Transition from EU Framework Programme 7 (2007 – 2013) to HORIZON 2020

Siegfried Huemer

NCURA/EARMA Fellow visit to New Mexico State University July 29 – 30, 2013

Table of Content

1. EU Research Support at TU Vienna
2. Common Strategic EU Framework & FP7
3. Success of TU Vienna in FP7
4. EC Proposal for HORIZON 2020: Objectives & Budget
   4.1 European Research Council
   4.2 Marie Sklodowska-Curie Actions
   4.3 Rules of Participation
   4.4 International cooperation – BILAT EU USA 2.0
   4.5 Next steps towards HORIZON 2020
5. Useful links
1. EU Research Support at TU Vienna

- Service Unit for Researchers, Managers and Administrators
- Central Contact Point for EU Research Projects at TU Vienna
- Support in Preparation & Implementation of EU Research Projects

2. Common Strategic EU Framework

![Diagram of EU Treaties and Frameworks]

- Research Policy (DG Research) (DG InfoSoC)
  - Framework 7 (£50bn)
- Enterprise Policy (DG Enterprise)
  - CIP (£3.6bn)
- Education Policy (DG Education)
  - EIT (£309m)
- Regional Policy (DG Regio)
  - Structural Funds for Innovation (£86bn)
- Health Policy (DG SANCO+InfoSoC)
  - European Innovation Partnership (pilot)

S. McCarthy, Sept. 2010
2. Structure of Framework 7

- ‘Cooperation’
  1. Health
  2. Food, agriculture/fisheries, biotechnology
  3. Information Communication Technologies
  4. Nanosciences + nanotechnologies, Materials+new Production technologies
  5. Energy
  6. Environment
  7. Transport
  8. Socio-economic sciences + the humanities
  9. Space
  10. Security

- ‘Ideas’
  - Frontier Research (European Research Council)

- ‘People’
  - Marie Curie Fellowships

- ‘Capacities’
  - Research Infrastructures
  - Research for SMEs
  - Regions of Knowledge
  - Research Potential
  - Science in Society
  - Inco (Horizontal)
  - Development of Policies

SME (Small and Medium Sized Enterprise)
JRC (Joint Research Centre)

3. Success of TU Vienna in FP7

TU Vienna: 38 in HES Ranking
(Source: EC - Monitoring of FP7, 2011)
3. Success of TU Vienna in FP7

Spezifische EU-Programme & Themenbereiche der 199 RP7 Projekte 2007-2013

(Projektbudget TUW: € 87.412.934.-- EU-Beitrag an TUW: € 75.184.927,31,--)

4. EC proposal for HORIZON 2020

- European Commission proposal for a 80 billion € research and innovation funding programme (2014 -2020)

- A core part of the Europe 2020 Strategy, Innovation Union & European Research Area:
  - Responding to the economic crisis to invest in future jobs and growth
  - Addressing people’s concerns about their livelihoods, safety and environment
  - Strengthening the EU’s global position in research, innovation and technology

EC Proposal for Horizon 2020, 30th Nov. 2011
4. What’s new in HORIZON 2020?

- A single programme bringing together three separate EU research programmes & technology initiatives (Successor of the 7th Research Framework Programme (FP7), Competitiveness and Innovation Framework Programme (CIP) & European Institute of Innovation and Technology (EIT))

- Coupling research to innovation – from research to retail, all forms of innovation

- Focus on societal challenges facing EU society, e.g. health, clean energy and transport

- Simplified access, for all companies, universities, institutes in all EU Countries and beyond worldwide

July 2013 Siegfried Huemer

4. Objectives in HORIZON 2020

1. Strengthening the European excellent science base

2. Boosting Europe’s industrial leadership and competitiveness

3. Increasing the contribution of research and innovation to solutions for key societal challenges

4. Integrating the knowledge triangle of education, research, and innovation

5. Providing scientific and technical support to EU policies

## 4. Budget for HORIZON 2020

### 1. Excellent Science

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Research Council (ERC)</td>
<td>17.0%</td>
</tr>
<tr>
<td>Future and Emerging Technologies (FET)</td>
<td>3.5%</td>
</tr>
<tr>
<td>Marie Skłodowska Curie actions</td>
<td>8.0%</td>
</tr>
<tr>
<td>Research infrastructures</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

### 2. Industrial Leadership

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leadership in enabling and industrial technologies</td>
<td>17.6%</td>
</tr>
<tr>
<td>Access to risk finance</td>
<td>3.7%</td>
</tr>
<tr>
<td>Innovation in SMEs</td>
<td>0.8%</td>
</tr>
</tbody>
</table>

July 2013  
Siegfried Huemer

### 3. Societal Challenges

<table>
<thead>
<tr>
<th>Subcategory</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health, demographic change and wellbeing</td>
<td>9.7%</td>
</tr>
<tr>
<td>Food security, sustainable agriculture, marine and maritime and inland water research, and bio-economy</td>
<td>5.0%</td>
</tr>
<tr>
<td>Secure, clean and efficient energy</td>
<td>7.7%</td>
</tr>
<tr>
<td>Smart, green and integrated transport</td>
<td>8.2%</td>
</tr>
<tr>
<td>Climate action, environment, resource efficiency and raw materials</td>
<td>4.0%</td>
</tr>
<tr>
<td>Europe in a changing world - Inclusive, innovative and reflective societies</td>
<td>1.7%</td>
</tr>
<tr>
<td>Secure Societies – Protecting Freedom and Security of Europe and its citizens</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

