

A stylized sunburst graphic on the left side of the slide, consisting of several curved lines radiating from a central point, with some lines ending in dark grey triangular shapes.

## FP7: an industrial perspective:

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- Benefits to Industry
- Industrial R&D and University research
- Collaboration throughout Europe
- Internal organisation of large companies for an effective participation in the EC program
- Risks, difficulties and frequent errors in project organisation
- Sequence of steps (processing phases) for a project definition
- Lessons learned:
- Some practical problems during the management of a project.

- Improve the level of **scientific knowledge** of a company's R&D department in a specific strategic sector
- **Mind opening** and improve the capability to compete within the international market
- Better understanding of **new and emerging lines of research**
- Support the development of the **technology road-map** of the company
- Possibility to address **front-edge topics** (higher risk technologically) that are otherwise outside the normal development planning of the company
- Opportunities to establish new and beneficial **partnerships** with SMEs and University researchers which, without EC initiatives, may have remained unknown to large industry.

- **Industry:**
  - Industrial R&D is usually strongly constrained by short-term product development requirements
  - The business strategy and objective priorities are often modified on a fairly short-time basis (flexibility required)
  - A clear visibility of technology evolution and its maturity is a must for any industrial context
- **Universities:**
  - Academic research is strongly pushed by technology innovation
  - Less interest in engineering issues and business priorities
- A mutual convergence of both interests is mandatory for successful collaboration

# International collaboration throughout Europe



- Participation in EC projects offers a unique opportunity for **research collaboration** with other industries, SMEs and academic departments
- The **exchange of personnel** is a promising potential method of collaboration but it is not easy to implement: Industrial companies must be suitably organized (human resource programs and very open technical departments.)
- Industrial **collaboration** is simplified when previous strategic long-term agreements already hold
- Risk to share common results between companies that are essentially competing in the European market (**technology ownership and IPR issues**)
- Opportunity to **share methodology** (beyond technology); test procedures, data management, standards

- A **multi-competence department** is usually specifically appointed within large industries to support all the different phases of project proposal, management and administration
- The management and development of the technical activities are directly in charge of the **R&D department** with specific technology competence
- Strong connection with marketing and business development and **strategic departments** is recommended. It may be extremely beneficial to support some major strategic decisions (end-user selection and involvement, etc.)
- The **Marketing and Business** Development departments in large industry need to be better informed about the benefits to be gained from participating in EC programs

- **Mismatch between project objectives** and internal business priorities (product development push)
- **Joining an already established project team** has some advantages, but also many risks (possibly not convergent industrial objectives)
- Project funding is not to be considered as a simple source of money; a **high investment** in terms of qualified manpower is always required.
- **Internal conflicts** between R&D (involved in the project) and the other engineering and business department of the company (Research activity is often considered as an option, a pleasure, and a waste-of-time)
- Illusion to obtain easily **short term results** that can be immediately transferred to product development and to the customers of the company
- Under-evaluation of the technical difficulties of **system integration** and technology exploitation activity

- Best option is an end user with whom we already have an **established relationship**: mutual knowledge of strengths and weakness, and a better understanding of real interests and priorities
- **Last-minute user selection** is often difficult and risky; there is a danger of mismatching objectives and possible misunderstandings during the project lifetime
- Many end users have little **experience in R&D project management** and constraints (outside their competence field)
- **Short term requirements** not always fit with long-term constraints of the technology research
- Need to provide a **strong support** (especially on technical matters) to the selected users during all the cycle of development of the project
- Often, end users and industry use different terminology for the same items, resulting in **misunderstandings**
- End users sometimes don't see the benefit of being involved in R&D: They sometimes prefer to see demonstrable products/capabilities that give them an **immediate improvement** over their current systems.

