European Knowledge Framework

Austrian Reflection Paper on the Succession of the 7th Framework Programme

December 2010
Reflection Paper: Some Thoughts ...

By the end of 2011, the European Commission will present its proposal for the research policy measures following the 7th Framework Programme. The Reflection Paper on hand is addressed to all those who contribute to the development of the future research and innovation policy: the European Commission, the European Parliament, the member states, the associated states, the regions, as well as stakeholders from science and the business sector. The paper contains considerations regarding the possible future design of RTI policy after 2013. It is based on a national consultation process on the Web (www.era.gv.at/consultation), as well as on a series of high-level stakeholder talks in Austria. The Austrian Reflection Paper does not predefine any negotiating positions, since this would only be possible on the basis of the European Commission proposal. However, the paper provides ideas for further consultations. It is intended to provide food for thought and stimulate discussion, as well as to make a contribution to a new orientation of European research and innovation policy.

Summary: Seven Bites of “Food for Thought”

1. Austria welcomes the further development of the Framework Programmes towards a coherent policy framework reaching well beyond mere project funding. For this purpose, we propose the “European Knowledge Framework” as a new name for coherent RTI policy in Europe.
2. From Austria’s point of view, the structure of the future funding measures should be simple and easy to understand: There should be three pillars for promoting knowledge serving (1) society, (2) growth, and (3) science.
3. Research, technology and innovation should make an important contribution to coming to terms with societal challenges.
4. Strengthening the competitiveness of the business sector by means of instruments that are strategically coordinated with each other, and expanding the frontiers of our knowledge through an effective "European Research Council", are regarded as important pillars in the future "European Knowledge Framework" by Austria.
5. From Austria’s point of view, EU regional policy should contribute even more strongly to supporting the regions in their necessary long-term and knowledge-based structural change.
6. RTI institutions and groups of stakeholders will have to be better involved in planning and implementing funding measures in future. Joint Foresight processes should lead to "Smart Specialisation Strategies", opening up new opportunities for growth for the regions.
7. All efforts to make access to the Framework Programme as well as its implementation simpler and more customer-friendly (simplification) are to be resolutely continued. Being customer-friendly also includes finding the right balance between continuity and the reform required.
Relevance of Joint Research and Innovation Policy for Austria

The time has come to think about the next EU planning period for science, research and innovation: 2014 – 2020. In the year 2014, Austria will be able to look back on nearly 20 years of membership in the European Union.

Austrian participation in the different EU Framework Programmes is regarded by many as a success story:

- According to PROVISO analyses, more than 7,000 Austrian participations since 1995 are evidence of Austrian groups of researchers increasingly networking with European partners;
- Since Austria’s accession to the EU, more than 900 Austrian project carriers took upon themselves the challenging task of coordinating pan-European consortia;
- Since 1995, Austrian project participants received approximately € 1.3 billion of funding from the EU in the Research Framework Programmes;
- The rate of return as measured against the Austrian contribution to the EU budget has risen continuously, from 70% in the 4th Framework Programme to more than 120% in the 7th Framework Programme (PROVISO 2010).

Today, the Framework Programmes are part of the Austrian funding portfolio as a matter of course. The most recent evaluation study on the support structures and impact of the Framework Programmes in Austria (Technopolis 2010) clearly demonstrates that our researchers value the Framework Programme as one of the possible instruments for implementing their own strategic priorities. Against this background, Austria’s research is regarded as having arrived at the European “mainstream”.

However, it would be a dangerous error to hold the naive belief in the fact that we can maintain – or even improve - the level we have achieved without making any further efforts. The success story of Austria in European research policy has been a both a consequence and an enhancement of regional and national efforts over the past 15 years, with the objective of making Austria develop into one of the leading research nations. Europe can help us to proceed on this route, but it cannot substitute it. The Federal government’s decision to aim at a national research quota of 3.76% of GDP by 2020 strengthens confidence in the fact that regional, national and European research policy will be developed hand in hand also in future, provided the private sector takes over its intended role (providing a minimum share of two thirds in the national R&D quota).

