



Technology Platforms: Experiences and Prospects

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Technology Platforms: Concept

Stakeholders, led by industry, getting together to define a Strategic Research Agenda on a number of strategically important issues with high societal relevance where achieving Europe's future growth, competitiveness and sustainable objectives is dependent upon major research and technological advances in the medium to long term.



Technology Platforms: Rationale

Contribute to Competitiveness

- Lisbon goal

Boost Research Performance

- ERA, 3% target

Positive Impact on other Community Policies

Concentrate Efforts and Address Fragmentation



Development of Technology Platforms: Three steps in the process

- step 1:** Interested parties get together and organise launching
(vision, wide participation)

- step 2:** Definition of a Strategic Research Agenda
SRA (objectifs, means, organisation)

- step 3:** Implementation of the SRA (Relations with
FP7/8)

FP7 Technology Platforms



Radical change :

- Hydrogen & Fuel Cells
- Nanoelectronics
- Nanomedicines

[http://cordis.europa.eu/
technology-platforms/](http://cordis.europa.eu/technology-platforms/)

Sustainable development:

- Genomics and biotechnology
- Water management and sanitation
- Photovoltaics
- Sustainable chemical processes
- Clean technologies
- Life sciences
- Road Transport (ERTRAC)
- Rail Transport (ERRAC)
- Maritime Transport (ACMARE)

New technologies based on public goods and services

- Wireless and mobile communications
- Innovative medicines for Europe

Ensure the development of technological changes

- Embedded systems
- Aeronautics (ACARE)

Renewal, re-estructuration of traditional industries

- Steel
- Textiles
- Manufacturing technologies

FP7 Technology Platforms > 30



[Advanced Engineering Materials and Technologies](#) - **EuMaT**Michal.Basista@kmm-vin.eu - [Roadmap \(2006\)](#)

[Advisory Council for Aeronautics Research in Europe](#) - **ACARE**luigi.bottasso@asd-europe.org - [SRA Vol. 1 \(2004\)](#) - [SRA Vol. 2 \(2004\)](#) - [Addendum to the SRA \(2008\)](#) - - [Note on Vision 2020](#)

[Embedded Computing Systems](#) - **ARTEMIS**info@artemis-association.eu - [SRA \(2006\)](#)

[European Biofuels Technology Platform](#) - **Biofuels**info@biofuelstp.eu - [SRA \(2008\)](#)

[European Construction Technology Platform](#) - **ECTP**secretariat.ectp@cstb.fr - [SRA \(2005\)](#) - [Implementation Action Plan \(2007\)](#)

[European Nanoelectronics Initiative Advisory Council](#) - **ENIAC**eniacoffice@eniac.eu - [SRA \(2007\)](#)

[European Rail Research Advisory Council](#) - **ERRAC**errac@unife.org - [SRA \(2007\)](#)

[European Road Transport Research Advisory Council](#) - **ERTRAC**info@ertrac.org - [SRA \(2004\)](#) - [Research Framework \(2008\)](#)

[European Space Technology Platform](#) - **ESTP**estp-space@esa.int - [SRA \(2006\)](#)

[European Steel Technology Platform](#) **ESTEP**jean-claude.charbonnier@steelresearch-ESTEP.org - [SRA \(2005\)](#) - [Implementation Plan \(2006\)](#)

[European Technology Platform for the Electricity Networks of the Future](#) - **SmartGrids**secretariat@smartgrids.eu - [SRA \(2007\)](#) - [Deployment Document \(2008\)](#)

[European Technology Platform for Wind Energy](#) - **TPWind**secretariat@windplatform.eu - [SRA/Market Deployment Strategy \(2008\) \(JPG\)](#)

[European Technology Platform on Smart Systems Integration](#) - **EPoSS**contact@smart-systems-integration.org - [SRA \(2009\)](#)

[European Technology Platform on Sustainable Mineral Resources](#) - **ETP SMR** - [SRA \(2009\)](#) - [Implementation Plan \(2007\)](#)

[Farm Animal Breeding and Reproduction Technology Platform](#) - **FABRE TP** - [SRA \(2009\)](#) - [Implementation Plan \(2008\)](#)

