



7th Community Research Framework Programme Theme 6 “Environment (including climate change)”

Presented by:

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Compiled by:

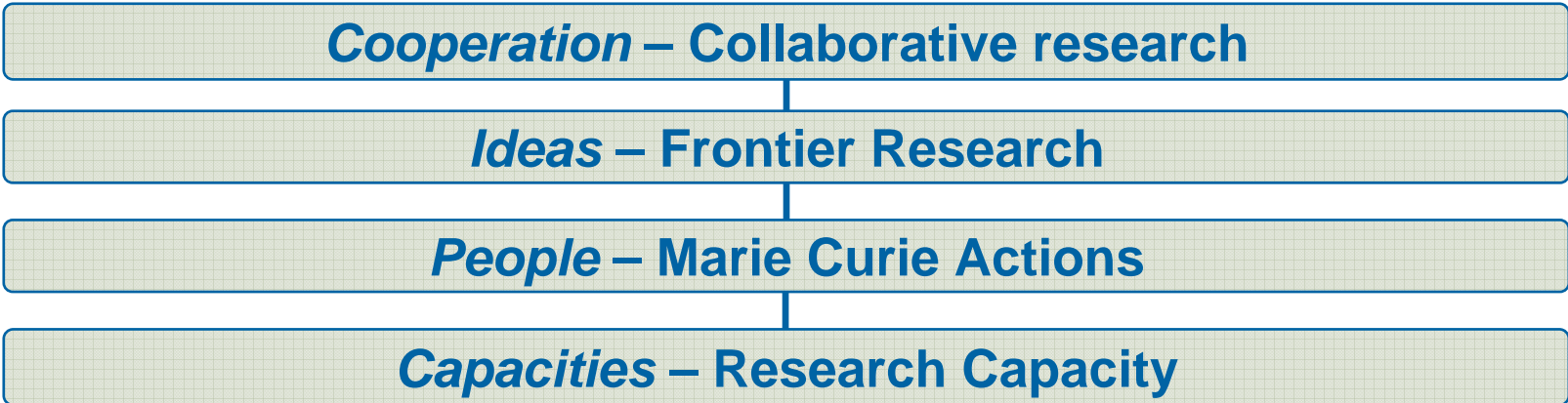
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The added value of the EU level

- ✓ **Pooling and leveraging resources (critical mass)**
- ✓ **Fostering human capacity and excellence in S&T (networking)**
- ✓ **Better integration of European R&D (scientific base, coordination, dissemination)**
- ✓ **« European research to strengthen the EU policies » (Lisbon strategy)**

FP7 (2007 –2013) 4 Specific Programmes



+ The JRC activity and the EURATOM research

Cooperation – Collaborative Research

Ten themes

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

Environment has links with all the other themes

Budget for FP7 (non-Nuclear part)

- Total budget: 50.521 million €* (current prices)
- Indicative breakdown:

2006	2007	2008	2009	2010	2011	2012	2013
5.044	5.082	5.579	6.119	6.932	7.968	8.925	9.913

- In 2013 expenditure 75% higher than in 2006
- 60% increase compared to FP6
- **For Environment:** from ~225 M€ in 2006 to about 350 M€ in 2013; sharp increase only from 2011

* Commission modified proposal (May 24, 2006)

FP7 2007 - 2013

Specific Programmes	* Modified Commission Proposal 24 May 2006 (€bn)
<i>Cooperation</i> - Collaborative research	32.292
<i>Ideas</i> - Frontier Research	7.460
<i>People</i> - Human Potential	4.727
<i>Capacities</i> - Research Capacity	4.291

+

JRC (non-nuclear)	1.751
JRC (nuclear)	0.750
Euratom	4.062

Cooperation (current prices)*

Health	5984
Food, Agriculture and Biotechnology	1935
Information and Communication Technologies	9110
Nanosciences, Nanotechnologies, Materials ...	3467
Energy	2265
Environment (including Climate Change)	1886
Transport (including Aeronautics)	4180
Socio-economic Sciences and the Humanities	607
Security and Space	2858
TOTAL	32292

* Commission modified proposal (May 24, 2006)

Differences between FP7 and its predecessors

✓ ***key contribution to the re-launched Lisbon strategy***

New elements in FP7:

- Emphasis on **research themes** rather than on “instruments”
- Significant **simplification of its operation**
- Focus on developing research that meets the needs of European industry, through the work of **Technology Platforms** and the new **Joint Technology Initiatives**
- Establishment of a **European Research Council**, funding the best of European science
- Integration of **International Co-operation** in all four programmes
- Development of **Regions of Knowledge**
- A **Risk-Sharing Finance Facility** aimed at fostering private investment in research

Support from Environmental Research

- ✓ ***Environmental Research to support International commitments such as:***
 - UN FCCC and Kyoto Protocol and Montreal Protocols
 - UN Convention on Biological Diversity
 - UN Strategy for Disaster Reduction
 - World Summit on Sustainable Development
 - Intergovernmental panel for Climate Change (IPCC)
 - Group on Earth Observations (GEO)

