

EU - BUILDING AN INNOVATION UNION

European Technology Platforms - ETP

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European research policy + European innovation policy

Research and Innovation policies at EU level have traditionally been supported via two instruments:

The Framework Programme for Research (FP) – European Commission Directorate General for Research

€ 50 billion for 2007-2013

Cooperation, Capacities, Ideas, People

The Competitiveness and Innovation Programme (CIP) – European Commission Directorate-General for Enterprise

€ 3.6 billion for 2007-2013

Focus on SMEs: eco-innovation, information society, access to finance, business support services in the regions.



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Context for the launch of ETPs

European Technology Platforms (ETP) process started in 2003

Lisbon strategy 2000-2010 / 3% target, 2/3 from private sector
Bring industry closer to Framework Programme – FP7 in preparation.
Create European Research Area (ERA)

**Align efforts, fight fragmentation / duplication,
create critical mass**

Bottom up / support from the European Commission



Definition of ETPs

European Technology Platforms (ETPs) provide a framework for stakeholders, led by industry, to define research priorities and action plans on a number of technological areas where achieving growth, competitiveness and sustainability requires major research and technological advances in the medium to long term.



Objectives of ETPs

European Technology Platforms (ETPs) develop and update agendas of research priorities for their particular sector.

These agendas constitute valuable input to define European research funding schemes.

Since they are developed through dialogue among industrial and public researchers and national government representatives, they also contribute to create consensus and to improve alignment of investment efforts.



The EU's Framework Programme has a broad range of funding instruments.

Some of them are also used to establish cooperation with the private sector: JTIs (via a joint undertaking) or PPPs (via a joint call for proposals).

Some are used to align national research plans (ERA-Nets, which are a type of joint calls).

ETPs are not *funding instruments*: they are stakeholder fora to discuss research priorities.

We could compare ETPs to advisory boards, but their role is NOT institutionalized and the Commission does not own them nor decide on membership.



Stakeholders come together

Companies – typically research directors, other

Public researchers: universities, research centres, other (development agencies, SME-support agencies)

National research policymakers: **mirror groups**

Consumers, users

Define a vision and a research agenda

FP7, work programmes, other programmes

Annual meeting, working groups

Publications, training courses, TechTransfer activities

Secretariats, legal status, projection



Individual ETPs in 5 Areas

Energy	ICT	Bio-based economy	Production and processes	Transport
<u>Biofuels</u>	<u>ARTEMIS</u>	<u>FABRE TP</u>	<u>ECTP</u>	<u>ACARE</u>
<u>SmartGrids</u>	<u>ENIAC</u>	<u>Food</u>	<u>ESTEP</u>	<u>ERRAC</u>
<u>TPWind</u>	<u>ISI</u>	<u>GAH</u>	<u>ETP SMR</u>	<u>ERTRAC</u>
<u>Photovoltaics</u>	<u>Net!Works</u>	<u>NanoMedicine</u>	<u>Manufuture</u>	<u>Waterborne</u>
<u>ZEP</u>	<u>NEM</u>	<u>Plants</u>	<u>FTC</u>	<u>ESTP</u>
<u>SNETP</u>	<u>NESSI</u>	<u>Forestry</u>	<u>WSSTP</u>	
<u>RHC</u>	<u>EUROP</u>		<u>SusChem</u>	
	<u>EPoSS</u>		<u>EuMaT</u>	



- R&D of new energy technologies is vital for fighting climate change, securing European energy supply and supporting competitiveness.
- Binding legislation to implement the 20-20-20 targets ('energy package')
 - reduction in EU greenhouse gas emissions of at least 20% below 1990 levels
 - 20% of EU energy consumption to come from renewable resources
 - 20% reduction in primary energy use compared with projected levels.
- Strategic Energy Technology Plan (SET plan)
 - (i) energy R&D, (ii) increasing research investment, (iii) improving the performance of existing technologies, and (iv) developing a new generation of low carbon technologies.
- ETPs → private and public research in a set of energy technologies and relevant partners in the debate on energy research priorities at EU level.



- ~ € 600 bn (4.8% of GDP) of European economy value.
- 25% of total business investments in R&D in the EU.
- Europe → great knowledge and industrial assets and → one of the world's largest markets.
- Eight ICT ETPs are active partners in research dialogue, and
- their horizontal nature makes them excellent vehicles for cross-sectoral industrial cooperation to tackle societal challenges (e-Health, safe transport, solutions for the elderly...).



Bio-based economy ETPs

- Focus on strategic fields - such as food, agricultural biotech, chemicals - where Europe's future growth, competitiveness and sustainability depends upon major technological advances.
- Bring together stakeholders to define medium- to long-term research and technological development objectives and lay down markers for achieving them.



Production and Processes ETPs

- Resource-efficient, intelligent processes and recycling procedures for materials and products via product and process innovations will become a key success factor over the next decade.
- Research efforts in this area should contribute to the transformation of current industrial sectors and the development of new sectors through new knowledge from nano-, materials-, and production technologies.



- EU transport policies aim at fostering clean, safe and efficient travel throughout Europe.
- Europe needs to move towards a form of mobility that is sustainable, energy-efficient and respectful of the environment.
- Technical innovation and a shift towards the least polluting and most energy efficient modes of transport — especially in the case of long distance and urban travel — will contribute to a more sustainable mobility.



Funding

Strategic Research Agendas are one source of ideas for Framework Programme 7 research topics, but:

The European Commission receives proposals from a broad range of stakeholders. It is not obliged to take up all the indications of Strategic Research Agendas.

