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# The European Union's Research Policy

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# OVERVIEW OF PRESENTATION

- **The overall policy context**
- **The challenges for S&T in the EU and the role of EU RTD**
- **The 7<sup>th</sup> EU S&T Framework Programme (2007 – 2013)**
- **International cooperation in science & technology**



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# "The Lisbon Strategy"

**Aims at creating:**

***the most competitive and dynamic knowledge based economy in the world, capable of sustainable economic growth, with more and better jobs and greater social cohesion .. by the year 2010***



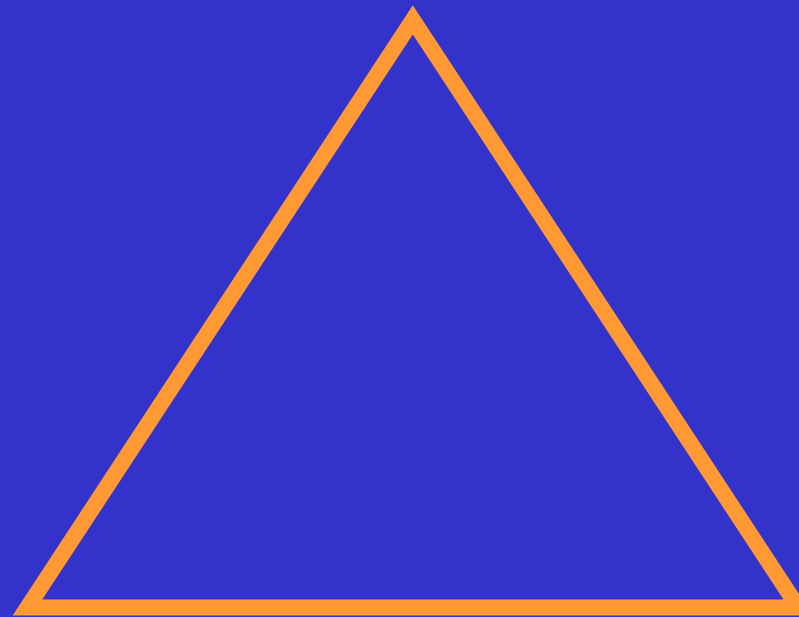
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# The Knowledge Triangle

Research and development



Innovation

Education and  
Training



# R&D – Europe's challenges

	EU-25	US	Japan
R&D intensity (% of GDP) (2004)	<b>1.86</b>	<b>2.66</b>	<b>3.18</b>
Share of R&D financed by industry (%) <sup>(1)</sup>	<b>54.8</b>	<b>63.7</b>	<b>74.8</b>
Researchers (FTE) per thousand labour force <sup>(2)</sup>	<b>5.5</b>	<b>9.1</b>	<b>10.1</b>
Share of world scientific publications (%) (2003)	<b>38.3</b>	<b>31.1</b>	<b>9.6</b>
Scientific publications per million population (2003)	<b>639</b>	<b>809</b>	<b>569</b>
Share of world triadic patents (%) (2000)	<b>31.5</b>	<b>34.3</b>	<b>26.9</b>
Triadic patents per million population (2000)	<b>30.5</b>	<b>53.1</b>	<b>92.6</b>
High-tech exports as a share of total manufacturing exports (%) (2003)	<b>19.7</b>	<b>28.5</b>	<b>26.5</b>
Share of world high-tech exports (%) (2003)	<b>16.7</b>	<b>19.5</b>	<b>10.6</b>

Data: Eurostat, OECD.

Source: DG Research

Notes: <sup>(1)</sup> EU-25: 2003; US, JP: 2004. <sup>(2)</sup> EU-25: 2004; US: 2002; JP: 2003.



