



EU-funded research

FP7

Tomorrow's answers start today

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Why research at European level?

- Pooling and leveraging resources
 - Resources are pooled to achieve critical mass
 - Leverage effect on private investments
 - Interoperability and complementarity of big science
- Fostering human capacity and excellence in S&T
 - Stimulate training, mobility and career development of researchers
 - Improve S&T capabilities
 - Stimulate competition in research
- Better integration of European R&D
 - Create scientific base for pan-European policy challenges
 - Encourage coordination of national policies
 - Effective comparative research at EU-level
 - Efficient dissemination of research results



R&D – Europe's challenges

	EU-27	US	Japan
R&D intensity (% of GDP) (2005)	1.84	2.68	3.18
Share of R&D financed by industry (%)	54.8	63.7	74.8
Researchers (FTE) per thousand labour force	5.5	9.1	10.1
Share of world scientific publications (%) (2003)	38.3	31.1	9.6
Scientific publications per million population (2003)	639	809	569
Share of world triadic patents (%) (2000)	31.5	34.3	26.9
Triadic patents per million population (2000)	30.5	53.1	92.6
High-tech exports as a share of total manufacturing exports (%) (2003)	19.7	28.5	26.5
Share of world high-tech exports (%) (2003)	16.7	19.5	10.6

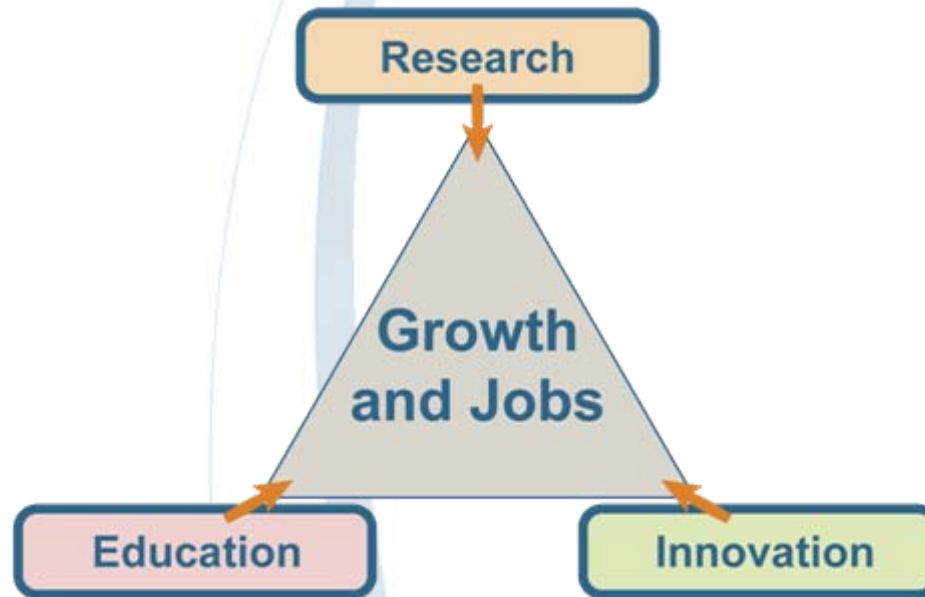
Data: Eurostat, OECD.

China 1.34% in 2005

Source: DG Research



Lisbon strategy



S&T contribute to the **Lisbon** objectives:
economic **growth, jobs,**
quality of life (GSM, remote working, safe roads, etc.)
social challenges: fight **poverty**, improve human **health**
environmental protection



The EU's Seventh Research Framework Programme (FP7, 2007-2013)

- It is the **European Union's** main instrument for **funding research** in Europe between 2007 and 2013
- It has a budget of €53.2b (AU\$85.86b)
- It supports research in **selected priority areas**
- It represents a **41% budget increase from FP6** at 2004 prices



EU Research impact on S&T and the economy

- Economic benefits

€1

(research)
at European level



€4-7

(long-run, econometric models)

- Reduced commercial risk

- increased turnover and profitability
- enhanced productivity and market share

- Innovative performance

- Enterprises participating in FP:

- tend to be more innovative
- more likely to patent
- co-operate with other firms and universities