Over the past years, the environment for research and innovation has changed fundamentally. The development and exploitation of knowledge have become part of global exchange processes, and neither enterprices nor universities, and least of all the national states, can shut themselves off from them. During the decade following Austria’s accession to the EU, for instance, globalised knowledge production led to a sharp increase in the foreign share in R&D funding in Austria, to 19.4% of research expenditure in 2004, even though this share decreased to 15.7% over the past five years (OECD 2010). At the same time, domestic enterprises are opening up more and more towards new cooperation partners, in the sense of "open innovation" (Austrian Research and Technology Report 2009). The financial system crisis and the economic crisis are restricting the latitude of public budgets, so that competition for funds between research and innovation on the one hand and other policy areas on the other is becoming fiercer.

Against the background of the changing framework conditions, European research and innovation policy plays an important role in Austria’s search for new balances in sharing the workload between the EU, the member states and the regions (subsidiarity principle), in selecting the most effective incentives for private and public research work, as well as in ensuring that future RTI measures are implemented efficiently, economically and unbureaucratically.
New EU Developments

The "Europe 2020 Strategy" of the European Union aims at promoting intelligent, sustainable and inclusive growth in Europe. In order to implement this objective, the Commission Communication on the "Innovation Union" formulates the future framework as one of seven so-called "Flagship Initiatives". This Communication conveys a broad concept of innovation, reaching far beyond technological innovations. The "Innovation Union" focuses attention on framework conditions for innovation policy (e.g. intellectual property rights such as patents), and amongst other things advocates a better deployment of demand-oriented incentives.

The new Treaty on the Functioning of the European Union, or "Lisbon Treaty" for short, entitles the European Commission to take any initiatives in the field of research to ensure coherence between the research policies in the member states and in the European Union. This reinforced coordination by the European Commission has to be effected in close partnership with the member states. In addition, the new provision in the "Lisbon Treaty" is essential according to which a European Research Area is to be created where there is free movement of researchers, and where scientific and technological findings can be exchanged freely. Sometimes this is also called the "internal market for research".

*Chart: Policy Framework for Future Research and Innovation Policy*

In future, the Framework Programmes will serve these changed objectives that have been laid down by the "Lisbon Treaty" and the "Europe 2020 Strategy". After a first stage of the Framework Programmes in the 1980s and 1990s, when they were serving the networking and internationalisation of individual research players in Europe, the Framework Programmes claimed for the first time that they were implementing research policy for the benefit of an overarching
strategy in the first decade of the new century. This was the hour of birth of the “European Research Area” serving the “Lisbon Strategy” (Technopolis 2010).

Now we are at the threshold of a new decade of European research policy, during which the Framework Programmes will

- be part of a comprehensive new, intelligent, sustainable and inclusive growth strategy of the EU (“Europe 2020”);
- fund research, technology and innovation in a coordinated manner;
- enable scientific achievements of highest quality;
- develop the “Internal Market for Research” by dismantling existing barriers;
- stimulate intelligent contributions to meeting the grand challenges;
- increase the coherence between national and EU measures through coordinated partnership.

The Framework Programmes of the future will only partly be funding programmes in the classical sense of the term. Their role is changing towards their turning into a comprehensive strategy through which a Union of free knowledge transfer is to be created. As a complement, the importance of other funding measures in the field of industrial policy or of higher education is to be taken into account.

A New Name for a New Age of RTI Policy

Since the 1980s, the fact that the European funding instruments were numbered chronologically as Framework Programmes reflected three different characteristics: (1) the concentration of all funding measures in one coherent Research Framework Programme; (2) the continuity of the funding logic in the shape of thematic programmes, any modifications in detail notwithstanding; and (3) a certain bureaucratic heavy-handedness as far as marketing European funding measures was concerned.

In future, we will no longer just talk about implementing a research funding programme, but about a policy framework that is as coherent as possible, comprising diverse and exceedingly different individual measures. Ultimately, the “European Research and Innovation Area” will have to contribute to dismantling existing barriers to RTI cooperation, to meeting the grand challenges, to strengthening the knowledge base in Europe, as well as to supporting European competitiveness on the global markets. For these purposes, we need a “European Knowledge Framework” as an “umbrella brand”.