- **Strategic objectives** of the company to be established and clearly identified
- Selection of the project's **general objectives**, in accordance with the relevant topic in the program call,
- Identification of some (a few) **key partners** (the core of the project team) and identification of the driving project goals (with appropriate technology innovation content)
- Basic structure of project objectives and identification of the **required (missing) competencies**
- Search for the most qualified partners with additional geopolitical constraints
- **End-user selection**, (trust and previous experience)
- **Continuous promotion** of the project objectives inside the company (internal market)
- **Project proposal** submission and approval => an important step but just the starting point...

- Good and effective **Project management** is not an easy task: the coordinator must be an efficient and diplomatic communicator.
- **Internal business development** units are the first natural customer to keep informed on the success of the project results
- Selection and involvement of the **end-users** is difficult, because of resources available, and also because of the usually medium-long term exploitation possibilities of the applied research
- Working with **partners across Europe** is a great opportunity but also a heavy task, because of different experiences, different background and different organisations (also, each organisation has different long term goals)
- It is important to maintain communication and improve **collaboration** among teams that already have developed a common approach and basic methodologies

- Clear identification of **its own technical and managing role** (research, systems, architectural issues, market and business evaluation, etc.), to provide a highly qualified contribution to the project team
- **Continuity of participation** to EC programs to reduce internal extra-costs and improve efficiency
- Continuity through an **incremental & coherent development roadmap**
- Strong connection between **EC management and the Industry top managers** is recommended, to establish a common strategic direction of research program and activity for the European industry
- Industry participation in the different **orientation committees** that are established by the EC is to be highly recommended (Security, Transportation, etc.)

- **Procedures** should be made easier
- **Administrative overheads** are often quite large
- Direct involvement of the **R&D management** of a company is important to strengthen the common objectives of European industry and the EC
- **End users** often don't have the budgets to attend demonstrations, workshops etc,
- Sometimes, there is no **logical successor to a given project** in the next Call, giving the danger that novel innovations are 'shelved' or that successful teams are disbanded when their continued collaboration would be extremely beneficial

# A good deal of experience

A fairly long list of projects managed by Elsig-Datamat, in the field of IST and Security, since the early times of ESPRIT phase I (1986-1992, DMA – Depth & Motion Analysis on 3D real time stereo matching for robotic automation)

**P940**  
1986- **DMA**  
Depth & Motion Analysis  
**ESPRIT 1**

**P2502**  
1990 **VOILA**  
Robot Vision Guidance  
**ESPRIT 2**

**P24977**  
1995 **STRETCH**  
Document Processing  
**IST**

Nr	Title	Framework
IST-1999-10768	BIDSAVER	IST 1999
<b>IST-1999-10808</b>	<b>VISOR-BASE</b>	<b>IST 1999</b>
Esprit 28139	EQCSPOT	IST 2000
204100	CITRINE	FP6 -SECURITY
IST-11244	HEAVEN	IST
<b>13800</b>	<b>ISCAPS</b>	<b>FP6 -SECURITY</b>
26919	LD-CAST	FP6-IST
GJU/2410	MARUSE	FP6- GALILEO
15848	QAP	FP6-IST
ENV4980742	SIREN	ENV 2C
34622	WEIRD	FP6-IST
JLSCIPS018	ASTROM	JLS - 2008
<b>217991</b>	<b>EFFISEC</b>	<b>FP7-SECURITY</b>
218133	EULER	FP7-SECURITY
225553	INSPIRE	FP7-ICT
216585	INTERSECTION	FP7-ICT
225663	ISTIMES	FP7-SECURITY
231430	PLUGIT	FP7-ICT
218621	PROPS	FP7-TRANSPORT
215605	RESERVOIR	FP7-ICT
218802	SAFER	FP7-SPACE
<b>217899</b>	<b>SAMURAI</b>	<b>FP7-SECURITY</b>
218223	SCIIMS	FP7-SECURITY
217855	SICMA	FP7-SECURITY
224332	SM4ALL	FP7-ICT
218132	STRAW	FP7-SECURITY
<b>218004</b>	<b>SUBITO</b>	<b>FP7-SECURITY</b>
225404	DITSEF	FP7-ICT-SEC