INNOVATION IN THE NATIONAL STRATEGIC REFERENCE FRAMEWORKS

Working document of the Directorate General for Regional Policy

31 October 2006
Table of Contents

1. **INTRODUCTION** ........................................................................................................... 1

2. **INNOVATION IN THE REGIONAL POLICY OF THE EUROPEAN UNION** .............. 2
   2.1. Innovation in the Community Strategic Guidelines ................................................. 2
       2.1.1. Purpose of the Community Strategic Guidelines .............................................. 3
       2.1.2. Innovation priorities of the Community Strategic Guidelines ....................... 3
   2.2. Evaluation of innovation policies and recommendations for 2007-2013............... 4
       2.2.1. Lessons from the 2000-2006 period ................................................................. 4
       2.2.2. Main recommendations for the 2007-2013 period ........................................... 5

3. **INNOVATION IN THE NATIONAL STRATEGIC REFERENCE FRAMEWORKS** .... 6
   3.1. Extent to which innovation is a priority ................................................................. 6
       3.1.1. Innovation is a priority ................................................................................... 6
       3.1.2. Increased investment in innovation ................................................................. 6
       3.1.3. Types of innovation operations foreseen ......................................................... 7
       3.1.4. Objectives and strategies ............................................................................. 7
       3.1.5. Implementation structure ............................................................................. 7
   3.2. Main types of operations foreseen ......................................................................... 8

4. **CONCLUSIONS** .......................................................................................................... 9

**ANNEXES**

1. Additional tables
2. Main features on innovation of the draft National Strategic Reference Frameworks by Member States
1. **INTRODUCTION**

The central importance of innovation in improving the performance of the European economy has been recognised since the original launch of the Lisbon agenda in 2000. The aim in a global and more competitive economy was to help Europe to move up the value chain and, in particular, to exploit the opportunities offered by the growing knowledge economy. In 2005, the Commission proposed a renewed Lisbon agenda: the partnership for growth & jobs\(^1\), where once again innovation was seen as a key driver. This is reflected in the content of the Integrated Guidelines approved by the Member States at that time, which are in turn the basis for the multi-annual National Reform Programmes put in place by each Member State, and which are now being implemented.

In pursuit of the renewed Lisbon agenda, the Council also said that “the Union must mobilise all appropriate national and Community resources including Cohesion policy”\(^2\). This means that promoting innovation is at the same time a central feature in the National Reform Programmes and a main priority for the new Cohesion policy programmes for 2007-2013.

Developing the innovation agenda is also a priority of the Member States under the direction of the Finnish Presidency of the European Union. The Commission has recently proposed 10 priority actions to achieve a broad-based innovation strategy for Europe\(^3\). One of these actions is to ‘foster regional innovation through the new Cohesion policy’.

In relation to cohesion policy, the period from mid-2006 through 2007 is critical. During this period, the national and regional authorities in the Member States, together with the Commission, are engaged in the preparation of the new generation of programmes for 2007-2013. These preparations are based on the resources that will be made available under the Financial Perspective, 2007-2013, as decided in May 2006, and the regulations on cohesion policy which entered into force the following August. The focus on innovation has been increased in a number of ways:

1. The Cohesion Policy Regulations give a prominent position to investments in research and innovation;

2. These Regulations also set a quantitative target: 60% to 75% of available financial resources will be allocated to operations leading to growth and jobs\(^4\). These targets do not exclusively relate to innovation (other areas are included), but they confirm the new framework within which Cohesion Policy will work.

---


4 For the EU15, the Member States should commit to reach this target, whilst for the EU10, Romania and Bulgaria, this is optional.
In terms of content, the main priorities have been defined in the Community Strategic Guidelines. These again focus very much on innovation in all its aspects.

In addition, the Commission has proposed action through the initiative on Regions for Economic Change, which is a separate item on the agenda.

The purpose of this document is to analyse how and to what degree innovation has been retained as an important element in the seven-year strategies described in the National Strategic Reference Frameworks. It starts by presenting the priority actions that characterise the approach to innovation under the Community Strategic Guidelines. It summarises the results of evaluation of Member States’ innovation policies. Finally, it examines the extent to which innovation is a priority in the National Strategic Reference Frameworks (both in terms of financial targets and priorities identified) and describes the main types of operations foreseen.

2. INNOVATION IN THE REGIONAL POLICY OF THE EUROPEAN UNION

The long-term growth performance of the European economy will be determined by its ability to build up and exploit its innovation and research capacity. Innovation stems from the quality of interactions between producers, users and mediators of knowledge: public authorities, enterprises, centres of production or of transfer of knowledge, local coordination institutions, bodies providing financing for SMEs or research, collective foresight systems, etc., and the regional level is particularly appropriate for such interactions. Regions are well placed to appreciate needs and to develop policies by encouraging relevant actors to focus on shared interests. Depending on institutional and cultural factors, this mobilisation requires more or less intervention on the part of public authorities. A regional innovation system should facilitate:

- Identification of the infrastructures available and the regional sources of knowledge and expertise;
- Access to finance, exchange of experience, exploitation of knowledge (development agencies, chambers of commerce, foresight bodies, risk capital funds, etc.); and
- Effective transfer of competences and co-operation between the different regional development actors.

Cohesion policy supports innovation in two main ways: the co-financing of investments through the European Regional Development Fund (ERDF), European Social Fund (ESF) and Cohesion Fund, and the development of a system of regional governance based on strategic development, partnership, programming, monitoring and iterative evaluation. In some ways, it is an innovative policy in itself.

2.1. Innovation in the Community Strategic Guidelines

The renewed Cohesion policy for 2007-2013 encompasses a more strategic approach aiming to boost and integrate growth strategies at European, regional and local level,

---

taking account of the territorial dimension and specificities of regions and based on a reinforced partnership. This helps to ensure that Member States, regions and other stakeholders share the goals of the programmes.

2.1.1. Purpose of the Community Strategic Guidelines

The new legislative framework for Cohesion policy in 2007-2013 aims to ensure that Community priorities are clearly defined so that they can be used effectively by the Member States and regions when drafting their national strategies on economic, social and territorial cohesion and their Operational Programmes (for the ERDF, ESF and Cohesion Fund).

The Cohesion policy regulations confirm that the Community Strategic Guidelines are the framework within which the ERDF, ESF and Cohesion Fund should be used. Based on the Community Strategic Guidelines, Member States should prepare a National Strategic Reference Framework presenting the strategy for Cohesion Policy and demonstrating its consistency with the Community priorities. The Guidelines were subject to a wide consultation of the relevant stakeholders and have been adopted by the Council, thus reinforcing their legitimacy. The regulations also insist that there are explicit links between the national strategies and the National Reform Programmes.

2.1.2. Innovation priorities of the Community Strategic Guidelines

Innovation is a complex concept that embraces three major components: product innovation that includes the development of new products and the rise of new industry sectors; process innovation that requires the development and use of more advanced technologies; and organizational innovation that introduces more efficient arrangements, co-operation networks, flexibility, and optimization of internal and external relations.

The Community Strategic Guidelines identify three major priorities, one of which is innovation: “encouraging innovation, entrepreneurship and the growth of the knowledge economy by research and innovation capacities, including new information and communication technologies”.

The Guidelines define innovation as a driver to generate growth and jobs. It is defined more broadly than Research and Technological Development alone. Five components concern innovation: four under the guideline “Improving the knowledge and innovation for growth” and one under the guideline “More and better jobs”:

- “Increase and better target investments in Research and Technological Development” (§ 2.2.1. of the Community Strategic Guidelines): improving Research and Technological Development infrastructures; encouraging cross-border and trans-national initiatives in the field of research; strengthening technology transfer; facilitating cooperation between enterprises, research centres / education bodies (e.g., universities) and the public sector (the so called ‘triple helix’);

- “Facilitate innovation and promote entrepreneurship” (§ 2.2.2. of the Community Strategic Guidelines): supporting research in Small and Medium Enterprises; encouraging exchanges of experience, synergies and economies of scale by establishing poles of excellence or clusters; providing business support services; promoting innovation awareness, entrepreneurship and the creation of new firms (start-ups, spin-offs, incubators,…); supporting specific groups of entrepreneurs such
as young people or women. In line with the Renewed EU Sustainable Development Strategy\(^6\), eco-innovations will be given particular attention.

