning industry. E! 2694 EUROCARE2000 focuses on the protection of Europe's cultural heritage, a key theme of the Hellenic Chairmanship, through the development of products, techniques, services and Centres of Excellence to support conservation and restoration work, particularly of artefacts and buildings exposed to the damaging effects of natural environmental factors and pollution.

E! 2402 LOGCHAIN, which aims to draw freight away from the roads and onto Europe's railways and inland waterways, is collaborating with the EU on a €3.2 m project. E! 2486 FOOTPRINT, which seeks to establish the environmental footprint of freight vehicles to measure their impact on road and rail infrastructure. It's a good example of EUREKA working in synergy with complementary bodies such as the EU and will feed directly into EU policy-making. The EC will be funding a thematic network to disseminate the project's results, with EU directives eventually benefiting from the knowledge derived in the project.

EUREKA presents...

EUREKA's XXth Ministerial Conference was the showcase for some of the past year's most successful projects, including:

- **E! 2343 PICASSO** is an unrivalled film restoration solution, which is enabling the TV/DVD/internet market to satisfy the huge demand for additional programmes, the majority of which are being obtained from film archives. The fragility of film means that a high proportion of this material is too damaged for today's discerning audiences and standard restoration techniques are too expensive and time-consuming. PICASSO's ingenious hardware and software system has solved the problem by enabling a film colourist to colour correct and eliminate dirt and scratches in real time during the online transfer of a piece of film.
- **EAST-EEA**, a sub-project of the ITEA cluster (E! 2023), has been attracting considerable attention this year, first in Hanover at CeBIT, the world's biggest IT and telecommunications trade fair, and most recently at the Ministerial Conference. With 80% of a car's functions operated by software-driven 'smart' devices and more on the way, this timely project brings together 20 partners from the car manufacturing industry, suppliers and universities to develop integrated, electronically controlled functions in vehicles in common pursuit of a safer, accident-free future.

EUREKA Evaluation

Creating impact through quality and transparency

EUREKA provides Europe's innovating organisations, large and small, with the opportunity to develop their ideas into marketable products, processes or services. To fulfil this commitment, and to further the Initiative's position in the wider European R&D community, specifically the ERA, EUREKA's priorities are to improve the scope of the service it offers, explore alternative sources of funding from the private sector and continue to enhance the quality and marketability of its project portfolio.

The EUREKA seal is an internationally respected hallmark of excellence. Nevertheless, the Initiative acknowledges the need for transparency in the way it operates and for procedures such as the assessment and monitoring of projects to be further streamlined and strengthened. Currently, on conclusion of a project, participants are invited to submit a Final Report evaluating its outcome. To maintain and improve project quality, however, more attention needs to be paid to the initial selection stage than is at present the case. Accordingly, EUREKA's High Level Representatives have given the go-ahead for a one-year trial of a more transparent network level procedure as an additional tool for assessing the suitability of projects for EUREKA endorsement.

Assessing project impact

EUREKA's success in achieving its objectives is measured by a process, initiated in 1995, known as the Continuous and Systematic Evaluation (CSE) system. A Statistical Report has been compiled by the EUREKA Secretariat at the end of the Hellenic Chair Year. The CSE is based on the analysis of data provided in Final Reports and Market Impact Reports submitted by industrial participants. The cumulative responses, which now number more than 1,000, are split approximately 50: 50 between large companies and SMEs.

The key points arising from this year's analysis are as follows:

- The entrepreneurial spirit is impressively high among respondents – over 70% expected to exploit the results of their projects themselves.
- Technological achievements scored highly, with 85% of industrialists rating the achievements of their projects as excellent or good, and less than 2% as bad. New knowledge, products, processes and prototypes also scored highly; publications, licences, patents, strategic alliances less so.
- Most partnerships had proved very successful. Nearly 9 out of 10 rated theirs as excellent or good. When undertaking R&D projects there is no formal requirement to prepare a legal agreement or a business plan. Nonetheless, 60% of EUREKA partnerships had drawn up a legal agreement and almost 40% had a business plan.
- The prestige of EUREKA endorsement was cited by half the respondents as their major reason for wanting to take part in a project. Asked to rate EUREKA's most attractive features, 40% cited the Initiative's bottom-up approach, 37% its lack of bureaucracy and 27% its market orientation. However, they awarded lower ratings to the support received from EUREKA in the areas of partner search, proposal preparation, ongoing assistance, sourcing funding, the database as an information tool and exploitation of technology and products. Disappointing news, but an invaluable indicator of areas in which the Initiative can improve its service.
- The main obstacles encountered by over 40% of industrial participants were technical difficulties - perhaps not surprising given the boundary-pushing nature of R&D. Around 25% were hampered by changes in partner strategy, while a fifth of projects were affected by subsequent changes in the market.

