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introducing eureka

EUREKA a catalyst for collaboration



EUREKA was launched in 1985 to help Europe's technology-oriented companies work together in research and development and in the years since 1985 EUREKA has had a significant impact on European R&D. At that time, globalisation of the world's economy was a relatively new trend, however, EUREKA's strategy was ahead of others in anticipating this and is still relevant.

Today the EUREKA initiative aims to enhance the productivity and competitiveness of European industries through the promotion of collaborative, market-led, high technology R&D ventures. Its basic principle is "bottom-up", which means that participants are free to use their own initiative to formulate, develop and finance R&D projects according to their own needs, with EUREKA offering a wide range of assistance in these areas.

A simple set of criteria for establishing EUREKA projects ensures participants the minimum of bureaucracy and a maximum of control and flexibility. The most important of these criteria require the project to:

- include independent partners from at least two different EUREKA members
- be innovative in its sector
- result in a marketable product, process or service.

EUREKA: Added Value

Projects and participants are eligible to carry the EUREKA label - an internationally recognised hallmark of excellence. Surveys conducted over the years show that project participants value the impact the EUREKA label has on their image. Similarly the EUREKA database which includes over 6,000 of Europe's foremost companies and research institutes, ensures that project participants are marketed all over Europe. In this way, they are likely to attract attention and contracts from prospective partners searching for specific technological skills to develop new products, processes or services.

EUREKA: a flexible and decentralised structure

Since its launch in 1985, EUREKA has grown from 18 to 27 members, including the European Union. The latest country to join is Lithuania, which was officially admitted as a EUREKA member at the Ministerial Conference in Istanbul in June 1999.

Full members of EUREKA are: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Lithuania, Luxembourg, the Netherlands, Norway, Poland, Portugal, Romania, Russia, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the European Union.

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In addition, seven countries across Europe participate in EUREKA projects through a network of **National Information Points (NIPs)**. These countries are Albania, Bulgaria, Croatia, Estonia, Latvia, Slovak Republic and Ukraine. As well as preparing these countries for full EUREKA membership, the NIPs are set up to provide industry and research institutes with an easy interface to EUREKA and facilitate participation in projects.

A Minister from each EUREKA member country and a Commissioner from the European Commission meet once a year at the **Ministerial Conference**. This is the political body of EUREKA, and during these meetings Ministers lay down political guidelines and officially announce the new EUREKA projects launched since its previous meeting.

The Ministerial Conference is hosted by the country which holds the chairmanship. The chairmanship of EUREKA rotates between member countries on a yearly basis and each mandate runs from June to June the following year. In June 1999 the Turkish Chair handed over to Germany. In turn, Germany will hand over to Spain in June 2000, and Greece will take over the following year.

The **High Level Group (HLG)** meets three or four times a year. Each EUREKA member appoints one representative to this group, which endorses new EUREKA projects, allowing them to get under way, as well as preparing new EUREKA policy for approval by the Ministerial Conference.

The **National Project Co-ordinators (NPCs)** are responsible for the actual contact with project participants. They run the national EUREKA offices and form the interface between project participants and the EUREKA network.

EUREKA's central support unit is the **EUREKA Secretariat**, located in Brussels. The Secretariat gathers and distributes information on projects and EUREKA, ensures continuity in the Initiative, manages the project database, assists the various bodies of the Initiative and promotes the EUREKA concept in cooperation with the national offices and the Chair.

eureka statement from Karsten Brenner



Statement from Karsten Brenner

For the past fifteen years, EUREKA has helped strengthen the competitiveness of European enterprises in the world market-place. Up till now about 750 projects have been completed with a total volume of € 8,3 billion. Currently, there are well over 600 running projects with a total budget of more than € 8,3 billion. This represents an impressive figure.

Certainly EUREKA has undergone a significant change in recent years: Above all globalisation and the broader impact of the Fifth Framework Program of the European Union have had their effect on both the scale and total number of projects.

At the initiative of Germany and Turkey, EUREKA was subject to a fundamental evaluation in the Spring of 1999. The statements generated in this exercise by the European industry value EUREKA as a flexible, non-bureaucratic instrument for pursuing near-market industrial research and development for the future.