Relation between Regional, National and European RTI Funding

It is a key consideration for Austria that in the multi-level system of research and innovation policy, each level plays its distinct role. The regions are best able to develop future visions for their regional society and to make research, development and innovation serve this vision. The member states ensure the performance of the national innovation systems through a policy mix of legal and institutional as well as direct and indirect elements of governance.

The interaction between these regional and national RTI systems on the one hand and the “European Knowledge Framework” on the other requires a fundamentally cooperative approach that explicitly acknowledges the independence of the other levels respectively.
Structure of the “European Knowledge Framework”

The Interim Evaluation of the 7th Framework Programme proposes focussing future funding measures in three areas, geared towards the requirements of the researchers, of enterprises, as well as of society (Interim Evaluation 2010).

In accordance with the evaluation referred to above, Austria advocates a simple structure of the future funding measures, along three essential pillars: (1) meeting the grand challenges; (2) strengthening the competitiveness of the European business sector; and (3) expanding our knowledge frontiers.

Chart: Characteristics of the "European Knowledge Framework"

"Knowledge for Society" Pillar

The grand challenges for Europe, such as for instance the ageing society, climate change, energy and resource scarcity, or living together in the cities of the future, require a coordinated policy, the most important measures of which often have little or nothing to do with research and innovation. However, there is a broad consensus in Europe concerning the fact that research, technology and innovation should make an important contribution to dealing with the grand challenges. For this purpose, Austria proposes to develop the concept of the Innovation Partnerships further within the
first pillar of the "European Knowledge Framework", so that a coherent mix of supply and demand-oriented incentives for solutions is integrated in each "Grand Challenge". Austria supports the pilot Innovation Partnership in the field of "Active and Healthy Ageing", which integrates, amongst others, a large number of medical, technological and social science issues.

The Innovation Partnerships will consist of a broad spectrum of instruments for which different players in the regions, the member states or the European Union will be responsible. Existing instruments should be examined critically as regards their relevance for the new tasks. Creating new instruments should preferably be avoided. Funding will not be supplied by just one single source, but will trigger different flows of funds. In addition to research, technology and innovation, this mix of instruments will have to comprise activities on knowledge transfer, on regulatory measures (e.g. public funding framework) and on policies on the demand side (e.g. public procurement). The involvement of enterprises should be supported, especially with a view to the implementation of research results.

As provided under Joint Programming, "Joint Calls" should be planned among regional, national and EU players under the framework of the Joint Programming Initiatives (e.g. URBAN EUROPE, CLIMATE KNOWLEDGE), with the Community level providing funds for these calls. Thus critical mass for these measures and an integrated approach could be achieved, which together would ensure better coherence and the required relevance of the "grand challenges" in the member states. However, participation in these measures has to be voluntary in any case, as a matter of principle ("à la carte").

In addition to the jointly funded measures (Joint Programming, Article 185 Programmes, ERA-NET+), the implementation of the Innovation Partnership includes activities that are implemented directly by the Union. These activities comprise on the one hand the funding of collaborative projects, where a mixture of top-down calls and thematically open bottom-up approaches makes sense. In addition, part of the funds should be used for implementing measures agreed through strategic alliances of important stakeholders concerning the "grand challenges".

For each of the three pillars of the "European Knowledge Framework", horizontal measures should be provided in future, which are adapted to the objectives of the respective pillar. Actions funded so far under the framework of "Science and Society" should be integrated into the planning of the Innovation Partnerships. The overarching measures comprise

- mobility & career promotion
- the development and use of research infrastructures, or the targeted use of public procurement for the application of RTI solutions
- research at the Joint Research Centre (JRC Strategy 2010)
- the development of intelligent specialisation strategies
- shaping the global research relations of the Union which should be intensified in particular with a view to the BRIC states
- the development of joint knowledge transfer strategies.