Impact on S&T

- Scientific performance:
 - FP project = up to 9 peer reviewed publications (international co-publications)
 - 180,000 co-operation links (FP5) – academia, industry, public research labs)
 - Better coordination of national research efforts (ERA-NET, etc.)
- Counter-acting fragmentation of ERA
 - Average number of Member States per project:
3 (FP2) **6.7 (FP6)**
- Human resources development:
 - over 7,000 proposals for Marie Curie actions (mobility, training) in 2004, thousands of researchers have participated in top transnational teams, benefiting from training and knowledge sharing



Impact on integration of the ERA

(more participants involved to reach critical mass)

- Concentration of research efforts through larger projects with critical mass
 - Average number of participants per project:
4.7 (FP2) → 14 (FP6)
 - Average EU funding per project:
€1.2 million (FP2) → €4.6 million (FP6)
- Top-level scientists: e.g. six Nobel prize-winners involved in FP6 fundamental genomics projects
- ERA more attractive to researchers worldwide.
 - Number of participating countries from across the world:
30 (FP2) → 140 (FP5)



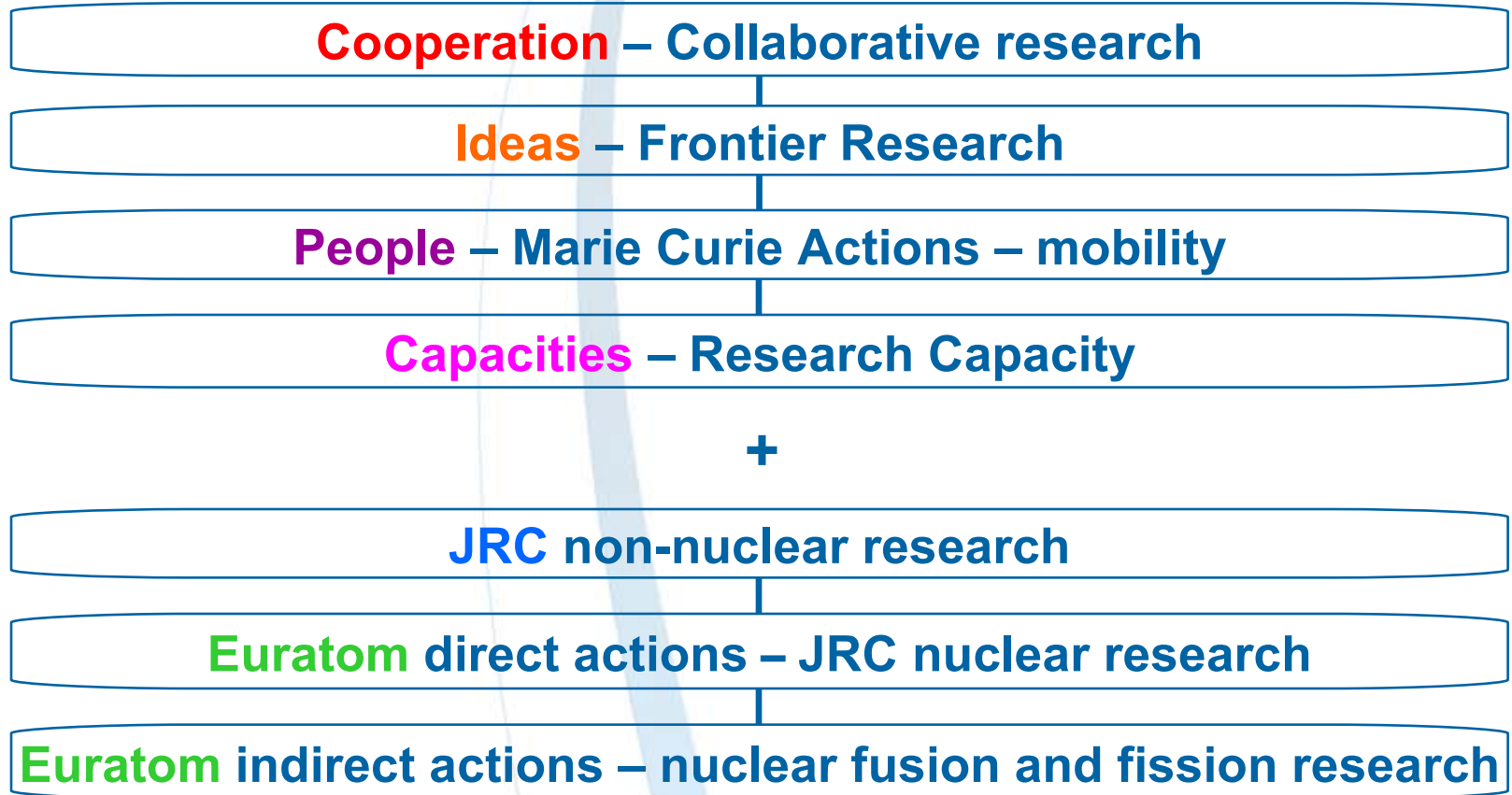
FP7 – What's new?