- **“Improve access to finance”** (§ 2.2.4. of the Community Strategic Guidelines): supporting the availability and use of non-grant financial instruments to finance risk (e.g., seed capital, venture capital). This component is reinforced by the establishment of JEREMIE, an initiative from the European Commission providing a series of coherent actions to promote increased access to finance for micro to medium enterprises;

- **“Promote the information society for all”** (§ 2.2.3. of the Community Strategic Guidelines): improving Information and Communication Technology capacities (e.g., broadband where the market fails to provide it at an affordable cost and to an adequate level); increasing the use of Information and Communication Technologies by households, firms and public administration; improving the skills of users; improving the supply of services and encouraging use (e-commerce, e-health, e-government, e-learning, e-inclusion,…);

- **Human capital** (§ 2.3. of the Community Strategic Guidelines): improving the skills of citizens through education and training.

### 2.2. Evaluation of innovation policies and recommendations for 2007-2013

In 2006 the Directorate General for Regional Policy analysed the results of the Updates of the Mid Term Evaluations which were carried out in 2005 under the responsibility of the Managing Authorities for the 2000-2006 programmes. It has also recently received the results of a study it commissioned in order to understand how Cohesion Policy can contribute more effectively to the competitiveness of regions through definition of appropriate innovation strategies and better management of innovative processes\(^7\).

#### 2.2.1. Lessons from the 2000-2006 period

There is clear evidence that Cohesion Policy has contributed to improved regional innovative capacity. In Objective 1 regions, the main focus was on building basic capacities, combining education, training, technological modernisation and awareness-raising, and networking. In Objective 2 regions, programmes tended to be demand-led and focused on technology transfer, networking and clustering initiatives.

However, financial allocations to innovation planned in 2000 were in the case of several Member States reduced at mid-term due to implementation difficulties arising from the design of new measures and weak demand from enterprises. In addition, efforts to improve policy-making, strategy development and evaluation, including coordination between national and regional policy making, were limited. Four main bottlenecks to the efficient absorption of funds and effective outcomes of innovation measures were identified:

\(^6\) Renewed Sustainable Development Strategy: European Council DOC 10117/06

\(^7\) Technopolis (2006): Strategic Evaluation on Innovation and Knowledge in the Structural Funds – Perspectives for 2007-2013
– An administrative rather than strategic management of innovation measures leading to a lack of synergies with other initiatives;

– A lack of expertise at national and regional levels in managing innovation measures;

– A continuing dominance of supply-side measures with poor linkages to regional innovation systems;

– A limited interest in many ‘softer’ ‘demand-side’ measures aimed directly enterprises.

2.2.2. Main recommendations for the 2007-2013 period

The evaluation carried out for the Commission identifies a series of recommendations which could enhance Regional Policy support for innovation:

- Establishing effective and efficient systems of innovation governance

There are significant differences in the nature and extent of the decentralisation of powers between regions in terms of design, funding and implementation of innovation policies. The capacity of the regions to develop and implement innovation policies depends not only on their own powers, but also on the diversity of national regulatory environments and the extent of co-operation between the major stakeholders at national and regional level. For the future, governance needs to be reinforced through a strong and long term institutional commitment. Strategic co-ordination needs to involve all the various competent authorities as well as the key private actors.

- Investment priorities in the European policy context

Increasingly, policy-makers recognise that Structural Funds have a special role to play in accelerating the pace of transition from traditional to knowledge-based economies in less prosperous regions. There is no single ‘miracle strategy’ to make economies more innovative. The key recommendations for the next programming period are:

– To identify a limited number of priorities for regional innovation policies, where the region can develop a competitive position;

– To focus support more on the demand than supply side of innovation;

– To balance the technology focus with other forms of innovation;

– To invest sufficiently in human capital;

– To ensure better co-ordination of innovation policies.

There is also a need for actions at operational level:

– To establish transparent and efficient selection systems for projects to be funded;

– To introduce a degree of flexibility and risk in policy planning;

– To improve the monitoring and evaluation culture to increase the value-added of interventions.
3. **INNOVATION IN THE NATIONAL STRATEGIC REFERENCE FRAMEWORKS**

The analysis below is based on the draft National Strategic Reference Frameworks received by 31 October 2006 in the Directorate General for Regional Policy (the availability of these drafts is presented in table i) of Annex 1). Out of the National Strategic Reference Frameworks analysed, only two are official drafts which have been formally submitted to the Commission (Austria and Latvia). Each draft has been examined, in particular the sections on the strategy and objectives, innovation issues, the implementation system and financial allocations (when available). A summary of the situation for each Member State is presented in Annex 2.

### 3.1. Extent to which innovation is a priority

#### 3.1.1. Innovation is a priority

Innovation is a key priority for all Member States as reflected in the National Reform Programmes which are now being translated into the national strategies and programmes of Cohesion Policy. It features in all the National Strategic Reference Frameworks. In most ‘Regional competitiveness and employment’ regions, it is the first priority. Member States use the term ‘innovation’ appropriately, not restricting it to Research and Technological Development but broadening it to other fields, such as innovation policies for enterprise, Information Society and Human Capital.

#### 3.1.2. Increased investment in innovation

In the 2000-2006 programming period, innovation accounted for 7.5% of forecast expenditure.

In the draft National Strategic Reference Frameworks, the amounts allocated to innovation are often not clearly defined. Early indications are that the percentage allocation will increase compared to the last programming period (for the new Member States given the radical increase in funding, the absolute amounts will increase very significantly). Out of the 25 National Strategic Reference Frameworks received, 14 make a commitment to reach the ‘earmarking’ targets (cf. Table ii) in Annex 1).

---

8 Some National Strategic Reference Frameworks have not yet been submitted to the Commission and for those which have been submitted, the Commission has not yet formally taken note of them. According to Council Regulation (EC) No 1083/2006 of 11 July 2006, “Each Member State shall transmit the National Strategic Reference Framework to the Commission within five months following the adoption of the Community Strategic Guidelines on cohesion. The Commission shall take note of the national strategy and the priority themes chosen for assistance from the Funds, and make such observations as it considers appropriate within three months from the date of receipt of the framework.” (Article 28(2))

9 Allocations to innovation for the 2000-2006 period, *(total expenditure)* (source: programme complements sent by the Member States, categories of expenditure of the classification system of the Structural Funds for 2000-2006). The categories concerned are: research projects based in universities and research institutes, innovation and technology transfers, establishment of networks and partnerships between businesses and / or research institutes, RTDI infrastructures, training for researchers and Information Society (basic infrastructure, technologies, services and applications for citizens and SMEs).
3.1.3. Types of innovation operations foreseen

The types of operations foreseen are in line with the Community Strategic Guidelines. The National Strategic Reference Frameworks include strengthening Research and Technological Development, assisting enterprises, making financial instruments available for innovation, promoting the Information Society and improving human capital. There are no major differences between ‘Convergence’ and ‘Regional competitiveness and employment’ regions in terms of types of operations proposed (in terms of amounts, it is too early to have a view as they are not yet indicated).

All National Strategic Reference Frameworks foresee a very wide range of options. Member States have not prioritised particular types of operations linked to the strategic analysis of strengths and weaknesses and the objectives set. When innovation features in national and regional Operational Programmes, Member States and regions will need to specify the types of operations they plan to implement.

3.1.4. Objectives and strategies

The objectives of the National Strategic Reference Frameworks are ambitious. The link with the National Reform Programmes is explicit. However, the objectives tend to be rather general as they focus on macroeconomic growth for ‘Convergence regions’ and on improving the ‘knowledge economy’ for the ‘Regional competitiveness and employment’ regions. The strategies do not provide details on the process behind: little information is given on the partnerships through which the strategies were developed, on the options which were discussed and on the justification for the options finally chosen.

3.1.5. Implementation structure

In general, there are few details on the implementation systems. Whilst the Operational Programmes are listed, their content is not yet defined nor their links to national initiatives for innovation. In 12 Member States (mostly ‘Convergence’, cf. Table 2 below) innovation will be implemented exclusively through one or several national Operational Programmes. In the others, innovation will feature in the regional Operational Programmes.