In order to guarantee this for the future, we must give EUREKA new momentum. At the July 1999 Ministerial Conference in Istanbul, the EUREKA network mandated the German chair to initiate a process of revitalisation. This considerable responsibility has represented one of the most important challenges for the German Federal Government during its tenure as chair of the initiative.

Together with the EUREKA network, we have defined three areas on which to focus our efforts in the future:

- EUREKA as an Initiative for Small and Medium-sized Enterprises In October 1999, we organised a discussion forum with representatives of European SMEs and industrial associations. This discussion revealed that, although EUREKA already provides SMEs with a useful and desirable framework for international co-operation in R&D, the Initiative could be made even more attractive by further tightening its procedures to allow new projects to acquire EUREKA status more rapidly.
- EUREKA as a Platform for Strategic Projects In April 2000, we shall hold a further discussion forum with high-ranking representatives from government and industry. The goal here is to discuss and define new strategic topics of research crucial for strengthening European industry's market position in the field of information and communications technologies.
- Integration of Central and East European Countries EUREKA can play an important role in the development of industrial and technological relations between eastern and western Europe. Additional countries from central and eastern Europe have applied for membership in of the initiative.

The results of these consultations and discussion forums will be integrated into the new programme document Guidelines EUREKA 2000 plus, which will be endorsed at the next EUREKA Ministerial Conference at the EXPO in Hanover on June 23, 2000. With this document, whose validity from now on will not be limited to a specific period of time, EUREKA will take into account decisive economic and technological developments that are changing the world today.

We are convinced that EUREKA is on the right track and that we will be able to see first results towards revitalisation at the coming Ministerial Conference bringing the German chairmanship to a close.

eureka in 1999

**EUREKA developing
for the innovation age**



The innovation environment in Europe is changing, with innovation now regarded as distinct from science and technology policy. Supporting market-led industrial research as it does, EUREKA is moving more and more towards being an initiative for innovation. Although it has a very successful track record at project level, EUREKA's activities have been changing in recent years. Projects are becoming smaller in scale, while EUREKA's focus is changing: not only is it moving towards innovation but also the proportion of smaller companies participating is increasing. In June 1999, EUREKA's Ministerial Conference in Istanbul discussed the Strategic Review of the Initiative's future, and gave the incoming German Chair a mandate to take immediate action to give a renewed boost to EUREKA

In April 1999, an external panel delivered the "Strategic Review of EUREKA - Building Europe's Innovation Network". Their report shows that since EUREKA's launch in 1985, the changing environment for industrial R&D and innovation has affected both the rationale for the EUREKA initiative and the conditions within which it operates - greater competitive pressure upon firms, a reduction in the scope for longer term R&D and the emergence of networking as a key to innovative success.

Relaunching EUREKA

The Strategic Review panel reflected on the key changes outlined in the report and emphasised the need for EUREKA to take immediate action. The panel presented four possible scenarios for the future, illustrating them using the seasons. Autumn would see no changes in EUREKA, while Winter would mean closing down EUREKA. The Spring scenario would see EUREKA relaunched and revitalised, with stronger involvement from industry in EUREKA policy, while Summer would mean an expansion of EUREKA into a wider role in support of innovation in Europe. In Istanbul in June, Ministers agreed that the Spring scenario was best fitted for the future of EUREKA.

The Spring scenario is based on the recognition that EUREKA has been of good value to European industry. It requires a matching political commitment from the member countries to be implemented. EUREKA should be seen as a tool which provides a favourable environment for innovative firms to take the results of their R&D to the market. The relaunch will emphasise the importance of dialogue with industry, through for example the EUREKA Industry Forum, giving it a much stronger voice in the direction of EUREKA. It will also look at means of responding to the distinct needs of small companies, particularly assisting them in the post R&D commercialisation phase.