Main new elements compared to FP6:

- Duration increased from 5 to 7 years (except for Euratom FP)
- Annual **budget increased** significantly
- New structure: **Cooperation**, **Ideas (ERC)**, **People**,
Capacities, **Euratom** and **JRC** activities
- Basic research (~ €1 billion per year): **European Research Council**
- Regions of Knowledge
- **Flexible** funding schemes including a risk sharing facility
- **Simpler procedures** – hmm
- **Joint Technology Initiatives**

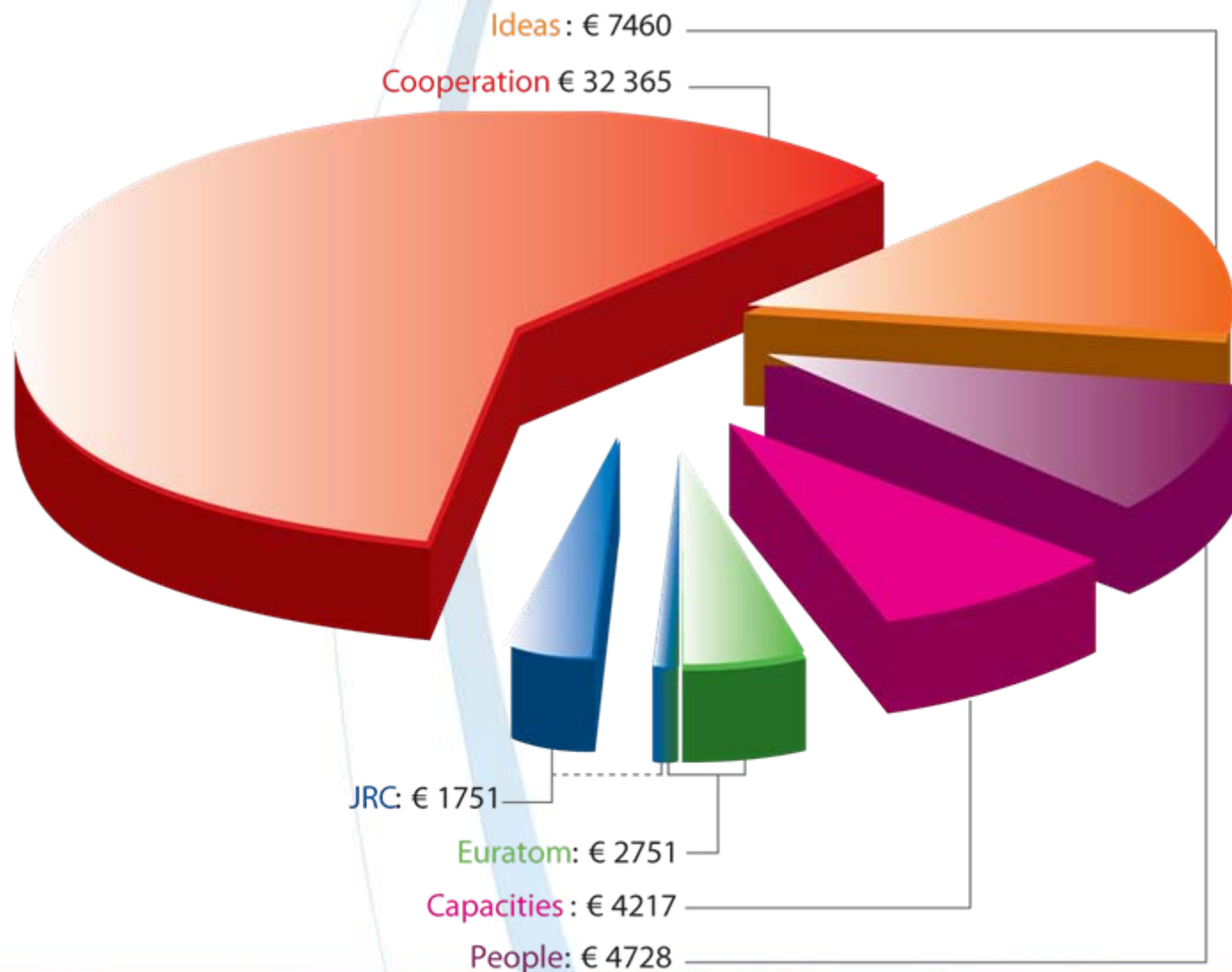


FP7 (2007-2013) | The Structure





FP7 – Indicative breakdown (€ million)