Support from Environmental Research

- ✓ ***Environmental Research to contribute to EU Environmental Policies such as:***
 - European Climate Change Programme II
 - 6th Environmental Action Plan and associated Thematic Strategies (*air, waste, marine, soil, pesticides, urban*)
 - Action Plans on *Environmental Technologies* and *Environment and Health*
 - European directives – Water Framework, REACH (chemicals), CAFE (air quality), INSPIRE (env. data)

- ✓ ***Environmental Research to contribute to EU policies such as:***
 - Sustainable Development Strategy, International cooperation, Space, Innovation, Health, Regional Development

FP7 Areas and Topics

FP 7 activities should integrate within the research activity itself, when relevant:

- ✓ Support to Policy / Unforeseen policy needs
- ✓ Dissemination activities (research-policy, science-society)
- ✓ International cooperation in particular with INCO countries
- ✓ Socio-economic dimension
- ✓ SME participation
- ✓ Cross thematic topics

Coordination of national programmes ERA-NET, Art. 169 can be part of the activities

Structure of the FP7 annual work programmes

- ✓ One single WP for each Specific Programme with calls distributed in the calendar year
- ✓ Simplification aspects
- ✓ A coherent approach with new elements in the Themes: integrating international cooperation, policy needs, emerging needs and coordination of national programmes (ERA-NET)
- ✓ Definition of topics, funding schemes, and expected impacts

Timetable for the preparation of the Work Programmes

- ✓ Consultation/ preparatory stage (February-June)
 - Advice, consultations, inputs from external sources (AG, TP, events)

- ✓ First draft at the DG RTD level by 19 July 2006

- ✓ Consolidation stage (July-Sept)
 - First consolidated draft
 - Review of horizontal, cross-thematic issues
 - Further consultation with AG's

- ✓ Adoption stage (2006)
(Oct-Nov – Interservices Consultations / Nov-Dec – FP7 PC/
Dec – Commission adoption)

Research in support to policies in FP7

- ✓ Will continue to be central in FP7 in “Co-operation”
- ✓ Research in support to policies will be embedded in the Themes and implemented through standard calls
- ✓ Impacts on policy shall be clearly defined in the “expected impact” in the Work Programme
- ✓ Flexibility in the WP to accommodate unforeseen policy needs (e.g. epidemics, emerging concerns about food safety, natural disaster responses)

Dissemination, knowledge transfer and broader engagement in FP7

- ✓ More pro-active approach to dissemination in FP7
- ✓ At Programme level:
 - through specific 'topics' in the WP dedicated to synthesise knowledge/ results and to enhance dissemination
 - organising dissemination and awareness events
 - expert calls (framework contract)
 - programme monitoring, evaluation and impact assessment
- ✓ At project level:
 - through the introduction of dissemination activities in the contract and reporting requirements
- ✓ Offering targeted assistance to projects to optimise the dissemination and promote the actual use of results
 - legal helpdesk
 - exploitation strategic seminars
 - Cordis services

International cooperation in FP7

The participation of third countries in the co-operation SP will be possible via 2 mechanisms:

- ✓ The opening of all activities to third countries – both for ICPC* and industrialised countries in the Themes
- ✓ Specific international co-operation actions (SICA) in each thematic priority dedicated to ICPC
 - part of the main call identifying topics for ICPC's
 - topics in consultation with the Capacity Programme and ICPC partner regions
 - importance to regional approaches (eg. Latin-America, Asia, etc.)

SME Participation in FP7

- ✓ Participation of SME's across the Specific Programmes in particular in co-operation:
 - including priorities/ areas of interest to SME's; eg. environmental technologies
 - propose appropriate funding schemes
 - this will be complemented by the Competitiveness & Innovation Programme
- ✓ SME-participation in the “Industry-academia partnerships and pathways” of the “People” programme
- ✓ SME specific actions in the Capacities: “Research for the benefit of SME's”

Approaches to cross-thematic issues in FP7

- ✓ Create attention to cross-thematic issues in FP7
- ✓ Some identified in SP (e.g. marine science and technology)
 - implementation can be done through
 - coordinated calls (when more than one theme is involved)
 - or
 - joint calls (preferred if there are stronger linkages on topic level in several themes)
 - coordinated calls are preferred thanks to a lower administrative burden/ load

FP7 Rules for participation

Funding schemes (formerly 'instruments')

- ✓ Collaborative projects (range from small focused actions to large integrating projects)
- ✓ Networks of excellence (~same scope and objectives as in FP6)
- ✓ Coordination actions and Support actions (~same scope and objectives as in FP6)
- ✓ Actions to promote and develop human resources and mobility of researchers

Theme Environment (including Climate Change)