Exemplified by the first pillar, such measures could provide amongst others:

- calls for grants for researchers at the institutes of a "strategic alliance",
- the targeted recruiting of excellent researchers by innovation partners, for meeting specific challenges,
- promoting access of researchers to infrastructures that contribute to the exploration of a societal challenge,
- a remit for the Joint Research Centre to prepare in-depth studies on the societal challenges using Foresight methods,
- supporting the development of a regional specialisation strategy relating to a societal challenge,
• exchange with global partners and institutions (e.g. UNO, OECD), in order to optimise the political governance of global challenges
• supporting the creation of structures for inter-regional knowledge transfer.

"Knowledge for Growth" Pillar

Research and innovation are to be funded at European level also independent of their contribution to coping with societal challenges, both in the field of basic research and in the field of applied research and its exploitation.

Promoting the competitiveness of enterprises as well as their unimpeded use of the Internal Market is one of the provisions of the part of the "Lisbon Treaty" dedicated to research and development. The measures outlined under this pillar should be highly effective for the European economy. Austria proposes to coordinate already existing initiatives better with each other. This should lead to the variety of innovation instruments that has developed over time being examined with regard to their targets and effects, and to streamlining these instruments where this makes sense. A coordinated strategy of the Union is required concerning the orientation and the mix of instruments for RTI funding for the business sector at Community level. This also includes a clear division of labour with those activities that can be carried out better at regional or national level (subsidiarity principle). In addition, we will have to succeed in tying up the loose ends of European innovation policy with research funding.

The most important players within this pillar are the enterprises themselves, independent of their size. They have to play a significant active role in designing the research agenda for topics that are decisive for the development of the European economy in global competition. At the same time, such a course of action must not lead to the emergence of "innovation cartels" that erect barriers to new market participants.

The existing concepts of business-related RTI funding should be used coherently. This includes the long-term "Strategic Innovation Agenda" of the EIT in the same manner as the Technology Platforms and the "Joint Technology Initiatives" emerging from them. Thematic priorities, modelled on the 7th Framework Programme, should also be used, albeit geared towards ambitious research targets.

In the field of fundamental, generic and long-term key technologies, newly emerging fields of technology play a decisive role. Austria would welcome bottom-up funding of collaborative projects for all fields of technology, following the example of the current line of funding in the field of information and communication technologies ("Future and Emerging Technologies"). It has to be ensured that Europe remains competitive in key technologies of the future, such as for instance transport, energy or communications.

In the past, Europe has worked again and again on strategic fields of technology by concentrating its efforts, and examples of this go far beyond the Framework Programmes: Space technologies within ESA, the "Large Hadron Collider" at CERN, or the "Human Genome Project" in the field of biosciences and biotechnology. This kind of "Key Technology Projects" should be developed within the "European Knowledge Framework". Other funding partners (e.g. ESA) are of decisive importance, due to the size and the long-term character of these projects.

The Framework Programme for Competitiveness and Innovation (CIP) should be integrated into the "Knowledge for Growth" pillar, provided that this integration ensures that exploitation and the take-up of ICT continue to be adequately supported.
In addition, a fundamental task of this pillar will consist in preparing a comprehensive research and innovation strategy for the participation of small and medium-sized enterprises in the measures of the "European Knowledge Framework". This strategy will have to cater for the needs of the different types of SMEs. It will also have to consider the effectiveness of measures supporting SMEs more strongly than the number of SMEs participating in the programmes (SMEpact Final Report 2010).

The "Knowledge for Growth" pillar should adapt the instruments for long-term loan financing and the provision of capital by the European Investment Bank (EIB) in the light of a new, coherent and integrated research and innovation policy.

Cross-cutting measures within this pillar could comprise for instance

- funding inter-sectoral mobility of researchers through "Industry - Academia Partnerships and Pathways" or
- the use of research infrastructures by enterprises, or transnational tenders for the procurement of technology-intensive products (e.g. security technologies);
- or also using the science-based "policy options" of the Joint Research Centre when deciding on "Key Technology Projects",
- supporting start-ups by women within the framework of the "European Network to Promote Women's Entrepreneurship",
- or also using the science-based "policy options" of the Joint Research Centre when deciding on "Key Technology Projects",
- supporting established and efficient transfer and exploitation models between enterprises and science.

"Knowledge for Science" Pillar

Funding frontier research by the "European Research Council" (ERC) has proved to be a successful instrument in the 7th Framework Programme.