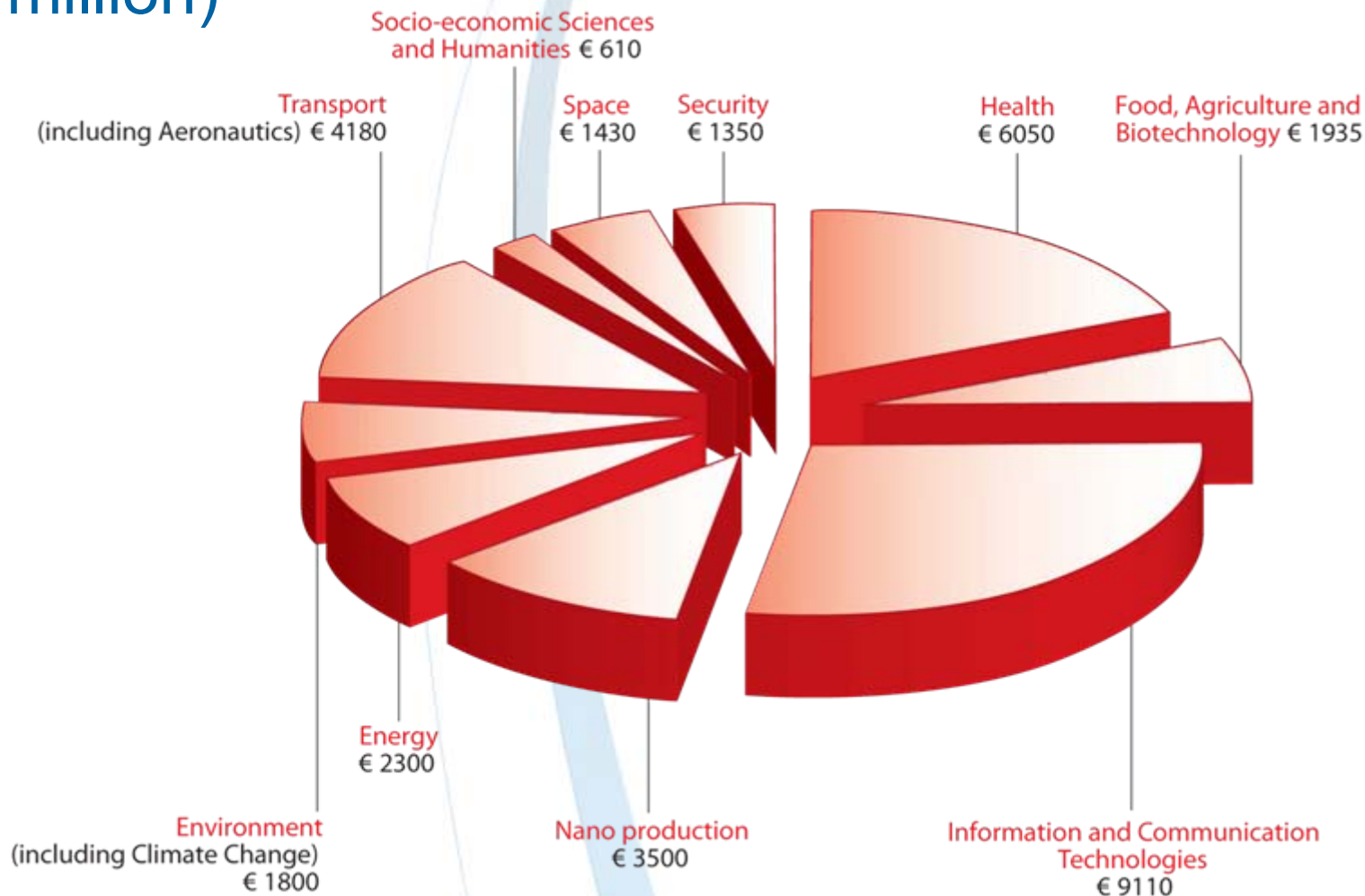
FP7 | Cooperation

bringing together our best talents from across Europe (**researchers, industry and SMEs**) to tackle the following areas:

- Health;
- Food, Agriculture and Biotechnology;
- Information and Communication Technologies;
- Nano-sciences, Nano-technologies, Materials and new Production Technologies;
- Energy;
- Environment (including Climate Change);
- Transport (including Aeronautics);
- Socio-economic Sciences and Humanities;
- Space;
- Security.