Notable trends over time

Certain trends and consistencies become discernible over time when Final Reports are grouped according to their start dates. The prestige of the EUREKA label has continued to be a key attraction for approximately half the respondents over the last decade, with a sizeable majority (currently around two-thirds) prepared to consider participating again in a EUREKA project.

Participants are remarkably constant in their views when assessing the support provided by EUREKA. Funding opportunities remain the most cited area of support over the last decade, but exploitation and the database as an information tool continue to be perceived as of limited support.

While the technological achievements ensuing from EUREKA projects have continued to be rated consistently and reassuringly high, over time there is, disappointingly, an upward trend in the number of industrialists who have rated their commercial achievements as bad or even nil.

Summary and recommendations

The CSE analysis for 2001/02 confirms that satisfaction levels remain high among the majority of respondents, and that their expectations of participation in a EUREKA project largely have been met. Moreover, there continues to be evidence of the positive commercial and employment impact experienced by many of the organisations involved in EUREKA projects.

However, the response rate to the CSE has been declining and, given the continuing absence of detailed independent analysis of the information obtained, recommendations are being put forward for the system to be reviewed. There is a potential to build links with the developments being initiated on EUREKA's project assessment methodology and to extend the system to a network level monitoring of ongoing projects.

EUREKA's Project Portfolio

Significant statistics for 2001/2002

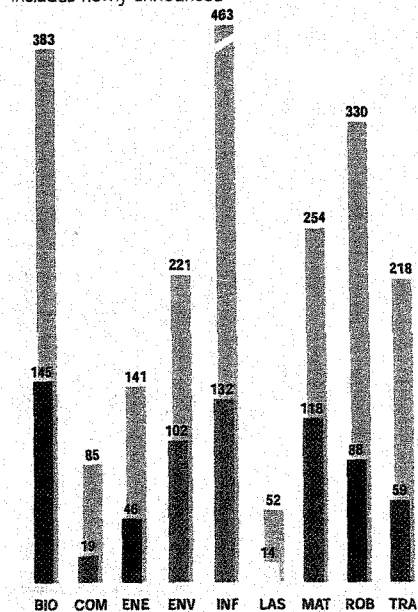
This section illustrates the composition of EUREKA's portfolio of individual projects and the pattern of participation by member countries and organisations at the end of the Hellenic Chair Year (28 June 2002). While ongoing projects are spread across the technology sectors, certain sectors have attracted a significantly high number of new projects during the Hellenic Chair Year, namely Information Technology, Medical and Biotechnology, New Materials and Environment.

France and Germany continue to have the highest number of organisations participating in projects (185 and 180 respectively), followed by Spain (153), the Netherlands (122), the UK (111) and Italy (110). France, the Netherlands and Spain also provide the main partners for the highest number of projects. However, they are followed closely by the Czech Republic, demonstrating the significant contribution that less well-resourced members are making to European innovation.

Industry continues to account for two-thirds of all participants, and almost two-thirds of these are SMEs. However, there is an interesting reversal among a handful of eastern European members, namely Poland, Romania, Slovakia, Slovenia and the Russian Federation, where research partners outnumber or match industrial partners.

Statistic 1: Ongoing projects by area*

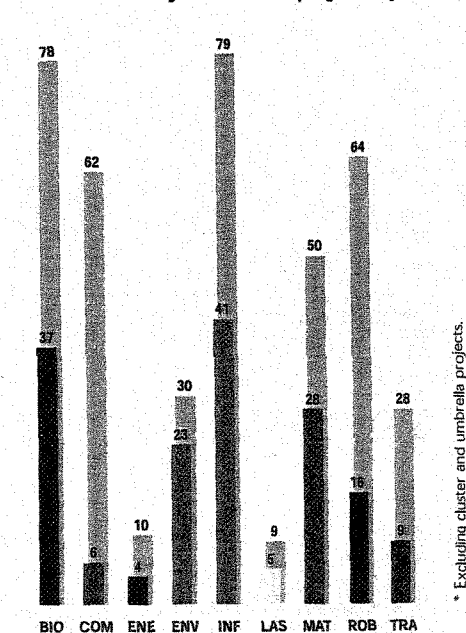
Includes newly announced



■ Cost (Meuro): 2147

Total: 723

Statistic 2: Newly announced projects by area*



■ Cost (Meuro): 410

Total: 169

No. of projects:

■ BIO Medical and Biotechnology
■ COM Communication Technology
■ ENE Energy Technology
■ ENV Environment Technology

■ INF Information Technology
■ LAS Laser Technology
■ MAT Materials Technology
■ ROB Robotics and Production Automation
■ TRA Transport Technology

* Excluding cluster and umbrella projects.

Statistic 3: Participation by members in ongoing projects

