Experience from Impact Assessment of Eureka Programmes

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The EUREKA Evaluation experience : 1996-2006

Introduction : the Eureka Initiative

1. **Continuous and Systematic Evaluation of Projects**
2. **Some impact indicators and …**
3. **Evaluation impacts on the Eureka programme Management**

Conclusion

Introduction
Highlights on the Eureka Initiative

The EUREKA Initiative is…

1. **Intergovernmental**
2. **Nationally financed**
3. **Market oriented**
4. **Bottom up!**

38 members

Austria
Belgium
Croatia
Cyprus
Czech Republic
Denmark
Estonia
European Union
Finland
France
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Latvia
Lithuania
Luxembourg
Malta
Monaco
The Netherlands
Norway
Poland
Portugal
Romania
Russia
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Turkey
Ukraine
United Kingdom

National Information Points (NIP): Albania, Bulgaria
Associated Country: Morocco

- ☐ EUREKA members
- ☐ EUREKA NIP countries
- ☐ EUREKA Chairmanship*
- ☐ EUREKA Associated Country

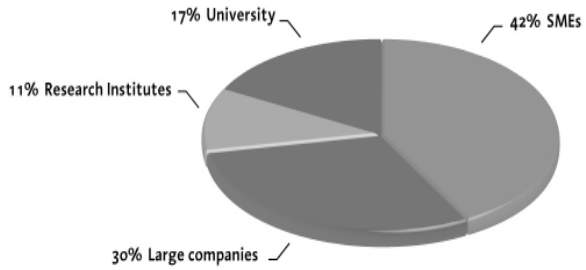
** Italy holds the Chairmanship of EUREKA from July 2006 to June 2007, followed by Slovenia*

Overview on statistics

Since 1985, 25 billion euro **of public-private investment has been mobilised to support some** 2,800 EUREKA projects

Who participates in EUREKA projects?

Nearly 13,000 partners from across Europe – and beyond



Impact indicators of what? What do we measure?

<u>The Two Pillars of Eureka</u>

i. **Strategic initiatives : two categories**
   - Clusters
   - Umbrellas

ii. **Individual projects**

ia. Clusters

MEDEA+	**Micro-/nano-electronics** www.medeaplus.org
ITEA2	**Software-intensive systems** www.itea2.org
CELTIC	**Telecommunications** www.celtic-initiative.org
EURIPIDES	**Smart systems** www.euripides-eureka.eu
EUROGIA	**Sustainable & safe energy** www.eurogia.com

ia. Clusters

- **Long-term, strategically-significant initiatives**
- **Large number of participants, many from Europe's major companies (eg Philips, Infineon)**
- **Develop generic technologies of key importance for European competitiveness**

ib. Umbrellas

1. Thematic network of public authorities and sectoral experts
2. Their objective is the generation of EUREKA projects
3. Fields of activity: manufacturing, logistics, food & feed, digital content …

(ii). Individual projects

1. Small, short-term projects
2. Ready-to-market results
3. Involve participants from at least two member countries
4. Result in a product, process or service representing a significant advance in their sector

This presentation focuses on individual projects due to time limitations

1. Continuous and Systematic Evaluation of Projects

1. **A data base**
2. **A case study approach**
3. **Annual and specific reports**
4. **Evaluation of Cluster projects**

Annual and specific reports : a culture of Evaluation at Eureka!

1. **Evaluation by External Expert Panels**
   - Dekker Assessment Report (1991)
   - Ormala Report (1993)
   - Airaghi Report (1995)
   - Davignon (1996)
   - Ernst & Young (1997)
   - Georghiou (1999)

2. **External Expert Panels AND an Internal data base built on final reports since 1996 : Annual Impact Reviews**
   - Bobe Report (2000)
   - Etc.
   - Bobe Report on Withdrawn Projects (2004)
   - Georghiou Report (2006)