Table 1 - Type of implementation structure for innovation (national or regional)

<table>
<thead>
<tr>
<th>National</th>
<th>BG, CY, DK, EE, HU, LT, LV, LU, MT, PT, SI, SK</th>
</tr>
</thead>
<tbody>
<tr>
<td>(of which MS = region)</td>
<td>(CY, DK, EE, LT, LV, MT, SI)</td>
</tr>
<tr>
<td>Regional</td>
<td>AT, BE, DE, FI, FR, IE, NL, SE, UK</td>
</tr>
<tr>
<td>Both</td>
<td>CZ, ES, EL, PL, RO</td>
</tr>
<tr>
<td>Information not available</td>
<td>IT</td>
</tr>
</tbody>
</table>

In some cases, particularly in the new Member States, the country is one region. Taking this into account, innovation policies will be implemented at the regional level in most Member States (21 of the 27). Available research and experience demonstrates that the regional level is most appropriate for the design and implementation of innovation policies, based on efficient and effective partnerships. For example, the forthcoming
regional innovation scoreboard shows that regions within the same Member State present specificities which need to be addressed at regional level.

3.2. Main types of operations foreseen

The following six themes are taken from the Community Strategic Guidelines (cf. § 2.1.2.): the first five are guidelines and the last, ‘experimentation’, is a recommendation to test new projects and approaches.¹⁰

Each of the following paragraphs highlights the main types of operations foreseen under each of the six themes. It follows the analysis of each National Strategic Reference Framework. Only those operations which feature in the national strategies of a significant number of Member States are mentioned.

- **Increase and better target investments in Research and Technological Development**: The 3 main objectives in the field of Research and Technological Development are: (1) to strengthen the research capacities (infrastructures) in order to reach an excellence level in some fields and benefit from research programmes (e.g., 7ᵗʰ Framework Programme); (2) to adapt research supply to needs and to strengthen technology transfer; and (3) to increase private research.

- **Facilitate innovation and promote entrepreneurship**: The 4 main objectives in relation to support for innovation in enterprises are: (1) to encourage for entrepreneurship; (2) to have awareness campaigns on innovation for Small and Medium Enterprises; (3) to create new enterprises (e.g., spin-offs, start-ups); and (4) to network enterprises (e.g., clusters) to share knowledge, to work together on projects and to benefit from economies of scale and exchange knowledge (experiences, competencies). In ‘Convergence’ regions, the modernisation of enterprises is also a widespread objective.

- **Improve access to finance**: The difficulty for innovative enterprises to transform an idea into a marketable product / service due to a lack of adequate financial instruments is recognised. Access to finance should be improved through the availability of risk capital, seed capital, venture capital and loan guarantees.

- **Promote the information society for all**: The main objectives of the Member States are to reinforce the supply of services (e-government, e-commerce, e-health,…) and to stimulate the demand for such services through awareness campaigns and an improvement of citizens’ skills. For the ‘Convergence’ regions the setting up of broadband capacities is also often mentioned. However, no amounts are allocated to this priority yet.

- **Human Capital**: The main objective as regards innovation is to increase the number of ‘sciences and engineering’ graduates. Some Member States envisage using the Operational Programmes to change their education systems to reach this objective.

¹⁰ The Commission recommends that Member States allocate an amount of their Operational Programmes to the experimentation of new actions (projects and approaches). The objective is to test projects and approaches and identify those which are successful and which can be implemented on a more extensive basis in later years of the Operational Programme.
Another objective is to improve the management skills in Small and Medium Enterprises.

- **Experimentation**: Only Finland refers at this stage in its draft National Strategic Reference Framework to experimentation (a possibility to test projects and approaches under Operational Programmes). The Commission in its comments on the draft National Strategic Reference Frameworks has argued for small allocations to be made to experimentation and later drafts may take note of this opportunity. Early indications are that a number of Member States plan to make such a provision and describe how such an instrument will function in their Operational Programmes.

4. **CONCLUSIONS**

With the adoption of the renewed Lisbon agenda in 2005, the decision was taken by the Member States to use the resources of Cohesion Policy as the principal instrument at Community level to realise its objectives. Now that the implementation phase is underway, the preliminary results are encouraging. In particular, the National Strategic Reference Frameworks show that innovation will play an increased role in the new generation of Cohesion programmes for the 2007-2013 period. The actions that will be implemented are in line with those of the Community Strategic Guidelines which in turn derive to a large extent from the National Reform Programmes adopted under the Lisbon strategy. Importantly, the indications are that Member States and regions will allocate more resources to innovation compared to the 2000-2006 period.

As the analysis presented in this document was carried out at an early stage in the preparation of the National Strategic Reference Frameworks, the objectives and operations foreseen are defined broadly and the budgets are not yet clear. This information is expected to be available in later drafts and will be complemented in the Operational Programmes to be sent to the Commission in the coming months.

Experience and evaluation evidence demonstrates that in the 2000-2006 period, there was a discrepancy between plans and implementation. While certain amounts were allocated to innovation in 2000, several Member States reduced these amounts at the mid-term. This suggests that Member States will need to take care to ensure that the intentions in the National Strategic Reference Frameworks are translated into reality, first through the Operational Programmes and then through the work of the Managing Authorities in implementation.

During discussions on the Operational Programmes, the Commission will highlight the following weaknesses identified in evaluations of the 2000-2006 programmes:

- **Innovation**: Innovation allocations were relatively modest in 2000-2006 while the definition was often restricted to Research and Technological Development. It is important to include also innovation policies targeted at enterprises (efficient technology transfer mechanisms), the Information Society and the improvement of Human Capital (to generate and consume innovation);

- **Regional innovation strategies**: An important pillar of an innovation policy is the establishment (and regular update) of regional innovation strategies. As the regional dimension is particularly important for innovation, strategies are
generally best designed at the regional level where they can reflect the strengths and potential of the key actors in the area.

- Governance and Partnership: Innovation policies have sometimes suffered from a lack of staff competent in innovation issues and a lack of indicators and targets to stimulate the actors and monitor progress. The private sector is also often not sufficiently involved in the design and implementation of innovation policies, although it is the private sector which will ultimately transform innovative ideas into growth and jobs;

- Risk taking: Regions did not take a sufficiently proactive attitude so as to achieve a high quality of operations, through trying out new ways of doing things, whilst absorbing all available resources.

The Commission looks forward to discussing these issues with Member States and regions in the context of negotiations on the Operational Programmes.

Through the categorisation of expenditure which was developed for the 2000-2006 period, the Directorate General for Regional Policy has been able to start a process of benchmarking expenditure on innovation. In 2007, a comparison with 2007-2013 allocations will be possible which can be monitored in future years, facilitating discussion and debate on the progress of innovation policies.

A final point to emphasise is the opportunity to use regional policy to support experimentation. Relatively small amounts of resources can be used to support pilot actions and approaches, trying out new initiatives and testing their effectiveness before implementing them on a larger scale. Such experimentation could be linked to the development or adaptation of regional innovation strategies in partnership between public authorities, education and research bodies and enterprises. It could also be used to pilot actions stemming from networks under the Regions for Economic Change initiative (experimenting with good practices successfully implemented in other regions).