The ERC is exclusively orientated towards scientific excellence, it refrains from having thematic priorities set from outside, and it funds individuals, therefore the ERC is regarded as the most innovative part of the 7th Framework Programme. However, we have also seen that both a high-performance national science landscape as well as matching R&D expenditure remain indispensable preconditions for the successful participation of member states in the ERC programmes. This can be seen from successful countries such as the Netherlands or Sweden, but also from non-EU member states such as Switzerland and Israel. The Austrian performance in the ERC roughly corresponds to the financial framework that Austria provides (fictitiously) for the ERC (PROVISO 2010).

Austria therefore advocates for all fields of science, including their interdisciplinary issues, to be supported by the ERC. This also includes research in the field of the arts within the domain of "Social Sciences and Humanities".

Supplementary measures should also be taken within the third pillar, for example

- such measures as under the current Marie Curie funding measures for individual researchers, or
- continuing unimpeded access for ERC "Principal Investigators" to high-performance research infrastructures in Europe,
- building up a strategic partnership between the Joint Research Centre and the ERC, in order to use outstanding achievements at the ERC for the seven core thematic areas of the JRC,
• funding branches of excellent research institutions in the convergence regions of Europe,
• improving the perception of the ERC in all parts of the world, in order to support the attractiveness of the ERC for international top researchers.

Importance of Regional Policy

Every Austrian federal province and every region in Europe has its specific research and innovation landscape, with differing performance profiles. Each of them is embedded in a different regional economic structure and follows its own development paths. This variety should be exploited for the benefit of the regions and of Europe.

The actual use of the € 86 billion earmarked for research and innovation within the framework of current EU regional policy has not been outstanding so far. Only 26% of these earmarked RTI funds have been allocated to actual projects to date (EC Communication on "Regional Policy" 2010).

Austria endorses the objective to give a key role to research and innovation also in the upcoming funding period. The regions of Europe should be actively supported in drawing up and implementing strategies for smart specialisation for themselves. It is important in this context that such strategies should not just be top-down processes where politics and administration select the "right" fields of specialisation (Knowledge for Growth, 2009). The lateral thinkers from science and from the business sector that exist in every region should much rather be encouraged to play a more active role in the strategy process. In the same way, the relevant stakeholders of a region will have to be involved, in order to answer the following two questions together: (a) Which new research and technology fields, or which research and technology fields to be further developed, contribute best to renewing the ageing and/or out-dated knowledge of the regional economy, and (b) how big is the economic sector that could benefit from the new research and technology fields, for instance through application-oriented innovations?

A variety of measures from the "European Knowledge Framework" should help the regions to develop their "smart specialisation strategies", for example through
• providing targeted incentives for regional entrepreneurs to participate in the development of specialisation strategies,
• competing for "Knowledge and Innovation Partnerships" (KIC) within the framework of the EIT, or for branch offices of excellent research institutions in the convergence regions of Europe,
• encouraging a coherent SME strategy which aims at maximising the effect of the participation of small and medium-sized enterprises in the different programmes of the "European Knowledge Framework",
• implementing recommendations concerning the better utilisation of funds from the Framework Programmes and the Structural Funds (CREST 2007).

In order to avoid parallel and uncoordinated strategy processes, the regional specialisation strategies will have to be coordinated with programme planning within the framework of EU regional policy. From an Austrian point of view, EU regional policy could at the same time contribute actively to improving the research infrastructures in Europe during the upcoming funding period. If financing has not been ensured already, it could be considered to support the implementation of the ESFRI list, which currently comprises 44 projects, through EU regional policy funds in those member states which will be sufficiently endowed with cohesion funds.
The decision to apply for becoming the location of a new EU research infrastructure has to be reserved for the individual regions. The selection of the location should depend decisively on the "smart specialisation strategy" of the region.

Relative Weighting

In preparation of the European Commission proposal on the next funding period for research and innovation, Austria would like to present its priorities. This is done by weighting the possible pillars and measures.

For Austria, this weighting does neither have a budgetary implication (the value of 100 is only used for better comprehensibility), nor does it bind Austria regarding its position towards the European Commission proposal in late 2011.