Furthermore, EUREKA is much appreciated for the "bottom-up" approach it provides for industrial companies wanting to participate in cross-border research cooperation, and this approach will be extended to EUREKA's own activities by introducing the principle of variable geometry. This means that different activities will be managed in different ways, depending on their specific characteristics, and only those countries which wish to need be involved in the management of such activities.

This work of revitalising EUREKA is now in full swing, and during the German Chair's first six months, it has set three main priorities for EUREKA: to engage in a dialogue with EUREKA's clients - industry, and especially SMEs; to develop new strategic projects; and to further open up EUREKA to Central and Eastern Europe.

eureka in 1999

Deepening the dialogue with industry

In the wake of the findings of the Strategic Review, EUREKA has made it a priority to keep up dialogue with industry. The EUREKA Industry Day - the first ever major consultation of industry in EUREKA's life

- was organised by the EUREKA Secretariat in Brussels in May during the Turkish Chair. Participants were united in underlining the value of EUREKA, and came out strongly in favour of revitalising EUREKA along the lines proposed in the Spring scenario. A common position paper was relayed to European governments urging them to take active measures to support EUREKA. Industry representatives also touched on several issues they regard as being relevant to EUREKA's future work:
- industry would appreciate if EUREKA member countries could harmonise procedures and synchronise decisions in the funding process, to make funding more predictable,
- industry sees that EUREKA has a role to play in assisting it in meeting the growing requirements which stem from the advancing pace of European legislation,
- EUREKA should support the post-R&D phase for small and medium-sized enterprises, while also providing complementary action on regulations and standards for industry.

These discussions were continued in October under the German Chair, when representatives of smaller companies and their industry associations were invited to a meeting of EUREKA's High Level Group. EUREKA recognises that the needs of small- and medium-sized enterprises are distinct from those of major companies, and as a result is developing new mechanisms in response. Participants in this discussion were keen to emphasise that quick decision-making is vital for small companies to remain competitive in a fast-moving marketplace, and called in particular for more coordination in the parallel funding procedures in different member countries.

Helping SMEs to network

Supporting companies to develop international cooperation has, over the years, been one of EUREKA's main tasks. EUREKA makes use of a special kind of partnering event to bring together companies, so-called Brokerage Events.

Brokerage Events are used by EUREKA to encourage the development of project ideas. They are organised on specific topics and enable industry and other organisations to network with each other, and form productive partnerships. Such events are particularly useful for SMEs and other companies interested in international cooperation.

However, more traditional brokerage events continued to be held during 1999. Among them:

- The Auto 2005 Brokerage Event hosted by the Spanish EUREKA office in Valencia in November, attracted car component manufacturers with interests in intelligent cars and environmental technologies.
- The EUREKA Brokerage Event on Applied Multimedia in Stockholm in June, where 18 European countries met to discuss project opportunities.
- The Wine Cluster Brokerage Event was held in May by the Portuguese EUREKA office. The organisers were very encouraged by the range of different types of business which attended. Projects discussed during the event are already under development: on the control of mycotoxins, low-input pest control, and the design of stoppers.

The newly announced cluster project in forestry was the theme of the EUROFOREST congress, held in Madrid in October. The project doubled its membership during this congress and as many as 90 organisations are now interested in participating in the project. Some 18 countries were represented, with over 300 people attending the congress.

In November the EUREKA Secretariat, with the aid of the Finnish EUREKA office, participated in the IST conference and exhibition in Helsinki, organised by the Information Society Directorate-General of the European Commission.

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New EUREKA projects in 1999

During the Istanbul Ministerial Conference in June, 153 new projects, with a total value of € 310 million, were announced (this includes projects endorsed in the second half of 1998). A further 26 new projects were endorsed in Autumn 1999, with a combined budget of € 62.5 million. The breakdown by sector of 1999's new projects was not greatly different from that of previous years. Of the new projects in 1999, some 19% are in medical and biotechnology, 17.5% in information technology, and 14.5% each in environment and new materials. Industrial participants made a very strong showing in 1999, with three-quarters of participants in the new projects from industry, compared to two-thirds in 1998.