The conclusion of the analysis on the role of innovation in the National Strategic Reference Frameworks as at 31 October 2006 is positive, although this is still an early stage: innovation will play an increased role in regional policy for the 2007-2013 period. However, Ministers will need to remain alert to ensure that the intentions set out in the National Strategic Reference Frameworks are implemented in reality. The Operational Programmes will provide further details enabling a more in-depth debate on the extent to which innovation, with support from regional policy, is planned to deliver growth and jobs.
Annex 1

Additional tables
Table (i) - Date of the draft National Strategic Reference Frameworks

<table>
<thead>
<tr>
<th>Member State</th>
<th>Date of draft</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>31.10.2006</td>
</tr>
<tr>
<td>BE</td>
<td>Not available</td>
</tr>
<tr>
<td>BG</td>
<td>14.09.2006</td>
</tr>
<tr>
<td>CY</td>
<td>05.2006</td>
</tr>
<tr>
<td>CZ</td>
<td>05.2006</td>
</tr>
<tr>
<td>DE</td>
<td>27.09.2006</td>
</tr>
<tr>
<td>DK</td>
<td>25.08.2006</td>
</tr>
<tr>
<td>EE</td>
<td>11.07.2006</td>
</tr>
<tr>
<td>EL</td>
<td>30.10.2006</td>
</tr>
<tr>
<td>ES</td>
<td>27.10.2006</td>
</tr>
<tr>
<td>FI</td>
<td>20.09.2006</td>
</tr>
<tr>
<td>FR</td>
<td>25.04.2006</td>
</tr>
<tr>
<td>HU</td>
<td>01.08.2006</td>
</tr>
<tr>
<td>IE</td>
<td>09.2006</td>
</tr>
<tr>
<td>IT</td>
<td>05.2006</td>
</tr>
<tr>
<td>LV</td>
<td>03.11.2006</td>
</tr>
<tr>
<td>LT</td>
<td>21.06.2006</td>
</tr>
<tr>
<td>LU</td>
<td>Not available</td>
</tr>
<tr>
<td>MT</td>
<td>10.07.2006</td>
</tr>
<tr>
<td>NL</td>
<td>29.09.2006</td>
</tr>
<tr>
<td>PL</td>
<td>01.08.2006</td>
</tr>
<tr>
<td>PT</td>
<td>09.2006</td>
</tr>
<tr>
<td>RO</td>
<td>04.2006</td>
</tr>
<tr>
<td>SE</td>
<td>29.06.2006</td>
</tr>
<tr>
<td>SI</td>
<td>20.05.2006</td>
</tr>
<tr>
<td>SK</td>
<td>09.05.2006</td>
</tr>
<tr>
<td>UK</td>
<td>23.10.2006</td>
</tr>
</tbody>
</table>
Table (ii) - Allocations for innovation

<table>
<thead>
<tr>
<th>Member State</th>
<th>Innovation 2000-2006&lt;sup&gt;a&lt;/sup&gt;</th>
<th>‘Earmarking’ 2007-2013&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT</td>
<td>9.1%</td>
<td>Yes</td>
</tr>
<tr>
<td>BE</td>
<td>11.4%</td>
<td></td>
</tr>
<tr>
<td>BG</td>
<td>Not applicable</td>
<td>Yes</td>
</tr>
<tr>
<td>CY</td>
<td>5.2%</td>
<td></td>
</tr>
<tr>
<td>CZ</td>
<td>3.5%</td>
<td></td>
</tr>
<tr>
<td>DE</td>
<td>7.8%</td>
<td>Yes</td>
</tr>
<tr>
<td>DK</td>
<td>5.7%</td>
<td>Yes</td>
</tr>
<tr>
<td>EE</td>
<td>9.0%</td>
<td></td>
</tr>
<tr>
<td>EL</td>
<td>7.1%</td>
<td>Yes</td>
</tr>
<tr>
<td>ES</td>
<td>8.4%</td>
<td>Yes</td>
</tr>
<tr>
<td>FI</td>
<td>11.2%</td>
<td>Yes</td>
</tr>
<tr>
<td>FR</td>
<td>6.3%</td>
<td></td>
</tr>
<tr>
<td>HU</td>
<td>9.2%</td>
<td>Yes</td>
</tr>
<tr>
<td>IE</td>
<td>14.0%</td>
<td>Yes</td>
</tr>
<tr>
<td>IT</td>
<td>6.5%</td>
<td></td>
</tr>
<tr>
<td>LV</td>
<td>3.4%</td>
<td></td>
</tr>
<tr>
<td>LT</td>
<td>10.1%</td>
<td></td>
</tr>
<tr>
<td>LU</td>
<td>6.7%</td>
<td></td>
</tr>
<tr>
<td>MT</td>
<td>1.5%</td>
<td></td>
</tr>
<tr>
<td>NL</td>
<td>4.6%</td>
<td>Yes</td>
</tr>
<tr>
<td>PL</td>
<td>10.0%</td>
<td>Yes</td>
</tr>
<tr>
<td>PT</td>
<td>7.2%</td>
<td></td>
</tr>
<tr>
<td>RO</td>
<td>Not applicable</td>
<td>Yes</td>
</tr>
<tr>
<td>SE</td>
<td>5.8%</td>
<td>Yes</td>
</tr>
<tr>
<td>SI</td>
<td>10.1%</td>
<td></td>
</tr>
<tr>
<td>SK</td>
<td>3.0%</td>
<td></td>
</tr>
<tr>
<td>UK</td>
<td>6.6%</td>
<td>Yes</td>
</tr>
<tr>
<td>EU</td>
<td>7.5%</td>
<td>-</td>
</tr>
</tbody>
</table>

a. Allocations to innovation for the 2000-2006 period, *(total expenditure)* (source: programme complements sent by the Member States, categories of expenditure of the classification system of the Structural Funds for 2000-2006). The categories concerned are: research projects based in universities and research institutes, innovation and technology transfers, establishment of networks and partnerships between businesses and / or research institutes, RTDI infrastructures, training for researchers and Information Society (basic infrastructure, technologies, services and applications for citizens and SMEs).

b. Whether the Member States indicates that it will reach the ‘Earmarking’ target as a percentage of total allocations *(ERDF + ESF + Cohesion Fund).*
**Annex 2**

**Main features on innovation of the draft National Strategic Reference Frameworks by Member States**

Annex 2 presents a summary of the National Strategic Reference Frameworks of each Member State.

The ‘state of play regarding innovation’ indicates the situation of the Member State regarding innovation. It is based on the data of the European Innovation Scoreboard, which is the instrument developed by the European Commission, under the Integrated Guidelines for Growth and Jobs, to evaluate and compare the innovation performance of the Member States.

The ‘extent to which innovation is a priority’ presents the main strategic choices made by the Member State: is there a formal innovation strategy?; will innovation be implemented through national (sectoral) or regional Operational Programmes?; What is the budget allocated to innovation (if any)?;…

The ‘main types of operations foreseen’ summarises the operations that will be implemented. The structure is in line with the one presented in § 2.1.2. “Priorities of the Community Strategic Guidelines”.

**ACRONYMS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT</td>
<td>Information and Communication Technologies</td>
</tr>
<tr>
<td>RTD</td>
<td>Research and Technological Development</td>
</tr>
<tr>
<td>RTDI</td>
<td>Research and Technological Development and Innovation</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>NSRF</td>
<td>National Strategic Reference Framework</td>
</tr>
</tbody>
</table>
• **State of play regarding innovation:** In 2005, Austria’s innovation performance was in 5th position out of the 25 EU Member States. Its main strengths are the level of public RTD and the innovativeness of SMEs. Its main weaknesses are the lack of early stage venture capital and the low number of students in sciences and engineering. In the 2000-2006 period, 9.1% of the resources were allocated to innovation.

• **Extent to which innovation is a priority:** The overall objective of the strategy is to transform Austria into a ‘knowledge-based’ economy. The 3 main ideas are: (1) the importance of the regional level to generate innovation; (2) the need to increase RTD activities; and (3) the importance of enterprises (mainly SMEs) for innovation. Innovation will be implemented through the regional programmes, but there is no indication on the resources allocated.

• **Main types of operations foreseen:**
  - RTD: increase of the RTD activities, capacity building in RTD in the regions lacking such infrastructures;
  - Enterprises: public subsidies to assist enterprises in RTD and innovation, exchange of knowledge through networks, clusters and technology transfer, business advisory services, assistance to newly created companies;
  - Access to finance: financing instruments for start-ups and innovative enterprises;
  - Information Society: development of the Information Society (availability of services and promotion of their use);
  - Human capital: increase of the skills of the workers, increase of the number of researchers, improvement of the regional governance in the field of innovation.
BELGIUM (BE)

Version of the NSRF: *Not available yet*

In the 2000-2006 period, 11.4% of the resources were allocated to innovation.
State of play regarding innovation: In 2005, Bulgaria’s innovation performance was in 26th position out of 33 countries (EU25 + BG + RO + Iceland + Norway + Switzerland + Turkey + USA + Japan), although it performs better than five of the EU Member States. It spends a lot on ICT, but broadband penetration is still low. Private RTD is very limited. According to the latest European Innovation Scoreboard 2005, Bulgaria was among the countries that were “further falling behind” in their overall innovation performance.