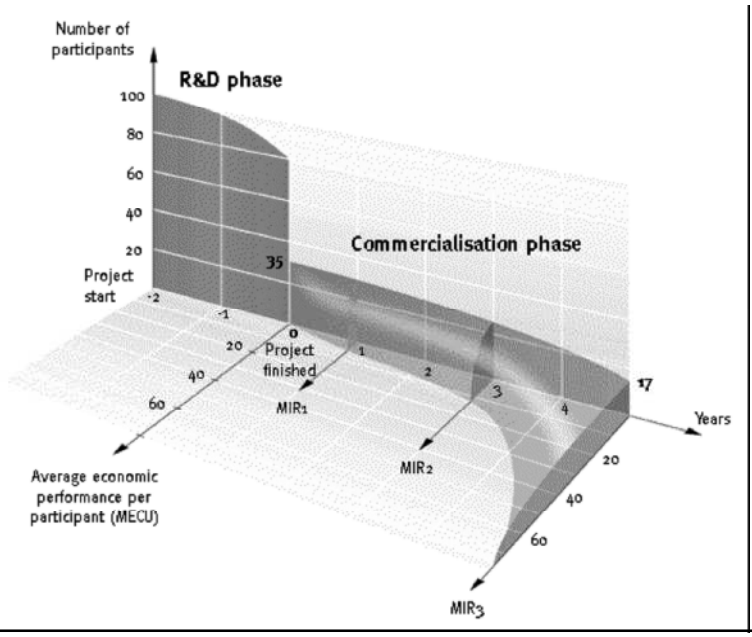
A data base

1. **At the end of projects, individual participants fill in**
   - A final Report
   - A Market Impact report (simple questionnaire)
2. **And the Main participant fill in a Final report**

The Market impact forms are filled in 1 year, 3 years and 5 years after the completion of the project : A unique Data Base since 1996

Plus the Eureka Projects Data Base

Eureka! Continuous and Systematic Evaluation (CSE)



Impacts indicators (2006) are built on two data bases

The statistics have been extracted from two databases:

- EUREKA project database (737 projects with 2855 participants)
- CSE database of Final Reports containing impact data (387 projects with 678 participants)

Coverage is 53% of projects, 23% of participants and 62% of costs

Good profile fit between 2 databases except 10% more industry in Final Reports (80%) of sample

Evaluation of Cluster projects

2. Impact indicators and …

i. Highlights on findings from the 2006 Annual Impact
ii. Highlights on findings from the case studies approach

Two key elements for the 2006 Report

- Analysis of Final Reports from Continuous and Systematic Evaluation (CSE) and data base
- Case studies of "high impact" projects by Panel
  - 17 Innovative Projects
  - 9 Sub-Cluster Projects

Highlights on findings from the 2006 Annual Impact
The "Iceberg Model "

Sales of innovative products
Reduced process costs
Licence income

Firm strategy, organisation and method learning
Use of technology in other parts of the business
New contacts/networks & prestige
Employment, competence & training

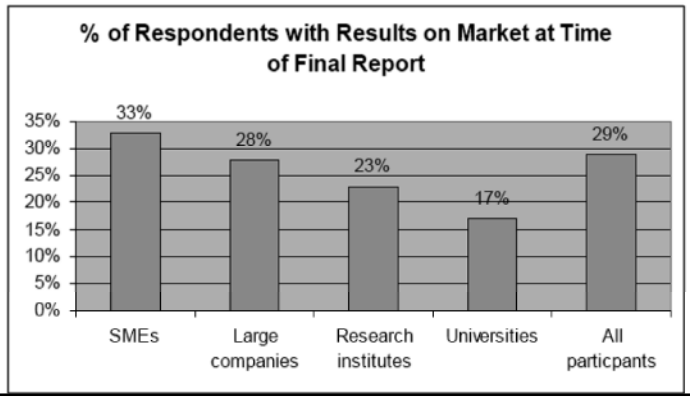
Spillovers to non-participants
User and social benefits

Highlights on findings from the 2006 Annual Impact

1. **Almost two thirds of participants (433 respondents accounting for 63%) <u>expect</u> to exploit their results in the market**

2. **29% have <u>already</u> successfully exploited them.**

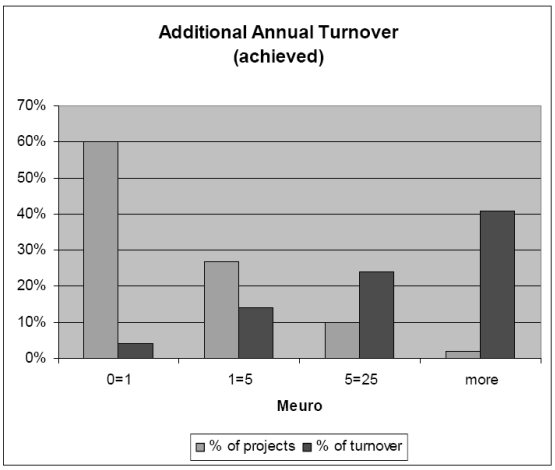
3. **SMEs are particularly successful at bringing their results to the market at or before the point of project completion.**



