



EUROPEAN
COMMISSION

Community research

European Technology Platforms

Knowledge for growth



FOREWORD



In March 2005, EU leaders relaunched the Lisbon Strategy with a new partnership for growth and employment. Building the knowledge society and leveraging knowledge and innovation for growth is at the heart of this renewed strategy.

The Commission's proposal for the Seventh Framework Programme for Research (2007-2013) is designed to play a key role in achieving the renewed Lisbon objectives.

Rapidly evolving into "champions for growth", European Technology Platforms are playing a major part in helping to ensure that the Lisbon Strategy is realised. They have the capacity to address a wide range of innovation challenges, from the laboratory to the market, in a coherent way. The results of this research can be commercialised, enabling Europe to increase its innovative capacity to transform excellence in science into added economic value.

During meetings with the industrial leaders of technology platforms, I have been struck by their enthusiasm and professionalism and their readiness to grasp this opportunity to become powerful actors in making the European Research Area a reality.

We see technology platforms as a smart, European way of working together to support industrial competitiveness. The Commission services will continue to do all they can to facilitate this important and welcome development.

A handwritten signature in black ink, reading "Janez Potočnik". The signature is stylized, with a long, sweeping line for the first letter 'J' and a distinct, cursive script for the rest of the name.

Janez Potočnik
European Commissioner for Science and Research

TECHNOLOGY PLATFORMS – THE FACTS

What are they?

European Technology Platforms focus on strategic issues where achieving Europe's future growth, competitiveness and sustainability depends upon major technological advances. They bring together stakeholders, led by industry, to define medium to long-term research and technological development objectives and lay down markers for achieving them. The achievement of these objectives will significantly improve the daily lives of the European citizen in many areas.

Technology platforms play a key role in better aligning EU research priorities to industry's needs. They cover the whole economic value chain, ensuring that knowledge generated through research is transformed into technologies and processes, and ultimately into marketable products and services.

Why are they important?

To remain competitive, European industry needs to specialise more in high-technology areas. Investment in research must be increased, coordination across Europe enhanced and the technological content of industrial activity raised. Technology platforms address these challenges through:

- Shared vision of stakeholders;
- Positive impact on a wide range of policies;
- Reduced fragmentation of research and development efforts;
- Mobilisation of public and private funding sources.

How do they work?

Technology platforms follow a three-stage process of development:



"The development of effective 'European Technology Platforms' can help ensure European investment in R&D rapidly and effectively:

- Delivers benefits to the European citizen;
- Creates competitiveness for our companies; and
- Ends the situation in which high EU R&D investment often produces fewer than expected benefits."

BUILDING KNOWLEDGE FOR GROWTH

Technology platforms cover a diverse range of challenges that are vital to Europe's future competitiveness, including:

- ◆ New technologies leading to radical change in a sector, if developed and deployed appropriately and in time.

"We will address ambitious, responsible research, development and innovation in nanotechnology for health to strengthen the competitive scientific and industrial position of Europe and improve the quality of life and health care for the people."

NanoMedicine Technology Platform

- ◆ Reconciliation of different policy objectives with a view to sustainable development.

"The overall objective is to develop innovative chemistry and technologies, so contributing to sustainability and competitiveness by developing leading-edge advances in environmentally-friendly technologies for both chemistry and customer industries."

Sustainable Chemistry Technology Platform

"An accelerated development of sustainable, integrated transport solutions is necessary. We aim to provide a framework to focus co-ordination efforts of public and private resources on the necessary research activities."

European Road Transport Technology Platform

"A timely response is needed to combat major animal diseases which can have devastating social and economic impacts."

Global Animal Health Technology Platform

- ◆ New technology-based public goods or services with high market entry barriers, uncertain profitability, but high economic and social potential.

"We face a fast-changing and diverse social environment in our everyday life. Technology has to embrace and maintain pace with social change and with the needs of a vast range of users."

eMobility Technology Platform

- ◆ Ensuring the necessary breakthroughs to remain at the leading edge of high-technology sectors.