Extent to which innovation is a priority: Bulgaria has two medium term objectives: to strengthen the competitiveness of the economy to achieve high and sustainable growth and to develop human capital to ensure higher employment, income and social protection. In terms of innovation, Bulgaria will have 7 national (sectoral) Operational Programmes, 3 of them covering innovation: ‘Development of the competitiveness of the Bulgarian economy’, ‘Human Resource development’ and ‘Regional Development’. Bulgaria has indicated that it aims to reach the ‘earmarking’ objective of 60%.

Main types of operations foreseen:

- RTD: increase of the level of applied research;
- Enterprises: entrepreneurship, technology transfer, business and regulatory environment, improvement of production processes, support to start-ups, clusters, networks, encouragement to SMEs to use new technology;
- Access to finance: availability of financial instruments for start-ups (guarantees, venture capital, micro credits, grant schemes);
- Information Society: development of a broadband infrastructure, public e-services, ICT in the healthcare sector, judiciary system and schools;
- Human capital: increase of the quality and relevance of skills at school, modernisation of education, training for SMEs in managerial and ICT skills.
• **State of play regarding innovation:** In 2005, Cyprus’ innovation performance was in 17th position out of the 25 EU Member States. Cyprus is performing particularly well on innovation among SMEs and for total innovation expenditures. The main weaknesses are the small size of enterprises, inadequate research infrastructures, low private and public RTD expenditure, limited utilisation of new technologies, low number of people involved in research despite the high educational level of the Cyprus labour force, low broadband penetration and the very low level of direct foreign investments in the technology areas. In the 2000-2006 period, 5.2% of the resources were allocated to innovation.

• **Extent to which innovation is a priority:** Among the specific interrelated objectives of the NSRF strategy is "to promote the knowledge society and improve performances in the research and innovation sectors". There will be one programme focusing on growth, territorial cohesion and competitiveness (ERDF and Cohesion Fund) and one for employment and social cohesion (ESF). The resources to be allocated to innovation are not yet known.

• **Main types of operations foreseen:**
  
  − RTD: research and technological infrastructures, increase of public spending on research, research networks, increase of the private research;
  
  − Enterprises: support for entrepreneurship, innovation poles and incubators, innovation support services;
  
  − Access to finance: establishment of financial instruments and creation of a government guarantee agency for loans;
  
  − Information Society: promotion of ICT for business and public services, strengthening e-government services and extending e-health services;
  
  − Human capital: promotion of a research and innovation culture at all levels of education, improve careers of researchers including mobility and international collaboration.
• **State of play regarding innovation:** In 2005, the Czech Republic’s innovation performance was in 20\textsuperscript{th} position out of the 25 EU Member States. The main strength is high employment in medium-high and high technology manufacturing. The main weaknesses are low expenditures for RTD and low broadband penetration. In the 2000-2006 period, 3.5% of the resources were allocated to innovation.

• **Extent to which innovation is a priority:** The objective of the Czech Republic is to strengthen competitiveness in a sustainable way so that it will be higher than the EU average, making the country an attractive place to live and invest in. Innovation has clearly a large focus in 3 of the national (sectoral) Operational Programmes: ‘Enterprise and innovation’, ‘Research and development for innovations’ and ‘Education for competitiveness’. Innovation will also feature in the 8 regional Operational Programmes.

• **Main types of operations foreseen:**
  - RTD: participation in the European Research Area, innovation networks, clusters, adaptation of research to business needs, RTD capacities (infrastructures);
  - Enterprises: support to start-ups, advisory services, incubators, technology transfer, SME networks;
  - Access to finance: better access to finance for enterprises;
  - Information Society: development of consistent nation-wide ICT infrastructure, effective ICT utilisation, interoperability, convergence of networks and services in the electronic communications market, security, information society for all, modern public administration, e-government and e-services;
  - Human capital: high education more focused on RTD, ICT training, modernisation of the education system and e-learning.
State of play regarding innovation: In 2005, Germany’s innovation performance was in 4th position out of the 25 EU Member States. Germany has many strengths including RTD expenditures and the innovativeness of its enterprises. This results in a high number of patents. However, it has reducing numbers of graduates in sciences and engineering. In the 2000-2006 period, 7.8% of the resources were allocated to innovation.

Cohesion policy interventions from 2000-2006 in Germany were implemented through 20 Programmes of which 15 Programmes contained RTDI interventions.

Extent to which innovation is a priority: The draft NSRF of Germany covers both ‘Regional competitiveness and employment’ and ‘Convergence’ regions. The general objective is “Convergence, competitiveness and employment”, through innovation. Each region will have a programme with a priority axis on innovation (ie. there will be no national programme on innovation). The resource allocations have not yet been defined.

Main types of operations foreseen:

- RTD: improvement of RTD infrastructures, assistance for the development of new technologies, technology transfer (through networking);
- Enterprises: clusters, financing of RTD projects in enterprises, promotion of innovation for the SMEs, entrepreneurship;
- Access to finance: improvement of the availability of financing instruments (risk-capital);
- Information Society: increased use of ICT;
- Human capital: development of high schools, improvement of education infrastructures in the field of ICT;
DENMARK (DK)

- **State of play regarding innovation**: In 2005, Denmark’s innovation performance was in 3rd position of the 25 EU Member States. It is strong in nearly all the innovation indicators, especially the education level and the innovativeness of enterprises. Privately funded RTD in universities could be improved. Regarding innovation policies, recent years have been dominated by central government attempts to make universities more efficient organisations, with stronger links to private businesses and society at large. In the 2000-2006 period, 5.7% of the resources were allocated to innovation.

- **Extent to which innovation is a priority**: The overall goal of the strategy is that Denmark maintains its position as one of the 10 wealthiest countries in the world, measured in terms of per capita GDP. To contribute to the achievement of the objective, Denmark's NSRF will focus on innovation and enterprises. There will be one national ERDF and one national ESF programme.

- **Main types of operations foreseen**:
  - RTD: support to research based innovation, better connections between business and knowledge institutions;
  - Enterprises: building of an entrepreneurial culture, conversion of new knowledge into products and services (technology transfer), clusters, enterprise networks, public and private sector consultancy and support for entrepreneurs, innovation environment;
  - Access to finance: better access to finance for enterprises;
  - Information Society: promotion of ICT to public and private sector, e-learning, e-business, secure a sound infrastructure;
  - Human capital: managerial and organisational development and entrepreneurship in education (all university students should be offered a course on innovation and entrepreneurship).
State of play regarding innovation: In 2005, Estonia’s innovation performance was in 13th position of the 25 EU Member States. It is one of the best performers among the ten new member states, along with Slovenia. Its main strengths are the level of education of the population, the innovativeness of enterprises and ICT expenditure (e.g., broadband penetration). The main weakness is the low level of RTD expenditures (public and private). Most RTD and innovative businesses are located in Tallinn and its surroundings. Innovation is supported by ‘Enterprise Estonia’, which is the major RTDI public funding agency. In the 2000-2006 period, 9% of the resources were allocated to innovation.

Extent to which innovation is a priority: A RTD Strategy for 2007-2013 has been developed focusing on: ICT, biotechnology and materials technology. The objective of the strategy is to reach a “fast, socially and regionally balanced sustainable economic development”. This strategy will be implemented through 3 national (sectoral) Operational Programmes (out of 4 foreseen for Estonia). The resources allocated to innovation are not indicated.

Main types of operations foreseen:

- RTD: research infrastructure, research projects, creation of centres of excellence, awareness campaigns, increased participation in the EU’s 7th Framework Programme, spin-offs, research and technology parks, incubators;

- Enterprises: raising the technological and RTD capacity of enterprises, technological modernisation of enterprises, technology transfer, increased cooperation between enterprises, incubators, assistance to start-ups, awareness campaigns for entrepreneurs on innovation, networks, promotion of entrepreneurship namely to students;

- Access to finance: equity finance, start-ups grants and loans;

- Information Society: increasing the availability of internet (in rural areas), awareness campaigns, improvement of the skills, improvement of the services available namely from the public sector, e-learning;

- Human capital: increase of the number of scientists and engineers at doctoral level, creation of new graduate schools, improvement of management skills.
State of play regarding innovation: In 2005, Greece’s innovation performance was in 23rd position of the 25 EU Member States. The trends for two key indicators of future innovation, ICT investment and public RTD expenditures, are negative and business RTD is static at a very low level. In addition, the business sector finds it difficult to innovate. However, there are strengths in the education level and the percentage of university R&D funded by business. In the 2000-2006 period, 7.1% of the resources were allocated to innovation.