Activities and sub-activities

- ✓ **Climate change, pollution and risks**
 - Pressures on environment and climate
 - Environment and health
 - Natural hazards

- ✓ **Sustainable Management of Resources**
 - Conservation and sustainable management of natural and man-made resources and biodiversity
 - Management of marine environments

Theme Environment (including Climate Change)

Activities and sub-activities

✓ **Environmental Technologies**

- Environmental technologies for observation, simulation, prevention, mitigation, adaptation, remediation and restoration of the natural and man-made environment
- Protection, conservation and enhancement of cultural heritage including human habitat
- Technology assessment, verification and testing

✓ **Earth observation and assessment tools**

- Earth and ocean observation systems and monitoring methods for the environment and sustainable development
- Forecasting methods and assessment tools for sustainable development, taking into account differing scales of observation

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Climate change, pollution and risks”

✓ **Sub-activity “Pressures on environment and climate” – 6 areas including regional impacts**

1. The Earth System and Climate: Functioning and abrupt changes
2. Emissions and Pressures: Natural and anthropogenic
3. The Global Carbon cycle - Greenhouse gas budget
4. Future Climate
5. Climate Change, Natural and Socio-economic Impacts
6. Response Strategies: Adaptation, Mitigation and Policies

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Climate change, pollution and risks”

- ✓ **Sub-activity “Environment and health” – 3 areas**
 1. Health Effects of Exposure to Environmental Stressors
 2. Integrated Approaches for Environment and Health Risk Assessment
 3. Delivery of Methods and Decision Support Tools for Risk Analysis and Policy Development

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Climate change, pollution and risks”

✓ **Sub-activity “Natural hazards” – 4 areas**

1. Hazard Assessment, Triggering Factors and Forecasting
2. Vulnerability Assessment and Societal Impact
3. Risk Assessment and Management
4. Multi-risk Evaluation and Mitigation Strategies

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Sustainable management of resources”

✓ ***Sub-activity “Conservation and sustainable management of natural and man-made resources and biodiversity” – 6 areas***

1. Integrated Resource Management
2. Water Resources
3. Soil Research and Desertification
4. Biodiversity
5. Urban Development
6. Integrated Forest Research

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Sustainable management of resources”

- ✓ **Sub-activity “Evolution of marine environments” - 1 area**
 1. Marine Resources

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Environmental Technologies”

✓ ***Sub-activity “Environmental technologies for the sustainable management of the natural and man-made environment” – 5 areas***

1. Water
2. Soil
3. Waste
4. Clean Technologies
5. Built Environment

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Environmental Technologies”

✓ ***Sub-activity “Protection, conservation and enhancement of cultural heritage, including human habitat – 4 areas***

1. Assessment and conservation in cultural heritage
2. Networking, knowledge transfer and optimisation of results
3. Environment technologies for archaeology and landscapes
4. Fostering the integration of cultural heritage in urban and rural settings

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Environmental Technologies”

- ✓ **Sub-activity “Technology assessment, verification and testing” – 3 areas:**
 1. Risk Assessment of Chemicals and Alternative Strategies for Testing
 2. Technology Assessment (Life Cycle Assessment, Life Cycle Thinking, etc)
 3. Environmental Technologies Verification and Testing

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Earth observation and assessment tools”

- ✓ ***Sub-activity “Earth observation” – 4 areas including in situ and space observation for 9 societal benefit areas***
 1. Integration of European Earth Observation activities within GEO
 2. Cross-cutting Research Activities relevant to GEO
 3. Earth Observation Activities in Emerging Areas
 4. Developing Capacity Building Activities in the Domain of Earth Observation in Developing Countries

FP7 activities – Theme “Environment” (including Climate Change)

Activity “Earth observation and assessment tools”

- ✓ ***Sub-activity “Forecasting methods and assessment tools for sustainable development, taking into account differing scales of observation” – 3 areas***
 1. Tools for Impact Assessment
 2. Sustainable Development Indicators
 3. Interplay between social, economic and ecological systems

FP7 Tentative Roadmap

2006

- ✓ June: EP – 1st reading on FP7.
- ✓ September: Council – Common position on FP7
- ✓ End of November: EP – Adoption of FP7 (2nd reading) and Rules for Participation (one single reading)
- ✓ Early December: Council – Adoption of the SPs
- ✓ December: Commission – Adoption of Work Programmes and necessary materials
- ✓ End of 2006: Commission – Publication of 1st calls

CONCLUSIONS

- ✓ The “Environment” priority is well articulated and promises to attract great interest
- ✓ Main innovations in content: Environmental Technologies, GEO, Environment & Health
- ✓ A budget similar to FP6 (slightly lower) for 2007 and 2008
- ✓ ERA-NETs, Art. 169, International Cooperation activities, and emerging policy needs integrated in the thematic priority
- ✓ A major challenge: how to exploit results for policy
- ✓ A new challenge: cross-thematic approaches related to Environmental research