Findings from the 2006 Annual Impact : direct effects – sales (1)

<u>The distribution of benefits is highly skewed</u>

- **12% of the projects accounted for 65% of effects on additional annual turnover at the point of the final report,**
- **60% of projects accounted for 4%.**



Findings from the 2006 Annual Impact : direct effects – sales (2)

1. 196 participants (29%) achieved €759.4M additional turnover
2. Further €1972.6M expected within three years reported by 42% of participants.
3. Figures represent 387 projects with a total investment cost of €1123.9M reported by 678 participants.
4. Conservative estimate gives ratio of return on R&D project cost through direct sales of 68% on completion and a phenomenal 243% within 3 years.
5. Almost certainly substantial underestimate as project costs apply to twice as many participants as responded and the Final Reports cover only 50% of the projects

Example of findings from the case studies approach : Case study 2 – Σ!1872 P3D

1. Developed passive surveillance systems for tracking aircraft 200km around airports
2. ERA is SME privatised 1994 and using EUREKA project in R&D based shift from military to commercial orientation
3. ERA and its spin-offs 30-50% of total ERA's sales in period of 2002-4, total value of €5.4-9.0M over 3 years.
4. Fourteen new jobs in ERA and 20 in partner firms performing outsourced manufacture
5. Chairing international standards setting group
6. Reduced costs by half compared with conventional systems
7. Fundamental contribution to safety

E! Project case studies indicate (1)

1. *reinforcement of firm strategy and creation of pathways to change*
2. *strong effects on turnover from sales of innovative products*
3. *reduced process costs for participants and clients and cost savings through improvement of business process methods.*
4. *that key effects are generated through the broader application of technology and related know-how acquired through the project in other areas of business.*
5. *effective use of the E! label to garner prestige and market prominence as well as new links and contacts.*

E! Project case studies indicate (2)

6. *significant effects in terms of improvement in quality control as well as supporting major transformations in working methods and market applications.*
7. *a range of effects in terms of employment, and from the database evidence of new jobs created both in participants and non-participants*
8. *some limited positive spillover effects on non-participants, in particular competitors as well as the broader network players.*
9. *a broad range of hidden benefits for users and society as a whole*
10. *benefits of additionality , input from agencies and collaborative partnership.*

3. Evaluation impacts on the Eureka programme Management

1. Criteria for success
2. Analysis of withdrawn projects
3. Impacts on the Eureka Programme Management

What is a success?

A success <u>for the project</u>: goals are achieved

A success for the <u>participants:</u>
- industrialization & commercialization of new products
- productivity and quality improvements (process innovations)
- and/or technological acquisition

Main reasons for withdrawal of projects

	Main reasons	Supplem. reasons
1. Strategy	8	3
2. Partnership issues	12	3
3. Funding problems	11	6
4. Technical problems	4	2
5. Market related issues	0	1
6. Assessment aspects	7	5

Note:
It should be noted that the classifications made into 'main' and 'supplementary' reasons are somewhat subjective and that more than one main and / or supplementary reasons for withdrawal were identified for a number of the projects (see Annex 4 for details).

Impacts on the Eureka Programme Management

1. **Criteria for success analysis**
   - Check list of 20 criteria for Ex ante Evaluation criteria
2. **Withdrawn analysis linked to Eureka Programme Management changes**
   - *Early Progress Check (6 months after Eureka! label)*
   - *Project Assessment Methodology (PAM) : compulsory for Eureka! label*
   - *Co-ordination and Information flows*

Conclusion

1. **European Commission has just launched the « Eureka's Eurostars Programme » (October, 2nd) : 800 million Euros of Public/private funding for high-tech SME Research**

2. **The « savoir-faire » of Eureka programme management, particularly the Culture of Continuous and Systematic Evaluation is essential for the success of this "new level of cooperation and integration between Community and national research programmes" (Commissioner Potoçnik)**

Most materials and reports are available on the Website

http://www.eureka.be/home.do

THANK YOU