Extent to which innovation is a priority: Among the interrelated thematic priorities of the NSRF strategy, entrepreneurship, knowledge society, innovation and employment have a prominent place. Investment in innovation will be mainly promoted in ERDF through the regional Operational Programmes and the two horizontal Operational Programmes on ‘Entrepreneurship and competitiveness’ and ‘Digital Convergence’ and through the ‘Education and Lifelong learning’ Operational Programme of the ESF.

Main types of operations foreseen:

- RTD: research and technological infrastructures, increase of public spending on research, research networks, increase of the private research;
- Enterprises: support for entrepreneurship, innovation poles and incubators, innovation support services, technology transfer, development of new product and processes, international co-operation;
- Access to finance: use and promotion of financial instruments;
- Information Society: promotion of ICT for business and public services, strengthening e-government services and extending e-health services;
- Human capital: promotion of a research and innovation culture at all levels of education, improve careers of researchers including mobility and international collaboration.
State of play regarding innovation: In 2005, Spain’s innovation performance was in 16th position of the 25 EU Member States. Spain has a relatively well-balanced performance on each innovation category, with the exception of much weaker performance on innovation in enterprises. Its main strengths are the tertiary education and the number of Community trademarks. Its main weaknesses are the lifelong learning, business RTD and high tech exports. In the 2000-2006 period, 8.4% of the resources were allocated to innovation.

Extent to which innovation is a priority: The strategy of the NSRF is (1) to increase attractiveness for investments and jobs, (2) to improve knowledge and innovation for growth, (3) to create more and better jobs and (4) to improve administrative capacities (technical assistance). Regarding ERDF, these objectives will be implemented through 19 regional programmes (one per region) and 3 national sectoral ones including one for ‘RTD and innovation for enterprises’ and one on the ‘Knowledge based economy’. Innovation will be the first priority both in objectives 1 and 2. Spain has committed to the earmarking targets (60% and 75%) for both objectives.

Main types of expenditures:

- RTD: RTD activities in research centres, pilot projects, RTD infrastructures;
- Enterprises: promotion of RTD and innovation in SMEs, entrepreneurship, technology transfers;
- Access to finance: global grants, risk-capital, venture capital;
- Human capital: improvement of the skills in research and innovation, reform of the education system to improve the matching of the students’ skills and the market needs.
State of play regarding innovation: In 2005, Finland’s innovation performance was in 2nd position of the 25 EU Member States. Finland is strong in the main innovation indicators, and has a high number of patents. The main challenges facing Finland are globalisation, peripheral location, low population density and ageing of population, a trend which is forecast to be one of the most severe of the EU25. In the 2000-2006 period, 11.2% of the resources were allocated to innovation.

Extent to which innovation is a priority: The strategy of the NSRF is to strengthen national and regional competitiveness, employment and wellbeing. The implementation of the strategy will be through five regional ERDF programmes, two ESF programmes and participation in eight territorial co-operation programmes. Innovation is included in all planned priorities of the NSRF. The earmarking objective for the NSRF and each regional programme is 75%, but there is no allocation between priorities available yet.

Main types of expenditures:

- RTD: strengthening of knowledge structures, innovation networks and activities, technology transfer, development of regional innovation strategies, networking;
- Enterprises: increase of the productivity of enterprises, promotion of innovation, technology transfer, networking among enterprises;
- Access to finance: removal of obstacles for access to finance and services for new and starting enterprises, development of financing possibilities to encourage entrepreneurship and to support growth of companies;
- Information Society: developing the information society and communication services.
- Human capital: improvement of workplace organisations, improvement of expertise and innovation and services that support the labour market.
State of play regarding innovation: In 2005, France’s innovation performance was in 9th position of the 25 EU Member States. France is slightly above average in most of the innovation indicators. It main strength is the high number of graduates in sciences and engineering and the public investments in innovation. Its main weakness is the low level of university RTD which is financed by the private sector. In the 2000-2006 period, 6.3% of the resources were allocated to innovation.

The 2004 programme “Poles of competitiveness” and the 2006 Programming Law for Research are introducing major shifts in policy, in particular in funding terms through the financing of research on a project basis and the introduction of fiscal measures (tax credits, tax breaks). The new priorities are: the creation of an innovation friendly environment, the support to innovation-driven clusters (“poles of competitiveness”) and the support to innovative enterprises, mainly “academic spin-offs”.

Extent to which innovation is a priority: Innovation features as the first priority for the French 2007-2013 regional policy, both for the ‘Convergence’ and ‘Regional competitiveness and employment’ regions. The target is to reach the earmarking targets. There will be one Operational Programme per region.

Main types of operations foreseen:

- RTD: reinforcement of RTD capacities at regional level, financing of RTD projects, technology transfer;
- Enterprises: creation of new enterprises, modernisation of enterprises, clusters, advisory services, networks, entrepreneurship;
- Access to finance: financial instruments specific for innovation;
- Information Society: improvement of supply and demand for e-services (particularly in ultra peripheral regions);
- Human capital: education infrastructures to promote excellence in the scientific field, improvement of the skills of management and staff in enterprises, partnerships between higher education bodies and enterprises, innovative methods for the management of human resources, employability of elderly persons.
State of play regarding innovation: In 2005, Hungary’s innovation performance was in 15th position of the 25 EU Member States. Its main strength is in the above average level of high-tech exports. Its main weaknesses are the low number of graduates in sciences and engineering, the low level of private RTD, low broadband penetration and the small number of patents. There are regional differences in innovation performance and Central Hungary (Budapest and around) is the leading region in terms of R&D personnel and expenditure. In the 2000-2006 period, 9.2% of the resources were allocated to innovation.

Extent to which innovation is a priority: The strategy aims to develop the country and strengthen its international competitiveness. Innovation is clearly indicated as a mean to reach this goal. At this stage 15 Operational Programmes are foreseen (national and regional), including one national programme for innovation related operations (this programme is called “Economic Development”). It is also planned to allocate limited resources for experimentation in regional Operational Programmes.

Main types of operations foreseen:

- RTD: support to market-oriented RTD, sectoral and regional concentration of research capacities (and networking);
- Enterprises: clusters, start-ups and spin-offs, technology transfers, incubators and promotion of innovation in enterprises, entrepreneurship, business support services, technological modernisation, business parks, cooperation between SMEs;
- Access to finance: financing instruments for SMEs;
- Information Society: development of the information society including broadband;
- Human capital: training and mentoring for the staff in enterprises.
• State of play regarding innovation: In 2005, Ireland’s innovation performance was in 11th position out of the 25 EU Member States. Its main strengths are the number of graduates in sciences and engineering and exports of high-tech products. Its main weaknesses are the low broadband penetration, the low level of RTD expenditure by enterprises and the low level of cooperation between universities and enterprises. In the 2000-2006 period, 14% of the resources were allocated to innovation.

• Extent to which innovation is a priority: The ‘Strategy for Science, Technology and Innovation’ has not yet been incorporated in the draft National Strategic Reference Framework. However, it has been adopted by the government and states that “Ireland has a vision of being internationally renowned in 2013 for the excellence of its research, and being at the forefront in generating and using new knowledge for economic and social progress, within an innovation driven culture”.

The Operational Programmes will be prepared - primarily - by the regions. There will be two regional Operational Programmes. The resources for transport, environment, energy, urban development and innovation are (for the whole period 2007-2013, ERDF + national co-financing): Southern & Eastern (€ 293 m) and Border, Midlands & Western (€ 458 m). Innovation will play an important role. The funding allocation to innovation and earmarking information are not yet available.

• Main types of operations foreseen:

The priorities identified are:

- RTD: scientific and technological education capacity, technology transfer;
- Enterprises: awareness campaigns on innovation, networks, support to projects;
- Access to finance: Financial support to start-ups and enterprises in expansion;
- Information Society: competitive and affordable broadband by private service providers;
- Human capital: training to owners or managers of micro-enterprises, mentoring.
ITALY (IT)

Version of the NSRF: 05.2006

- **State of play regarding innovation:** In 2005, Italy’s innovation performance was in 12th position out of the 25 EU Member States. Its main strength is the public funding of innovation. Its main weaknesses are the lack of venture capital, the low level of cooperation between firms and the low level of business RTD. In addition there is a predominance of SMEs (98% have less than 20 employees) specialising on low and medium technology sectors. In the 2000-2006 period, 6.5% of the resources were allocated to innovation.