Strategic projects

Istanbul also saw the announcement of three major new strategic cluster projects - PIDEA, ITEA and EUROFOREST - with a potential value between them so far of € 3,600 million:

- E! 1888 - PIDEA (Packaging and interconnection development for European applications) is an initiative to develop and exploit the strengths of European packaging and intercommunication technology systems; (1998-2003, €400 million).
- E! 2023 - ITEA (Information technology for European advancement) was launched by ten of Europe's top IT companies to close the gap between European and US software engineering. It focuses on the software infrastructures necessary to build complex systems. ITEA's core competencies are complex systems engineering, extended multimedia, communications, distributed information services, content processing and user interfaces; (1998-2006, € 3,200 million).
- E! 2144 - EUROFOREST will be one of the most extensive R&D projects ever set up under EUREKA and so far involves over 90 organisations. By researching ways to develop the production of hardwood and softwood species in Europe, it aims not only to preserve tropical forests, but to bring additional environmental benefits in Europe; (1999-2000, definition phase, € 0.5 million).

These three new strategic projects join others in EUREKA's portfolio such as MEDEA (microelectronics) and EURIMUS (microsystem uses). Another cluster project, E! 2009 SCARE, looking at ecological design and recycling of electronic components, moved from definition to implementation during 1999, with a budget of € 101 million.

Each of EUREKA's strategic cluster projects is in fact a number of smaller projects working on complementary activities in pursuit of a wider overall goal. By combining resources in this way, European industry gains far more than from separate projects. The cluster projects also bring together the largest companies in their field with much smaller companies, encouraging the formation of new partnerships which will outlive the project.

eureka Lillehammer Award 1999

E! 902 "CLEF" Clean Foundry

"At the beginning of the 1990s, the AFE Métal smelting works based in Feurs (France) was informed that it would have to stop eliminating its by-products through its local disposal site by the end of 1994. In those days, the foundry generated some 3 tonnes of by-products by tonne of useful pieces produced, i.e. 35,000 tonnes of by-products each year. The additional cost of landfilling the by-products, estimated at some EUR 2.5 million, risked proving unsustainable for the company.

AFE Métal took up the challenge by setting up a working group in 1991 to examine possible solutions. A wide-ranging action programme was drawn up, comprising 120 priorities. But that programme was too large for AFE Métal to carry out alone. We therefore looked around for other interested parties, and established a partnership with Magotteaux (a Belgian foundry), Laempe (a German equipment manufacturer), Huttenes Albertus (a Franco-German chemicals producer) and Cronite-Casting (a British foundry). Once the partnership was established, we submitted our programme to the French EUREKA secretariat and obtained the E! 902 label in 1992.

We organised the work into three strands:

- Reorganising the way by-products are handled in workshops, to avoid mixes and facilitate either internal recycling or external recovery.
- Adapting the smelting and casting processes, to reduce the consumption of raw materials and production of manufacturing by-products.
- Developing internal and external recycling techniques and processes.

The outcome largely exceeded our goals and enabled us to discontinue use of the local disposal site, not only at no extra cost but even with substantial gains (estimated at EUR 500,000/year).

On the strength of these results, AFE Métal decided in 1996 to launch a new activity based on the know-how developed under E! 902 and applied to other industries (mechanics, chemicals, batteries and accumulators, surface treatment, etc.) After an initial R&D stage, conclusive tests encouraged AFE Métal to start operations as an industrial by-products recovery agent. This led to the establishment of VALDI.

VALDI successfully built on the know-how gained from E! 902, achieving a turnover of FRF 17 million in 1998 and FRF 25 million in 1999. Its objective for 2000 is FRF 45 million. VALDI currently has a staff of 55.

The company is now engaged in redeploying its activities with the former partners of E! 902, with a view to moving onto the international stage - a process much facilitated by the atmosphere of cooperation and trust established since 1992.

The granting of the 1999 EUREKA Lillehammer Award to VALDI has greatly contributed to expanding the company's business both in France and abroad. This prize - the first of its kind in our new trade - testifies to the quality of the know-how we have developed and has been welcomed by many of our customers who are interested or engaged in ISO 14000 certification."

Lionel Picard
VALDI