The weighting is based on the following considerations:

- The future "European Knowledge Framework" will have to focus on dealing with the societal challenges. Particularly since its importance exceeds all other areas, it will have to be ensured that all 27 member states will become part of the planned Innovation Partnerships, but participation will have to be voluntary as a matter of principle.
- The integrated approach to research and innovation funding identifies competitiveness as the second pillar of the "European Knowledge Framework". This is where the funds from the CIP will be transferred, where the risk cover of the "Risk Sharing Finance Facility" will be guaranteed, where the SME-specific measures and the Joint Technology Initiatives will be funded. The funds for the EIT would be provided from this pillar. The identification and implementation of the "Key Technology Projects" would also be located in this pillar.
- The third pillar serves the funding of excellent basic research ("frontier research") and should be carried out fully by the ERC.
- The horizontal measures should be planned in support of the three pillars and would have to be weighted accordingly. The proposed weighting of the different horizontal measures is oriented on their relative weight in the 7th Framework Programme.
Implementing the "European Knowledge Framework"

The "European Knowledge Framework" is the answer to the grand challenges and the emerging internal market for research and innovation in Europe. This requires taking resolute steps towards better linkage between research and innovation policy, including their implementation instruments ("horizontal coherence"). At the same time, effective RTI policy requires the intelligent and coordinated interaction of measures at the regional, national and European level, without which neither the targets of the "Europe 2020 Strategy" nor those of the "Innovation Union" can be achieved ("vertical coherence").

We actually need further policy areas that make their contribution to implementing the "European Knowledge Framework", from education policy via industry policy to the sectoral policies in the fields of health, energy, or transport. All of this will only be possible if the groups of stakeholders concerned are integrated early, regularly and on equal terms into the implementation of all measures.

This results in the danger of a "cloud of complexity", which could lead to these decisions becoming intransparent, to established networks secluding themselves from the outside world, to inefficient and overly bureaucratic management spreading, and to losing the targets which we want to achieve together, in this cloud.
The challenge lies in achieving better horizontal and vertical coherence, without the price for it - in the shape of an enormous coordination effort - becoming too high. It is clear in this context that it will not be possible to achieve coherence without using coordination mechanisms. It is a matter of finding the right balance, for which Austria proposes the following key points:

(1) The European Commission, the member states and the regions should understand the implementation of the "European Knowledge Framework" as the beginning of a new RTI policy in this period of partnership. This means that Europe promotes excellence in all member states or supports the regions in building up future excellence. This also means, however, that there is a shared responsibility for the planning, governance, implementation and monitoring of RTI policy in Europe. The Council Competitiveness as well as ERAC, coordinated with high-level innovation policy advisory groups (HLG on Competitiveness and Growth, EPG), will have to ensure the coherence required.

(2) The implementation of the RTI policies will have to be planned rigorously from the point of view of the stakeholder groups, in particular of the researchers and innovators. We will need more bottom-up instruments which ensure that essential impulses are carried into the "European Knowledge Framework" directly from science and the business sector. Austria's proposal provides such bottom-up mechanisms in each of the three pillars. Great importance will have to be attached to interconnectivity among the measures of the three pillars proposed. In addition, the cooperation of RTI institutions (universities, non-university research institutions, agencies, laboratories, SMEs, corporate research centres) is to be strengthened systematically. Ultimately the frequently autonomous decisions of these players decide on the success or failure of political ambitions.
(3) From Austria's point of view, it will be decisive to achieve a change in funding philosophy when implementing the "European Knowledge Framework". We will have to get away from bureaucratic input-oriented governance that is obsessed with detail (e.g. person months per task in research projects) towards governance that verifies as far as possible the scientific risk (in basic research) or the innovation potential (in strategic research), which will thus subsequently lead to simplified bureaucratic processes and accounting and financing modalities.

In this context, Austria refers to the "Trust Researchers" initiative, which collected more than 13,500 signatures in 2010 in favour of a more trust-oriented funding philosophy (www.trust-researchers.eu).