- **Extent to which innovation is a priority:** The strategy is to develop favourable conditions to create or diffuse innovation. Innovation is one of the 10 priorities identified by the NSRF but it is not clear whether a specific Innovation Operational Programme will be established or whether innovation will feature under regional programmes. The resources to be allocated to innovation are not indicated in the draft NSRF. The current draft does not provide information on the governance systems for innovation.

- **Main types of operations foreseen:**
  - RTD: increased public and private investments on research, support to research centres, international cooperation, mobility of researchers, effective partnership between research and enterprise;
  - Enterprises: support of enterprise creation in new technological sectors, technology transfer, internationalisation activities, networking platforms, improvement of the services' supply to SMEs, fiscal rewards for RDT activities;
  - Access to finance: diversified and innovative supply of financial tools for SMEs (seed capital, capital risk, scouting activities, micro-credits), improvement of the regional attractivity for foreign investments;
  - Information Society: broadband, greater use of ICT in public administration and SMEs;
  - Human capital: increase of the general level of competence with a specific focus on local employment market needs, training system on scientific, technical and managerial skills for SMEs.
LATVIA (LV)

Version of the NSRF: 03.11.2006

- **State of play regarding innovation**: In 2005, Latvia’s innovation performance was in 24th position out of the 25 EU Member States. Its main strengths are the share of university RTD financed by the private sector and the investments in ICT. Its main weaknesses are the low level of public and private RTD and the limited innovative capacities of enterprises. In the 2000-2006 period, 3.4% of the resources were allocated to innovation.

- **Extent to which innovation is a priority**: The NSRF aims to accelerate economic growth of Latvia and approach the average EU level of welfare. Three national (sectoral) Operational Programmes will be carried out, one covering innovation (‘Entrepreneurship, innovations, science and research’), one on ‘Human Resources’ and one on ‘Infrastructures and Services’, which will cover part of the infrastructure investments for innovation, in particular in the area of education and ICT. The resources to be allocated to the Operational Programmes ‘Innovation and Entrepreneurship’ are € 750m. In addition, the funding of the other two programmes is partly dedicated to innovation.

- **Main types of operations foreseen**:
  - RTD: improvement of the scientific, technological and innovative infrastructure, better commercialisation of research, spin-offs, poles of technological excellence, international cooperation;
  - Enterprises: improvement of the business infrastructure, entrepreneurship, technology transfer, advisory services, competence centres for the co-operation between research and business;
  - Access to finance: better access to funds for enterprises (especially start-ups);
  - Information Society: development of ICT infrastructure and services, ICT training, development of state information systems, public internet access points;
  - Human capital: modernisation of the education system and adaptation to the market requirements, SME training.
State of play regarding innovation: In 2005, Lithuania’s innovation performance was in 19th position out of the 25 EU Member States. Its main strengths are the share of university RTD financed by the business sector and the number of graduates in sciences and engineering. Its main weaknesses are in the low level of RTD carried out by enterprises (they tend to outsource it to universities) and low broadband penetration. In the 2000-2006 period, 10.1% of the resources were allocated to innovation.

Extent to which innovation is a priority: The objective of Lithuania is “to improve rapidly the conditions for investment, working and living in Lithuania so that the benefits of economic growth reach all the people of Lithuania”. Lithuania currently foresees 3 national (sectoral) Operational Programmes, two of which feature innovation: ‘Economic Growth’ (45.3% of total funds allocated) and ‘Human Resources Development’ (16% of total funds allocated).

Main types of operations foreseen:

- RTD: support of the RTD sector, increase of private and public RTD expenditures;
- Enterprises: promotion of innovation in enterprises, technology transfer, favourable environment for start-ups, regulatory and taxation measures, business support, networks, cluster;
- Access to finance: risk-capital, seed-capital, micro-credits, guarantees;
- Information Society: ICT infrastructure (broadband), e-services;
- Human capital: increase of the number of researchers especially young ones.
In the 2000-2006 period, 6.7% of the resources were allocated to innovation.
• **State of play regarding innovation**: In 2005, Malta’s innovation performance was in last position out of the 25 EU Member States. Its main strength is the high level of business innovation expenditure. Its main weaknesses are the low level of public and private RTD and the low level of education (in particular scientific and engineering graduates). In the 2000-2006 period, 1.5% of the resources were allocated to innovation.

• **Extent to which innovation is a priority**: The national development strategy for Malta (which will be included in the National Strategic Reference Framework) focuses on economic competitiveness, the environment and the development of human capital. Two Operational programmes will be implemented, both including innovation: ‘Investing in competitiveness for a better quality of life’ and ‘Empowering people for more jobs and a better quality of life’. The resources to be allocated to the innovation are not identified in the draft NSRF.

• **Main types of operations foreseen**:
  
  − RTD: increase of RTD expenditure in relation to GDP from 0.27 % to 0.75% by 2013 focusing on business oriented RTD, mobility between research and business, technological development;
  
  − Enterprises: entrepreneurship, SME promotion, business support and advisory services, support to micro enterprises, building of an innovation system, strengthening the climate for innovation (stimulate private initiatives, collaboration and supply of knowledge workers) and focus on upgrading the tourism sector;
  
  − Access to finance: better access to finance for enterprises;
  
  − Information Society: facilitated access to ICT, development of e-government, e-society, e-services, e-learning and e-mentoring for the tourism sector;
  
  − Human capital: adaptation of education systems to new competitive requirements, upgrading of human resource skills and ICT education and training.
• **State of play regarding innovation:** In 2005, the Netherlands’ innovation performance was in 8th position out of the 25 EU Member States. Its main strengths are the public funding of innovation and the high broadband penetration. Its main weaknesses are the low innovativeness of the SMEs and the low number of graduates in the fields of sciences and engineering. In the 2000-2006 period, 4.6% of the resources were allocated to innovation.

• **Extent to which innovation is a priority:** The government has committed itself to stimulate innovation and entrepreneurship. Innovation will feature under the four regional Operational Programmes. In addition, it is stated that at least 75% of the resources will be spent on the Lisbon targets.

• **Main types of operations foreseen:**
  
  – **RTD:** mainly promotion of marketing of RTD results;
  
  – **Enterprises:** co-operation between partner-minded companies in clusters (nano-technologies, food, flowers, eco-efficiency), assisting spin-offs via incubators and efforts to optimise the use of patents;
  
  – **Access to finance:** development of and support for new business financing techniques;
  
  – **Information Society:** development of new and increased use of ICT services (preferably within a multi-regional context);
  
  – **Human capital:** increase of skills through further education of employed and training of unemployed.
• **State of play regarding innovation:** In 2005, Poland’s innovation performance was in 21\textsuperscript{th} position out of the 25 EU Member States. Its main strengths are the youth education attainment level, total innovation expenditure and ICT expenditure. All are indicators for future success in adopting new technology. Its main weaknesses are private RTD expenditure, the low level of high-tech exports and the low penetration of broadband. In the 2000-2006 period, 10% of the resources were allocated to innovation.

• **Extent to which innovation is a priority:** Innovation is a priority for regional policy in Poland. There will be one national Operational Programme specifically on the ‘Innovative economy’ (of about € 7-8 B) and each of the 16 Regional Operational Programmes as well as the Operational Programme for East Poland foresees innovation operations. The key objective is to increase the interest and the capacity of enterprises, in particular SMEs, to create and absorb innovation. Innovation priorities will be pursued both at national and regional level, therefore challenges will be to ensure complementarity and good coordination between initiatives at national and regional level, to improve the human resources for implementation and to improve cooperation between RTD institutions and enterprises, in particular SMEs.

