Human Resources and Mobility in the Research Framework Programme

From FP5 to FP6

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European Commission, DG RTD D4
I. Human Resources and Mobility in FP5
5th Framework Programme 1998-2002 (FP5)

4 thematic programmes
- Quality of life and management of living resources
- User-friendly information society
- Competitive and sustainable growth
- Energy, environment and sustainable development

3 horizontal programmes
- Confirming the international role of Community research
- Promotion of innovation and encouragement of SMEs
- Improving the human research potential and the socio-economic knowledge base
### Main Lines of the IHP Programme (FP5)

#### A. Improving human research potential

1. Supporting training and mobility of researchers
   - *System of Marie Curie Fellowships*
   - *Research Training Networks*
2. Enhancing access to research infrastructures
3. Promoting scientific and technological excellence

#### B. Improving the socio-economic knowledge base (*a key action*)

#### C. Support for the development of science & technology policies
Supporting training & mobility of researchers

Rationale

*Compared with our main trading competitors, Europe has*
- a relative shortage of researchers
- a rather high fragmentation & duplication of research effort
- a certain isolation of research teams
  - particularly in the peripheral & less-favoured regions
- a relatively low mobility of researchers
  - geographically & between academia and industry
- a general tendency towards an ageing workforce, which also affects the research field
- underuse of the potential of female scientists
Supporting training & mobility of researchers

Two principal actions

1. Research Training Networks

2. System of Marie Curie fellowships

Both actions remain
- “bottom-up”
- open to all fields of scientific research
## System of Marie Curie Fellowships (FP5)

<table>
<thead>
<tr>
<th>Individual</th>
<th>Return fellowships</th>
<th>Experienced researchers fellowships</th>
<th>Industry host fellowships</th>
<th>Development host fellowships</th>
<th>PhD Training Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>★ Individual fellowships</td>
<td>★ to return to Community LFRs</td>
<td>★ to aid LFRs &amp; promote industry-academia interactions</td>
<td>★ awarded to industrial enterprises to host young researchers</td>
<td>★ awarded to research institutions in less-favoured regions</td>
<td>★ awarded to training sites to host short stays by PhD students</td>
</tr>
</tbody>
</table>
Enhancing access to research infrastructures

Three principal actions

1. Access to Major Research Infrastructures
2. Infrastructure Cooperation Networks
3. Research Infrastructure RTD projects

- No “core” funding
- For infrastructures where such measures are not taken by the thematic programmes:
  - coordination and support to related activities throughout the Framework Programme
Promoting S&T excellence
Three principal actions

1. **High-level scientific conferences**
   continuation of the successful Euro-Conferences
   complemented by new elements

2. **Distinctions for high-level research work**
   prizes and awards at three levels

3. **Raising public awareness**
   for scientific activities and technological developments
   (particularly those undertaken in European research programmes)
II. European Research Area and FP6
European Research
- a fragmented landscape -

Companies, universities and research centres

CERN, EMBL, ESA, ESO and other international organisations

Only 4% of civilian research of the EU

Framework Programme

Candidate and associated countries

IRL  UK  NL  B  LUX  DK  S  FIN  IRL  NL  B  LUX  DK  S  FIN  IRL  NL  B  LUX  DK  S  FIN
European Research Area

- Proposal January 2000
- Broad support in political, scientific and industrial circles
- Implementation ongoing
European Research Area

**What should be done:**

- Networking existing centres of excellence
- Creation of “virtual” European laboratories
- European approach to infrastructures
- Co-ordination national/European programmes
- Greater mobility of researchers
- Greater coherence of research activities
- Improving the attraction of Europe for researchers from other parts of the world
Framework Programme 2002-2006
Commission proposal

⇒ INTEGRATING EUROPEAN RESEARCH

Priority thematic areas
- Genomics and biotechnology for health
- Information society technologies
- Nanotechnologies, intelligent materials, new production processes
- Aeronautics and space
- Food safety and health risks
- Sustainable development and global change
- Citizens and governance

Anticipating scientific/technological needs

⇒ STRUCTURING THE ERA

- Human resources & mobility

⇒ STRENGTHENING THE FOUNDATIONS OF ERA
Framework Programme 2002-2006
Council Common Position (11/12/2001)

Budget (million euros)

<table>
<thead>
<tr>
<th>Category</th>
<th>Budget (million euros)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EC</strong></td>
<td>16 270</td>
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<tr>
<td>➤ INTEGRATING EUROPEAN RESEARCH</td>
<td>13 285</td>
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<td>➤ STRUCTURING THE ERA</td>
<td>2 655</td>
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<td>· Research and innovation</td>
<td>300</td>
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<td>· Human resources</td>
<td>1 630</td>
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<td>· Research infrastructures</td>
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<tr>
<td>· Science and society</td>
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<td>➤ STRENGTHENING THE FOUNDATIONS OF ERA</td>
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<tr>
<td><strong>EURATOM</strong></td>
<td>1 230</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>17 500</td>
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</tbody>
</table>
III. Human Resources and Mobility in FP6
Human Resources and Mobility in FP5

Experienced Researcher Fellowships

Return Fellowships

Post-doc fellowships

Development Host Fellowships
  Euroconferences
  Research Training Networks
  PhD Training Sites
  Industry Host Fellowships

Individual driven actions

Host driven actions

Junior

Experienced
• Initial training
• Transfer of knowledge
• Advanced training

Host driven actions

Individual driven actions

Excellence driven actions

Promotion
Marie Curie Schemes

Initial Training (i)

**FP5**
PhD Training Sites
- Short stays (max. 1 year)
- PhD training only
- EU/AS nationals only

**Industry Host Fellowships**
- EU/AS nationals only

**FP6**
Host Fellowship for Early Stage Research Training
- Short and long stays (max. 3 years)
- < 4 years experience
- Open to 3rd country nationals
- includes Industry hosts
Marie Curie Schemes

Initial Training (ii)

**FP5**

- Research Training Networks
  - EU/AS nationals
  - < 36 years old

- Euroconferences

**FP6**

- Marie Curie Research Training Networks
  - open to 3rd country nationals
  - no age limit

- Marie Curie Conferences and Training Courses
  - series of thematic conferences
Marie Curie Schemes

Advanced Training

**FP5**
Individual Fellowships
- EU/Associated States only
- < 36 years old

**FP6**
Individual Fellowships
- Intra-European
- International in-coming
- International out-going
- no age limit
- > 4 years experience
Marie Curie Schemes

Transfer of Knowledge

**FP5**

- **Development Host Fellowships**
  - Community LFRs only

- **Experienced Researcher (Individual) Fellowships**
  - Short stays only (max. 1 year)
  - Very experienced researchers (10 years’ experience) only
  - Towards Community LFRs or industry-academia only
  - EU/AS researchers only

**FP6**

- **Host Fellowships for Transfer of Knowledge**
  - All regions/countries of EU/AS

  - Up to 2 years of stays
  - Post-doc level or higher

  - Open to 3rd country nationals
Marie Curie Schemes

Reintegration of Researchers

**FP5**

Return Fellowships
- Only to Community LFRs
- Only for salary costs

**FP6**

Reintegration Grants
- All EU/AS countries
- Contribution to salary or research costs
- After any 2-year Marie Curie post-doc mobility stay

Special grant for researchers returning to Europe
Marie Curie Schemes

Excellence, Promotion and Recognition (FP6)

Marie Curie Excellence Grants

Marie Curie Chairs

Marie Curie Excellence Awards