When suggestions from Strategic Research Agendas are taken up it does not imply that ETP members receive funding. These suggestions become call topics, and ETP members need to compete for funding.

ETP members create consortia to compete for funds. Please note that it is not ETPs as such that submit proposals for research projects.

Some call for proposals might allow ETPs (as such) to compete for funds that can cover Secretariat costs (non-research funds for research-related activities such as conferences, studies, etc)

Conclusions

ETPs **mobilise** large networks, but presence of NGOs, end-users (and SMEs) is small

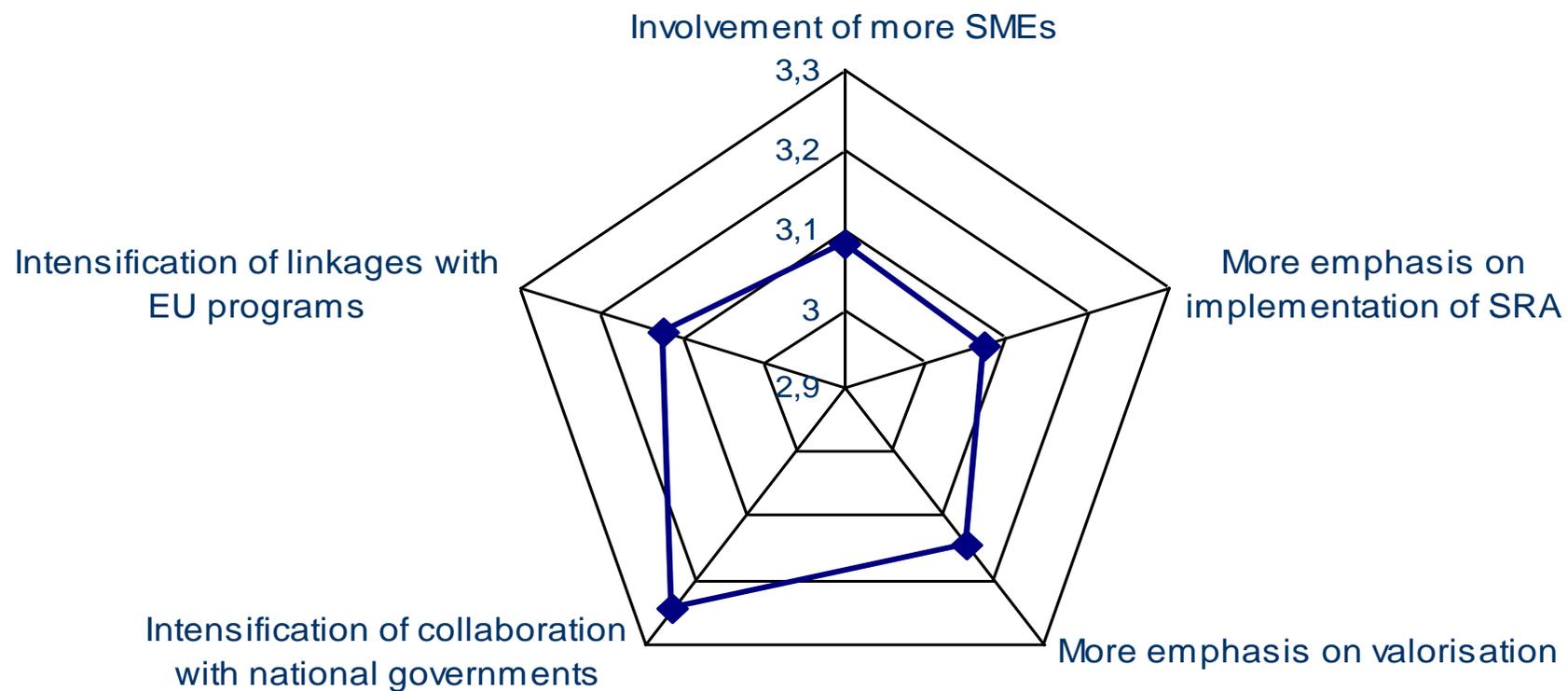
ETP members and stakeholders perceive ETPs as sufficiently **open** and transparent

Stakeholders would like to move to implementation

ETP members and stakeholders are satisfied:
93 % of them would renew their membership



Results evaluation study 2009



Follow-up to evaluation study

The European Commission set up an **expert group** to discuss the evolution of ETPs. It recommended:

- To cluster ETPs work around societal challenges
- To broaden the membership (all relevant funding agencies and national/regional authorities, end users, NGOs...)
- To enlarge ETP scope to include innovation and education

These recommendations have been further discussed at ETP **conferences** in October 2009 and May 2010. New approach to ETP meetings: Bringing ETP together to discuss research areas in workshops for 4 broad societal challenges: climate change, transport, consumption and production, health –
OBJECTIVE: identifying areas for cooperation.



Cross-ETP collaborations already taking place

Possibility to focus on **grand challenges** – need for public authorities to set strategic goals

Becoming active on **innovation**: standards, market regulation, procurement, access to capital – and IP!

Improved coordination: with national governments, across industrial sectors, across EU initiatives



European Research Information



EU Research & Innovation
<http://ec.europa.eu/research>

Innovation Union
http://ec.europa.eu/research/innovation-union/index_en.cfm



Seventh Framework Programme
<http://ec.europa.eu/research/fp7>

Information on European Technology Platforms
<http://cordis.europa.eu/technology-platforms>