• **Main types of operations foreseen:**
  
  − RTD: investment in research capacities and increase in the innovation potential of research (RTD expenditure to reach 2.35% of GDP in 2013 (compared to 0.58% in 2004));
  
  − Enterprises: awareness campaigns, technology transfer, training and advice for starting a new business, assistance for finding business partners, incubators;
  
  − Access to finance: financing tools for enterprises (venture capital, loans and guarantees);
  
  − Information Society: improved services in e-government and e-commerce, broader use of internet (the objective is that 65% of the population should use internet regularly in 2013 compared to 29% in 2004);
  
  − Human capital: increase in the education level of the citizens (education more adapted to the needs of the market).
State of play regarding innovation: In 2005, Portugal’s innovation performance was in 18th position of the 25 EU Member States. The main strengths of Portugal are the high level of public spending on innovation and the capacity of firms to use innovations developed outside Portugal and to introduce them on the national market. The main weaknesses are the low level of business RTD and the low number of high-tech firms. Overall, the innovation system performs better in innovation diffusion than in innovation creation.

Traditionally, the institutional and legal framework for innovation in Portugal has been characterised by two key features: (1) a centralisation of institutions and policies and (2) a divide between research and enterprise policies.

In the 2000-2006 period, 7.2% of the resources were allocated to innovation.

Extent to which innovation is a priority: The draft NSRF does not provide detail on the strategy and objectives of the 2007-2013 period, although innovation is presented as a strategic priority. There will be one multiregional thematic Operational Programme focusing on ‘Competitiveness’ with a budget amounting to € 2.6 m. In addition to these three thematic programmes there will be regional Operational Programmes which are also expected to include innovation driven initiatives as € 2.3 m have been specifically allocated for this objective.

Main types of operations foreseen: The types of operations foreseen are not defined yet.
• **State of play regarding innovation:** In 2005, Romania’s innovation performance was in 32nd position out of 33 countries (EU25 + BG + RO + Iceland + Norway + Switzerland + Turkey + USA + Japan). It has weaknesses in all the main innovation indicators, in particular broadband penetration which is close to 0. A significant policy development is the commitment of the Romanian government to develop a first National Innovation Strategy by 2006.

• **Extent to which innovation is a priority:** The NSRF has the objective to generate a 10% increase of the country's GDP by 2015 and catch up with EU Member States regarding social and economic development. In terms of innovation, there are 2 Operational Programmes aiming at increasing the long-term economic competitiveness and the development of human capital. Innovation also forms a part of the 8 regional Operational Programmes. About 15% of the resources should be allocated to increasing the long term competitiveness of the Romanian economy, much of which will be promoting innovation.

• **Main types of operations foreseen:**
  - **RTD:** upgrade and development of RTD capacities and infrastructures, improvement of the quality and range of innovative services and stimulate demand of innovation from the productive sector;
  - **Enterprises:** support of local entrepreneurial initiatives, support for high-tech micro-enterprises and spin-offs, business support structures (consultancy), support to internationalisation, availability of business infrastructures;
  - **Access to finance:** better access to finance for enterprises;
  - **Information Society:** infrastructure, portals, e-Business, new products, services and processes;
  - **Human capital:** modernisation of the education and training systems;
State of play regarding innovation: In 2005, Sweden’s innovation performance was in 1st position of the 25 EU Member States. It ranks above average in almost all the innovation indicators. However, a large part of the RTD spending is made by large private companies and the benefit for the citizens is limited. The main challenge is to increase the research financed by the government and to turn the high RTDI spending into growth and jobs. In the 2000-2006 period, 5.8% of the resources were allocated to innovation.

Extent to which innovation is a priority: Sweden has an innovation strategy which aims to ensure that no region is left behind. There will be 8 regional Operational Programmes. The resources to be allocated to innovation are not indicated in the draft NSRF, but it states that 75% will be used for the Lisbon targets.

Main types of operations foreseen:
- RTD: increase of the commercial exploitation of research results and ideas;
- Enterprises: entrepreneurship, technology transfer, clusters, start-ups, internationalisation, exploitation of opportunities created by renewable energy for example to drive technology and business developments, networks, exploitation of regional assets (natural, cultural, heritage);
- Access to finance: better access to finance for enterprises;
- Information Society: promotion of the use of ICT in SMEs, development of products and services to increase access and benefits of ICT for everyone and full broadband availability in rural and sparsely populated areas;
- Human capital: SME knowledge development.
SLOVENIA (SI)

State of play regarding innovation: In 2005, Slovenia’s innovation performance was in 14th position of the 25 EU Member States. It ranks 2nd among the new member States (after Estonia). Its main strength is that its performance is well-balanced across the innovation indicators so that the fundamentals for innovation are good. The main weaknesses are the low public funds made available for innovation and the low broadband penetration. In the 2000-2006 period, 10.1% of the resources were allocated to innovation.

Extent to which innovation is a priority: The strategy of the NSRF is to reinforce Slovenian competitiveness by encouraging innovations in order to catch up with the EU average by 2013. Slovenia is a single region and there will be one national Operational Programme focusing on regional development which will include innovation. The current indications are that in the draft NSRF a total of the order of €1 B will be devoted to policies fostering innovation.

Main types of operations foreseen:

- RTD: RTD infrastructures, more resources for RTD (increase by approximately 0.1% GDP per year);
- Enterprises: entrepreneurship, technology transfer, incubators / technological parks;
- Access to finance: seed and risk capital;
- Information Society: investment in infrastructure, promotion of ICT (‘a computer for each home’), e-content;
- Human capital: adaptation of the university system to the needs of the economy, increase of the number of students, staff mobility in enterprises.
SLOVAKIA (SK)

State of play regarding innovation: In 2005, Slovakia’s innovation performance was in 22nd position of the 25 EU Member States. Its main strengths are the high education level of young people and the employment levels in medium to high tech companies. In addition, newly created companies tend to focus on innovation. Its main weaknesses are the low expenditures on RTD (public and private), the low transfer of knowledge from research to enterprises and low broadband penetration.

There are large regional disparities between Bratislava (which matches EU-25 averages for most economic and RTD indicators) and rest of Slovakia.

In the 2000-2006 period, 3% of the resources were allocated to innovation.

Extent to which innovation is a priority: The objective of Slovakia is to have an “overall convergence of the economy to the EU15 average (in 2004)”. The strategy aims to significantly increase the competitiveness and performance of the regions. There will be one national Operational Programme on ‘Innovation, informatisation and knowledge-economy’ (covering both ‘Convergence’ and ‘Regional competitiveness and employment’ regions) with a budget of € 3,095 m (23% of ERDF, ESF and Cohesion Fund). There will be no regional Operational Programmes.

Main types of operations foreseen:

- RTD: improvement of the RTD infrastructures, better cooperation between research centres, measures supporting the commercial use of RTD (spin-offs);

- Enterprises: support to innovative enterprises, technology transfer, development of common services to enterprises, clusters;

- Access to finance: development of financial instruments to support start-ups and expanding innovative enterprises;

- Information Society: improvement of the broadband capacity, ICT literacy of the population, development and improvement of the quality of public services for citizens and businesses (e-government) and improvement of content;

- Human capital: “acquisition of basic skills and key competencies needed by the knowledge society” (in schools and universities).
• **State of play regarding innovation:** In 2005, the United Kingdom’s innovation performance was in 7th position of the 25 EU Member States. Its main strength is in the education level, in particular the number of graduates in sciences and engineering. A weakness is the limited public funds made available for innovation in enterprises. In the 2000-2006 period, 6.6% of the resources were allocated to innovation.

• **Extent to which innovation is a priority:** The government's central economic objective is to raise the rate of sustainable growth and achieve rising prosperity and a better quality of life, with economic and employment benefits for all. The list of Operational Programmes and resources allocated to innovation are not indicated in the draft NSRF. Innovation will be implemented through the regional Operational Programmes.

• **Main types of operations foreseen:**
  - RTD: increase investments in RTD, commercialisation of research;
  - Enterprises: favourable business environment, support of innovation and entrepreneurship, incubators, start-ups and spin-offs, business advisory services, technology transfer, development of new areas of activity (environmental technology, renewable energy, etc), clusters and closer links between research and business;
  - Access to finance: better access to finance for enterprises;
  - Information Society: ICT infrastructure, encouragement of broadband usage, promotion of ICT and e-commerce, e-government;
  - Human capital: management and ICT skills in businesses, improvement of higher education and enterprise culture.