FP7 Technology Platforms



- [Food for Life - Food](#)v.rimbert@ciao.eu - [SRA \(2007\)](#) - [Implementation Action Plan \(2008\)](#)
- [Forest based sector Technology Platform](#) - [Forestry](#)andreas.kleinschmit@cei-bois.org - [SRA \(2006\)](#)
- [Future Manufacturing Technologies](#) - [MANUFUTURE](#)info@manufuture.org - [SRA \(2006\)](#)
- [Future Textiles and Clothing](#) - [FTC](#)info@euratex.org - [SRA \(2006\)](#)
- [Global Animal Health](#) - [GAH](#)animaltp@ifah.be - [SRA \(2006\)](#)
- [Industrial Safety ETP](#) - [IndustrialSafety](#)info@industrialsafety-tp.org - [SRA \(2006\)](#)
- [Integral Satcom Initiative](#) - [ISI](#)isi-info@deis.unibo.it - [SRA \(2006\)](#)
- [Mobile and Wireless Communications](#) - [eMobility](#)fiona.williams@ericsson.com - [SRA \(2007\)](#)
- [Nanotechnologies for Medical Applications](#) - [NanoMedicine](#)[Contact us](#) - [SRA \(2006\)](#)
- [Networked and Electronic Media](#) - [NEM](#)info@nem-initiative.org - [SRA \(2008\)](#)
- [Networked European Software and Services Initiative](#) - [NESSI](#)office@nessi-europe.eu - [SRA Vol. 1 \(2006\)](#) - [SRA Vol. 2 \(2007\)](#) - [SRA Vol. 3 \(2006\)](#)
- [Photonics21](#) - [Photonics](#)secretariat@photonics21.org - [SRA \(2006\)](#)
- [Photovoltaics](#) - [Photovoltaics](#)secretariat@eupvplatform.org - [SRA \(2007\)](#)
- [Plants for the Future](#) - [Plants](#)PlantTP@epsomail.org - [SRA and Action Plan \(2007\)](#)
- [Renewable Heating & Cooling \(RHC\)](#) - info@rhc-platform.org
- [Robotics](#) - [EUROP](#) secretariat@robotics-platform.eu - [SRA \(2006\)](#) - [SRA \(2009\)](#)
- [Sustainable Nuclear Technology Platform](#) - [SNETP](#) - secretariat@snetp.eu - [SRA \(2009\)](#)
- [Sustainable Chemistry](#) - [SusChem](#)suschem@suschem.org - [SRA \(2005\)](#) - [Implementation Action Plan \(2006\)](#)
- [Water Supply and Sanitation Technology Platform](#) - [WSSTP](#)info@wsstp.org - [SRA \(2006\)](#) - [Implementation Plan \(2007\)](#)
- [Waterborne ETP](#) - [Waterborne](#)cesa.research@skynet.be - [SRA \(2006\)](#) - [Implementation Route Map \(2008\)](#)
- [Zero Emission Fossil Fuel Power Plants](#) - [ZEP](#)info@zero-emissionplatform.eu - [SRA \(2006\)](#) - [Strategic Deployment Document \(2006\)](#)

- The COM is **not the « owner »** of TPs, nor it is directing the way in which they have undertaken their activities.
- The COM is however encouraging this bottom-up industry-led approach to defining medium to long term RTD needs.
 - It is actively participating as observer
 - Playing a guiding role where necessary
 - Providing financial support (FP7) for operational entities (i.e. secretariat)
 - Sponsoring role through funding (collaborative research) in concerned areas
- COM services coordinate activities of TPs , monitor developments and when appropriate integrates their deliverables in the development of research policy

Technology Platforms: Key Success Factors

Industry-Led; Competitiveness-Driven

Wide Stakeholder Involvement

Flexibility: No “One Size Fits All”

Cross-Policy European Added Value

Mobilise a Range of Funding Sources

Focus on Communication and Dissemination

Technology Platforms: Key Success Factors

Evaluation Report: available at CORDIS

**[ftp://ftp.cordis.europa.eu/pub/technology-
platforms/docs/evaluation-etps.pdf](ftp://ftp.cordis.europa.eu/pub/technology-platforms/docs/evaluation-etps.pdf)**

Technology Platforms: **Openness and Transparency**

Industrial Leaders Committed to Good Practice

**Participation of SMEs, Consumer Interests and
End-User Organisations**

Dedicated Website

<http://cordis.europa.eu/technology-platforms/>

Community support under FP7

Support for implementing Strategic Research Agendas (SRAs):