Cooperation programme – thematic areas (€ million)





FP7 | Ideas conducting Frontier Research – The European Research Council (ERC)

- Frontier (“basic”) Research is a key driver to innovation and economic performance
- establish the **European Research Council (ERC)** – the first pan-European funding agency for Frontier Research
- support **investigator-driven** frontier research over all areas of research
- European added-value through **competition at European level**
- budget ~ **€1 billion per year** (2007-2013 ~ €7.46 billion)
- autonomous scientific governance (Scientific Council)
- support projects of individual teams
- excellence as sole criterion
- First Call: 9,000 proposals



FP7 | People

Marie Curie Actions – Fellowships, Grants, Awards

- **Initial training** of researchers
 - Marie Curie Networks
- **Life-long training** and **career** development
 - Individual Fellowships
 - Co-financing of regional/national/international programmes
- **Industry-academia** pathways and partnerships
 - Industry-Academia Knowledge-sharing Scheme
- **International dimension**
 - Outgoing & Incoming International Fellowships
 - International Cooperation Scheme
 - Reintegration grants;
 - Support to researcher 'diasporas'
- **Specific actions: mobility & excellence**
 - Mobility and career enhancement actions
 - Excellence awards



FP7 | Capacities offering excellent infrastructures to conduct research

- Research infrastructures
- Research for the benefit of SMEs
- Regions of Knowledge
- Research Potential
- Science in Society
- Coherent development of policies
- Activities of International Cooperation



Simplification of procedures

- Objectives:
 - Eliminate procedures, rules and requests with no added value
 - Cut the number of requests to participants
 - Cut red tape and increase user-friendliness
 - Reduce delays
- Principles:
 - Rationalisation of all procedures
 - Communication
 - Strike a new balance between risk and control to provide
 - Greater trust
 - Increased risk-taking



What do I do?

- You consult the Calls and the Work Programmes
- You check that your research is complementary
- You get in touch with your European colleagues
- You get them to submit the proposal
- The EC arranges evaluation by 3-7 independent expert evaluators
- Your bid is successful and you start contract negotiations
- If your bid is not successful, apply to become an Evaluator



EU–Australia S&T cooperation

- EU-Australia Joint Science & Technology Agreement signed in 1994
- EU-Australia Joint Declaration signed in 1997
- Annual JSTCC Meetings
- Forum for European Australian Science & Technology (FEAST) cooperation launched 2002
- FEAST MK II launched 2005
- Hundreds (literally) of joint projects
- Over 70 Marie Curie Fellows



	no. of projects funded	...which include EU or M/S	total money granted	...which include EU or M/S
Round One 2002-03	6	4	\$401,766	\$319,800 (79.6%)
Round Two 2002-03	20	13	\$2,677,325	\$2,241,835 (83.7%)
Round Three 2002-03	18	11	\$3,415,270	\$3,019,514 (88.4%)
Round Four 2003-04	12	8	\$2,007,751	\$1,821,751 (90.7%)
Round Five 2003-04	19	15	\$4,097,001	\$3,242,789 (79.2%)
Round Six 2004-05	8	7	\$3,615,309	\$3,463,709 (95.8%)
Round Seven 2004-05	10	6	\$1,200,304	\$762,479 (63.5%)
Round Eight 2004-05	9	6	\$2,951,370	\$2,662,920 (90.2%)
Round Nine 2005-06	9	9	\$2,934,083	\$2,934,083 (100%)
Round Ten 2005-06	11	8	\$4,805,121	\$4,273,519 (89%)
Round Eleven 2006	20	15	\$4,055,923	\$3,411,942 (84%)
Round Twelve 2007	19	14	\$5,231,832	\$4,236,309 (81%)



More Information

- **European Research Portal:**
ec.europa.eu/research
- General information on the **Seventh EU Research Framework Programmes:**
ec.europa.eu/research/fp7
- **Specific information** on research programmes, projects and FP7 Call documents:
cordis.europa.eu/fp7
- EU-Australia Cooperation
www.feast.org