"Our vision is to master the revolutionary transition from microelectronics to nanoelectronics, making the 2020 information society technologically feasible and economically affordable."

Nanoelectronics Technology Platform

"Embedded systems underpin the competitiveness of important industry sectors for Europe: from aerospace and automotive to consumer electronics, manufacturing and telecommunications."

Embedded Computing Systems Technology Platform

- ◆ Renewal, revival or restructuring of traditional industrial sectors.

"Our goal is to assist in the transformation of Europe's manufacturing industry to address the challenges of the knowledge-based economy and to achieve world leadership in manufacturing."

Manufature Technology Platform

OPENNESS AND TRANSPARENCY

Encouraging participation

A strong commitment to openness and transparency is key to the success of technology platforms. The involvement of a broad range of stakeholders increases efficiency and effectiveness.

"It is essential that there be public engagement from the start. Public involvement must be at the core of everything we do."

Water Supply and Sanitation Technology Platform

"Success is dependent on transparency and openness, achieved through an open organisation and representative participation system."

Forestry Technology Platform

Technology platforms are taking concrete measures: setting up dedicated websites, providing regular information as well as setting out clear rules for participation and openness to new actors.

"The platform Chair is elected while the support group Chair changes every two years."

Waterborne Technology Platform

"We explicitly provide for openness, participation and accountability, including dialogue with societal players."

Construction Technology Platform

Awareness-raising

Information-sharing events are held regularly, complementing the communication actions taken by research organisations, regional groupings, industrial federations, etc.

"Education and training are key to ensuring sufficient availability of skills to implement technologies developed."

Textiles and Clothing Technology Platform

"Dissemination of our activities is essential; we have participated in a number of colloquia and organised a dedicated information day."

Steel Technology Platform

Involving SMEs

SMEs can add significant value to the process of developing and implementing platforms.

"SME involvement is central to achieving our aims."

Photovoltaics Technology Platform

"EuropaBio's (European Association for Bioindustries) leading role ensures strong SME involvement in the platform."

Plants for the Future Technology Platform

Awareness of the particular needs and constraints of SMEs is essential for their effective participation.

"We have developed a model for involving SMEs which we will implement more widely across platforms."

European Association of High-Tech SMEs

KEEPING UP THE MOMENTUM

Moving to implementation

More than 25 European Technology Platforms have been launched, covering a wide range of technological challenges. Most of these have now defined their objectives and are reaching the implementation stage.

"We will continue to act as the proposer, general promoter and disseminator of the Strategic Research Agenda as the standard point of reference for all aeronautically-related research work across the Community."

Aeronautics Technology Platform

"The Deployment Strategy requires close collaboration between private and public entities in order to bridge the gap between the present research/prototype demonstration stage and the full-scale, commercial introduction of hydrogen and fuel cell technologies."

Hydrogen & Fuel Cells Technology Platform

"To achieve our vision requires commitment from those involved. It requires the implementation of proven research solutions, the development of breakthrough technologies and an appropriate legislative framework. In other words, every player would have to deliver what is expected of him or her to make the Strategic Research Agenda happen."

European Rail Transport Technology Platform

Future challenges

A number of action points have been identified:

In the short term:

- Move into the operational phase by setting up research and development activities;
- Mobilise a wide range of funding sources;
- Develop dissemination and deployment strategies, and take account of future education and training needs;
- Assess key issues, such as intellectual property rights, regulation and standards;
- Implement the "code of practice for openness and transparency";
- Explore the potential for large-scale, long-term public-private partnerships ('Joint Technology Initiatives').

In the longer term:

- Monitor the implementation of Strategic Research Agendas and adapt them, as necessary;
- Contribute to shaping future technologies and European research, innovation and industrial policies at regional, national and European level.

Further information

Information about individual platforms and forthcoming events is available at:

www.cordis.lu/technology-platforms

The website also provides access to key documents on European Technology Platforms.

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