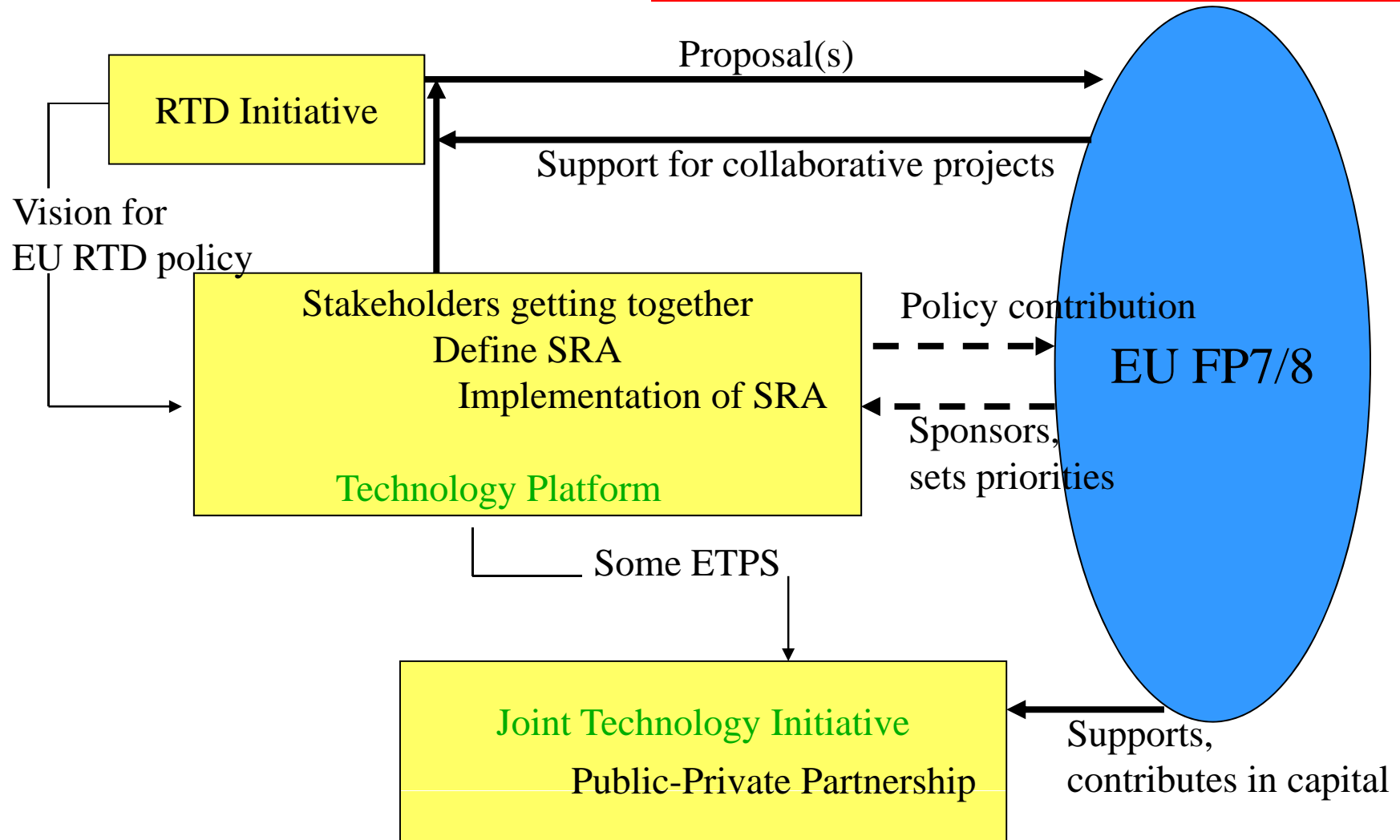
Majority of SRAs

- Supported principally through Funding Schemes for collaborative research under “Cooperation” Programme

Small Minority

- Long-term PPP (public-private partnerships) required: “Joint Technology Initiatives”

FP7/8,ETPs and JTIs



Joint Technology Initiatives

May be decided and developed via:

- Article 171 of the Treaty
- Decisions of the specific programmes

Article 171:

“The Community may constitute a a joint undertaking or any other required structure for the efficient execution of the community research, technology development and demonstration”

An example: The Galileo programme and the Galileo Joint Undertaking.

Why Joint Technology Initiatives?

Scale and Scope of Objectives Require Long-Term Public-Private Partnerships

- **Regular Instruments Not Sufficient**

Potential Flagship Projects for More Dynamic European Economy

Need for Structure that Allows Necessary Co-Ordination to Reach Objective

JTIs:

- **Embedded Systems (ARTEMISIA/ARTEMIS)**
 - **Nanoelectronics**
 - **Innovative Medicine**
 - **Clean Sky**
 - **Fuel Cells and Hydrogen**
- Others in preparation**

**Green Cars, Factories of Future, Global Monitoring
for Environment and Security**



Thank you very much

Michael Guth

www.zenit.de