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## WHY RESEARCH AT EUROPEAN LEVEL

- **Reduce fragmentation, achieve critical mass**
- **Pool resources to support and undertake major projects, infrastructures ec**
- **Provide a sound scientific basis for European policy challenges (eg knowledge economy, sustainable development, security etc)**
- **Promote the development of a strong and flexible European Research Area including free flow of knowledge, researchers etc**
- **Significant impacts on S&T and on the economy**



# EU research: the story so far

- 
- 1952: **ECSC treaty; first projects started March 1955**
  - 1957: **Euratom treaty; Joint Research Centre set up**
  - 1983: **ESPRIT programme**
  - 1984: **First Framework Programme (1984-1987)**
  - 1987: **'Single European Act' – science becomes a Community responsibility;**  
**Second Framework Programme (1987-1991)**
  - 1990: **Third Framework Programme (1990-1994)**
  - 1993: **Treaty on European Union;**  
**role of RTD in the enlarged EU**
  - 1994: **Fourth Framework Programme (1994-1998)**
  - 1998: **Fifth Framework Programme (1998-2002)**
  - 2000: **European Research Area**
  - 2002: **Sixth Framework Programme (2002-2006)**
  - 2005: **Proposal for the Seventh Framework Programme (2007-2013; 2007-2011 for Euratom)**
  - 2006: **Seventh Framework Programme adopted**



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# FP7 2007 –2013 | Specific Programmes

***Cooperation – Collaborative research***

***Ideas – Frontier Research***

***People – Marie Curie Actions***

***Capacities – Research Capacity***

+

**JRC non-nuclear research**

***Euratom* direct actions – JRC nuclear research**

***Euratom* indirect actions – nuclear fusion and fission research**



# Cooperation – Collaborative Research

## Ten themes

1. **Nanosciences, nanotechnologies, materials and new production technologies**
2. **Energy**
3. **Environment (including climate change)**
4. **Transport (including aeronautics)**
5. **Food, agriculture and fisheries, and biotechnology**
6. **Socio-economic sciences and the humanities**
7. **Space**
8. **Security**
9. **Health**
10. **Information and communication technologies**

**Euratom: Fusion energy research, nuclear fission and radiation protection**



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# IDEAS – THE EUROPEAN RESEARCH COUNCIL (ERC)

- **Investigator driven research – a key driver for innovation and economic performance**
- **The ERC – first pan-European funding agency for basic research (cf NSF)**
- **Promotes quality through competition for funds at European level**
- **Scientific excellence is only criterion for success**
- **Autonomous scientific governance by the research community**



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# The EU's OPEN STRATEGY FOR HUMAN RESOURCES IN RESEARCH

- **Expected to benefit 70,000 researchers in and outside of the EU**
- **Support at all stages of research careers**
- **Open to all research fields**
- **“Extra” – EU dimension is 25 - 30% of spending**



# ***People – Marie Curie Actions***

## ***1. Initial training:***

- ***Networks for Early stage researchers***

## ***2. Life long training and career development:***

- ***Intra European Fellowships***
- ***Co-funding of national programmes***
- ***European Reintegration Grants***

## ***3. Industry dimension:***

- ***Industry-academia partnership and pathways***

## ***4. International dimension:***

- ***Outgoing fellowships***
- ***Incoming fellowships***
- ***International reintegration grants***
- ***International staff Exchange Programmes***

## ***5. Specific actions***

***Such as: 'Researchers' Night'; Marie Curie Awards, ERA-More; networking of NCPs***



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# Capacities – Research Capacity

1. **Research infrastructures**
2. **Research for the benefit of SMEs**
3. **Regions of Knowledge**
4. **Research Potential**
5. **Science in Society**
6. **Coherent development of policies**
7. **Support for International Cooperation**



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# Information Sources

**General information on research:**

[www.ec.europa.eu/research/index\\_en.cfm](http://www.ec.europa.eu/research/index_en.cfm)

**General information on FP6:** [cordis.europa.eu/fp6](http://cordis.europa.eu/fp6)

**General information on FP7:** [cordis.europa.eu/fp7](http://cordis.europa.eu/fp7)