July 2013  
Siegfried Huemer
4. Budget for HORIZON 2020

<table>
<thead>
<tr>
<th>Category</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Institute of Innovation &amp; Technology (EIT)</td>
<td>3.52 %</td>
</tr>
<tr>
<td>Non-nuclear Actions of Joint Research Centre (JRC)</td>
<td>2.47 %</td>
</tr>
<tr>
<td>Widening Participation</td>
<td>1.06 %</td>
</tr>
<tr>
<td>Science with and for Society</td>
<td>0.60 %</td>
</tr>
<tr>
<td>TOTAL</td>
<td>100.00 %</td>
</tr>
</tbody>
</table>

TOTAL HORIZON 2020 (EURO million) 70,200

(informal agreement between European Commission, Council and European Parliament, June 30, 2013)

4.1 European Research Council

- ERC Starting Grant
- ERC Consolidator Grant
- ERC Advanced Grant
- ERC Proof of Concept

- Call Pre-announcement: End of 2013
- Call Publication: 2014
4.2 Marie Sklodowaska-Curie

- **ITN – Innovative Training Networks**
  - Training Networks
  - Joint Doctorates
  - European Industrial Doctorates
- **RISE – Research and Innovation Staff Exchange**
  - Early stage researcher or experienced staff
  - Secondement 1 – 12 months
- **COFUND – Co-funding of regional, national and international Programmes**
- **IF – Individual Fellowships** (former IEF, IOF, IIF)
  - Intra- European, international incoming, outgoing mobility

4.3 Rules of Participation

1. A single set of rules
   - Adapted for the whole research and innovation cycle
   - Covering all research programmes and funding bodies
   - Aligned to the Financial Regulation, coherent with other EU Programmes

2. One project – one funding rate for all participants
   - Maximum of 100% of the total eligible costs (except for actions close to market, with a maximum of 70%)
   - Indirect costs: a flat rate of 25% of direct eligible costs

3. Rules for grants
   - Broader acceptance of participants accounting practices for direct costs, and flat rate for indirect costs
   - No time-sheets for personnel working full time on a project
   - Possibility of output-based grants
4.3 Rules of Participation

4. Evaluation criteria
- Scientific excellence (ERC: excellence only)
- Impact of the project
- Implementation

5. Targeted controls and audits
- Lower level of requirements for audit certificates
- Audit strategy focused on risk and fraud prevention

6. Rules on intellectual property
- Balance between legal security and flexibility
- Tailor-made IPR provisions for new forms of funding
- Emphasis on open access to research publications

4.4 Strategy for International cooperation

Need to engage more actively and strategically in international cooperation:

Three main objectives:
- Strengthen the European Union’s excellence and attractiveness in research and innovation as well as its industrial & economic competitiveness
- Tackle global societal challenges
- Support the Union’s external policies

Combining openness with better targeted actions

Strengthened partnership with Member States

Stronger contribution of research and innovation to external policies of the Union (J. Claxton, 2013)
4.4 International cooperation in Horizon 2020

- General opening
- Targeted activities in Societal Challenges and Industrial Leadership
  - Projects with required or preferential 3rd country participation
  - Joint calls, delegated management, ERA-NET, Art 185
- Excellent Science
  - Marie Sklodowska-Curie Fellowships: strong international dimension
  - ERC open to researchers from all over the world – research to be carried out mostly in Member States or Associated Countries
  - Development of global research infrastructures
- Dedicated cross-cutting actions – Inclusive, Innovative and Secure Societies challenge (J. Claxton, 2013)

July 2013 Siegfried Huemer

4.4 International cooperation: BILAT EU USA 2.0 project

- Supporting the bilateral R&D dialogue between the EU and USA
- Promoting transatlantic cooperation between R&I actors
- Enhancing the cooperation / facilitating twinning
- Monitoring the progress of bilateral S & I cooperation


www.EuUsScienceTechnology.eu/
4.5 Next steps towards HORIZON 2020

• From 30th November 2011: European Parliament and Council negotiations on the basis of the Commission proposals

• Ongoing: Parliament and Council negotiations on EU budget 2014 – 2020 (including budget for HORIZON 2020: Euro 70,2 billion)

• Mid 2012: Final calls under 7th Framework Programme for research to bridge gaps towards HORIZON 2020

• November 2012 til January 2013: First reading by European Parliament in the ordinary legislative procedure

• September 2013: Adoption of legislative acts by European Parliament and Council

• 1st January 2014: HORIZON 2020 starts, launch of first calls

5. Useful links

EC official documents: www.ec.europa.eu/research/horizon2020

EU research participant portal: http://ec.europa.eu/research/participants/portal/page/home

BILAT EU USA 2.0: www.EuUsScienceTechnology.eu

EURAXESS Researchers in Motion http://ec.europa.eu/euraxess/index.cfm/links/

EARMA Conference 2013: www.earma-vienna-2013.com
DI Siegfried HUEMER
Vienna University of Technology

Gußhausstrasse 28 e0155
A-1040 WIEN
☎: +43 1 58801 41553
Fax: +43 1 58801 41599
siegfried.huemer@tuwien.ac.at
TU Wien PIC 999979888
www.tuwien.ac.at/en/tuwien_home/