# Frequently asked questions

## 1. About us

**What is SMART and is its focus?**
SMART is an industry-driven European research initiative to define, perform and finance through public and private funding collaborative, close to market research projects in Advanced Manufacturing. SMART will be instrumented as a EUREKA cluster within the inter-governmental EUREKA platform.

**What is EUREKA?**
EUREKA is a publicly-funded, intergovernmental network, involving over 40 countries It is committed to stimulating the competitiveness of European industry by promoting international, market-oriented research and innovation. The innovative technologies that EUREKA helps businesses to develop and to exploit are benefiting European competitiveness, growth and jobs. http://www.eurekanetwork.org/

**What is a EUREKA Cluster?**
Initiated by European industry, EUREKA Clusters are long-term and strategically significant initiatives that develop technologies of key importance for European competitiveness. Addressing the needs of both large companies and SMEs, they are the engine for industrial innovation and economic growth.

Clusters catalyse the generation of innovative, industry-driven, near to the market and pre-competitive R&D projects in their respective domains. Through their industrial representation, EUREKA Clusters have a prominent and active role to play in bringing innovation to the market.

## 2. Why a new Program in advanced manufacturing

**Why is Advanced Manufacturing important?**

Manufacturing represents approximately 21 % of the EU's GDP and 20 % of its employment, providing more than 30 million jobs in 230 000 enterprises, mostly SMEs. Moreover, each job in industry is considered to be linked to two more in related services. European manufacturing is also a dominant element in international trade, leading the world in areas such as automotive, machinery and agricultural engineering.
http://ec.europa.eu/research/industrial_technologies/innovation-in-manufacturing_en.html

**Which are the challenges of the Manufacturing Industry?**

Already threatened by both the lower-wage economies and other high-tech rivals, the situation of EU companies was even made more difficult by the economic downturn. Restoring growth and achieving sustainability require a strategic shift in Europe from cost-based competition to an approach based on the creation of high added value. A number of game changing technologies (digitalization, 3D manufacturing and advanced robotics) will deeply affect the manufacturing sectors. This will bring them great challenges and opportunities. There is also an increasing demand for greener, more customised and higher quality products. Manufacturing needs to address the challenge of producing more, while consuming less material, using less energy and creating less waste.

**Why is SMART necessary?**

As a driver of competitiveness and growth European Industry needs to complement existing instruments supporting Advanced Manufacturing with a new flexible research EUREKA Program, aimed at promoting and supporting close to market innovative projects, led by industry, developed in an Open Innovation context to provide new solutions including products, processes and services for the manufacturing industry.

**How does SMART fit within the R&D ecosystem?**

The focus of SMART are industry driven projects with the following characteristics:

- In international cooperation
- In Cooperation between large and small companies, RTOs and Academia.
- Facilitating the deployment of existing technologies
- In high Technology Readiness Levels (6-8)
- In rather short time projects: 2-3 years

As such, SMART complements very well FoF (Factories of The Future) projects from H2020, the European R&D program and other instruments like MANUNET, which have a regional approach. Strong relationships are foreseen with other actors in the Advanced Manufacturing R&D ecosystem to achieve the greatest efficiency in bringing the latest technologies and innovations to the market.

# 3. SMART scope and characteristics

**Which are the participating countries?**

Any EUREKA Network country can participate. EUREKA currently counts 41 full members, including the European Union. EUREKA has 3 associated countries: Canada, South Africa and South Korea. Albania and Bosnia and Herzegovina are National Information Points

Currently 8 countries support SMART: Czech Republic, Norway, Portugal, Slovakia, S. Korea, Spain, Sweden and Turkey. There are other interested countries, which may also support its national organisation participating in SMART projects.

**Which is the technological scope of SMART?**

The technological scope of SMART is defined in SMART Technology Roadmap, a document that defines the technological aspects of SMART Program. It will include the following technology domains:

1. ***Advanced Manufacturing Processes*** including innovative processing for either new and current material or products.
2. ***Intelligent and Adaptive Manufacturing Systems*** including Innovative Manufacturing equipment at components and system levels. Including mechatronics, control and monitoring systems.
3. ***Digital, Virtual and Efficient Companies*** including Factory design, data collection and management, operation and planning, from real time to long term optimization approaches.
4. ***Person-Machine Collaboration*** including the enhancement of people`s role in manufacturing
5. ***Sustainable Manufacturing*** including innovative processes and systems for sustainability in terms of energy and resource consumption and impact in the environment.
6. ***Customer-based Manufacturing*** including customers' involvement in manufacturing value chain, from product and process design to manufacturing associated innovative services.

This is intended, non-exhaustive, list of technology domains and will be updated as industry needs evolve, in a living Technology Roadmap.

**Which are the target sectors of SMART?**

SMART cluster will be focused on specific application sectors that are critical to the European competitiveness:

- Aerospace
- Automotive
- Railway
- Capital goods
- Durable consumer goods

These priority application sectors are subject to assessment and can be updated is there is strong demand from additional sectors.

# 4. SMART Projects

**What are the project requirements?**

The project shall be included within the scope of SMART and the project consortium shall include at least two industries from two EUREKA member countries. Some countries expect (or impose) participation of a public lab and an SME if the main participant is a Large Enterprise.

**What are the projects funding conditions?**

SMART does not directly fund projects. Funding is provided by each National Funding Agency from countries involved. SMART labelled projects will apply for funding through national programmes with assistance of SMART Public Authorities Committee Members and National Project Coordinators.

**Can non-member organisations participate in SMART Projects?**

Yes, they can participate and even lead projects. In this case, organizations which are not members of Smart must acknowledge the rules and regulations laid down in the Frame Agreement as being applicable to their SMART Project by signing a Declaration of Accession.

# 5. Membership and fees

**Who can become a member of SMART?**

Any organisation with interest in Advanced Manufacturing R&D can become a member if the belong to one of the SMART supporting countries. Types of organisations that considered;

- Industrial companies related to advanced manufacturing: manufacturer of products, subcontractors, equipment manufacturers, service providers, etc.
- Associations, clusters and similar organisations that includes companies related with Advanced Manufacturing
- Research and development organisations, universities and RTOs, active in the fields related to Advanced Manufacturing are also necessary.

**Are SMEs considered within SMART?**

Yes, SMART will welcome SMEs since they form the backbone of the manufacturing industry. Additionally, SMART cluster will implement a major initiative to ensure that SME's have the best possible opportunity to participate in SMART projects.

**Which are the advantages of participating in SMART?**

An organisation participating in SMART will have the following benefits:

- Obtain R&D&I financing for close to market high TRL projects
- Use internal and external knowledge to improve innovation
- Establish links to expand markets for international exploitation
- Continued collaboration with RTOs and Academia, to access leading edge technology
- Promote or participate in far-reaching projects with complementary companies
- Establish relationship with large leading companies
- Participate in the definition of the Technology Roadmap

**Which are the membership's types and fees?**

To become a member of the SMART Association, organisation have to apply for it, sign the Declaration of Accession, stating that accept the SMART Framework and regulation, and pay a unique entrance fee, according to the organisation type.

**My organisation is not within the SMART supporting countries, but I am interested. What can I do?**

You can become a SMART Supporter. SMART is a living project and it is willing to incorporate other countries. If you are in another EUREKA country, are interested in SMART and want to support its development in your country, send us the scanned signed Support Form. There is a manual (Support Form Manual) giving instructions to correctly fill the different fields of the Support Form.

SMART
Paseo Mikeletegi, 59 Parque Científico y Tecnológico de Gipuzkoa
San Sebastián, 20009
Tel. 943 309 009 Fax 943 309 191
www.smarteureka.com