(4) Foresight processes contribute to involving stakeholder groups in policy formulation in time. They help to develop joint bandwidths of objectives which serve as points of reference for the different players. They strengthen the self-organisation capacity of those who we want to reach and convince when dealing with the societal challenges. When implementing the "European Knowledge Framework", Europe-wide Foresight processes should become more important.

(5) As also recommended in the Interim Evaluation of the 7th Framework Programme, Austria advocates avoiding the introduction of ever new instruments (Interim Evaluation 2010). In addition, parallel activities among the three pillars of the "European Knowledge Framework" are to be avoided; it will much rather have to be ensured that instruments such as the KIC work towards several objectives simultaneously. The requirement is this: Having as few instruments as possible that are highly effective and geared towards research and innovation policy objectives that are as clearly and comprehensively formulated as possible.

Outlook

With the Reflection Paper on hand, Austria is providing a wealth of considerations intended to stimulate the consultations over the next months. All of the proposals presented are carried by the conviction that we need a coherent RTI policy for a strong Europe in our globalised world. Austria will participate in the upcoming consultations in preparation of the Commission proposal in late 2011 with commitment.
# Glossary of the Most Important Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIP</td>
<td>Competitiveness and Innovation Programme</td>
</tr>
<tr>
<td>CREST</td>
<td>Comité de la Recherche Scientifique et Technologique</td>
</tr>
<tr>
<td>EIB</td>
<td>European Investment Bank</td>
</tr>
<tr>
<td>EIT</td>
<td>European Institute of Technology</td>
</tr>
<tr>
<td>EPG</td>
<td>Enterprise Policy Group</td>
</tr>
<tr>
<td>ERAC</td>
<td>European Research Area Committee</td>
</tr>
<tr>
<td>ERC</td>
<td>European Research Council</td>
</tr>
<tr>
<td>ESFRI</td>
<td>European Strategic Forum on Research Infrastructures</td>
</tr>
<tr>
<td>FET</td>
<td>Future and Emerging Technologies</td>
</tr>
<tr>
<td>HLG</td>
<td>High Level Group on Competitiveness and Growth</td>
</tr>
<tr>
<td>ITER</td>
<td>International Thermonuclear Experimental Reactor</td>
</tr>
<tr>
<td>JPI</td>
<td>Joint Programming Initiative</td>
</tr>
<tr>
<td>JRC</td>
<td>Joint Research Centre</td>
</tr>
<tr>
<td>JTI</td>
<td>Joint Technology Initiative</td>
</tr>
<tr>
<td>KIC</td>
<td>Knowledge and Innovation Community</td>
</tr>
<tr>
<td>RSFF</td>
<td>Risk Sharing Finance Facility</td>
</tr>
<tr>
<td>SET-Plan</td>
<td>Strategic Energy Technology - Plan</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium-sized Enterprises</td>
</tr>
</tbody>
</table>
References

**CREST 2007**, CREST Guidelines on Coordinated Use of FP7 and Structural Funds to support R&D, June 2007

**EC Communication "Regional Policy" 2010**, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Regional Policy Contributing to Smart Growth in Europe 2020, October 2010


**Knowledge for Growth 2009**, Smart Specialisation – the Concept, Knowledge Economists Policy Brief no. 9, Dominique Foray, Paul A. David and Bronwyn Hall, June 2009

**Communication from the Commission** to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, Europe 2020 Flagship Initiative, Innovation Union, October 2010

**Communication from the Commission**, Europe 2020, A European Strategy for Smart, Sustainable and Inclusive Growth, March 2010

**OECD 2010**, Main Science and Technology Indicators, Volume 2010/1, OECD 2010

**Austrian Research and Technology Report 2009**, Report under Section 8(1) of the Research Organisation Act on Federally Subsidised Research, Technology and Innovation in Austria, BMWF (Federal Ministry of Science and Research) / BMVIT (Federal Ministry of Transport, Innovation and Technology) / BMWFJ (Federal Ministry of Economy, Family and Youth), 2009


**SMEpact Final Report 2010**, Impact assessment of the participation of SMEs in the Thematic Programmes of the Fifth and Sixth Framework Programmes for RTD, Coordinated by AVEDAS AG, March 2010