Vision
Reality
Regional Innovation Strategies: Why?
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Key messages

- Regional innovation policies help:
  - Address gaps in Federal innovation policy.
  - Ensure that innovation policy reflects regional gaps and capacity.
  - Achieve objectives through broad stakeholder buy-in.
Addressing Gaps in Federal Policy
Gap 1: Incomplete innovation policy instruments

- Limited reach of instruments

Matching grant support for enterprise innovation in 2008

<table>
<thead>
<tr>
<th></th>
<th>Russia (FASIE)</th>
<th>United States (SBIR)</th>
<th>Finland (Tekes)</th>
<th>Ireland (Enterprise Ireland)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total (million USD)</td>
<td>66</td>
<td>2000</td>
<td>429</td>
<td>310</td>
</tr>
<tr>
<td>Per capita (USD)</td>
<td>0.5</td>
<td>6.5</td>
<td>81</td>
<td>74</td>
</tr>
</tbody>
</table>

Source: Tekes, SBIR and Enterprise Ireland websites. Interviews with FASIE.
Gap 1: Incomplete innovation policy instruments

- **Unbalanced scope of instruments**

  The bulk of innovation support programs:

  1. **Is in the form of equity** → this is only relevant to a very specific type of firm at a very specific stage of development

  - SME matching grants & hands-on assistance
  - Rusnano (130 bln RUB)
  - Russian Venture Company (19.9 bln RUB)
  - Russian Investment Foundation for ICT (1.5 bln RUB)
  - Regional Venture Funds (8.6 bln RUB)
Gap 1: Incomplete innovation policy instruments

- Unbalanced scope of instruments

The bulk of innovation support programs:

2. **Is focused on hi-tech sectors** → this ignores vital sources of innovation such as industrial design, productivity improvements and quality upgrading.
Gap 1: Incomplete innovation policy instruments

- Limited effectiveness of instruments
  - Limited value-added of most technology parks, apart from the physical infrastructure.
  - Limited value-added of most venture funds apart from financing.
  - Federal R&D institutes isolated from industry and from global research networks.
Gap 2: Challenging business innovation environment

- Limited linkages with global business networks
  - Russia ranks 162 among 183 countries on its Trading across borders indicator score of the 2009 Doing Business survey.

→ Opportunities for regions to promote globalization of innovation.
Gap 2: Challenging business innovation environment

- Reduced incentives to innovate
  - Out of 133 countries in the 2009-2010 Global Competitiveness Report Russia ranks:
    - 106th in terms of the Intensity of Competition indicator.
    - 107th in terms of the Effectiveness of Anti-Monopoly Policy indicator.

→ Opportunities for regions to create targeted schemes for areas of limited competition.
Reflecting Regional Realities
Regional peculiarities

- Innovation activities in enterprises varies widely across Russia

![Bar chart showing the share of total enterprises engaged in intramural R&D and engagement in training across different regions in Russia.](chart.png)

**Legend:**
- Blue bars: Enterprises, engaged in intramural R&D
- Light blue bars: Enterprises, engagement in training
Regional peculiarities

As a result, so does international patenting
Regional peculiarities

The graph shows the number of patents per million population for various regions. The y-axis represents the number of patents, while the x-axis lists the regions. The region with the highest number of patents is Finland, with a significant lead over other regions. The other regions have much lower numbers of patents, with some regions almost negligible.
Regional innovation indicators

- Nizhny Novgorod: 4.5
- Saint-Petersburg: 3.0
- Moscow: 2.0
- Tomsk: 3.5
- Novosibirsk: 2.5
- Samara: 2.5
- Perm: 1.5
- Sverdlovsk: 1.5
- Tatarstan: 1.5
- Bashkortostan: 1.5
- Tyumen: 1.5
- Krasnodar: 1.5
- Estonia: 0.5
- Turkey: 0.5
- Russia: 0.5
- Tver: 0.5
- Tomsk: 0.5
- Finland (patents per million residents): 4.0

Bubble size represents patents per million residents.
Human capacity for R&D is very strong in some regions and is also a cause of divergence.
But looking at innovation from a technology perspective is not enough.

- Identifying barriers to entrepreneurship is key:
  - Cultural barriers
  - Policy barriers
  - Skills barriers
  - Network barriers (local, national and global)
  - Demand barriers

- This relies on the use of indicators that can be compared across other regions and countries.
Achieving Stakeholder Buy-in
Why stakeholder buy-in?

- For policy coordination:
  - Innovation is the result of the interaction of mutually reinforcing processes. If there are gaps in any of these processes or in their interaction, the whole system suffers.
Why stakeholder buy-in?

- For successful implementation by public, enterprise and research sector institutions over which the government has limited control:
  - This requires a shared understanding of challenges and objectives.
  - It requires aligned incentives.
In brief

- Regional innovation strategies:
  - Provide opportunities to introduce new measures that complement Federal programs of limited scope and reach.
  - Align policy tools to regional needs.
  - Increase policy effectiveness through stakeholder buy-in.
Example of Western Sweden as a region with a successful innovation system
Western Sweden (capital city Göteborg) was a strong industrialised regions with large plants dedicated to automotive industry, brown industries (fridges, etc.) or ship building.

In the 80ties loss of industrial jobs have lead to strong disruption of the local economy and the need to rethink the future of the community.

One strong university (Chalmers) and one important technical centre (IVF) dedicated to engineering.
After twenty years of changes ....

- Four sub-fields mostly originating from engineering, chemistry and physics, and a selection of areas in clinical medicine and biomedicine have been supported to re-launch the growth and competitiveness of the Region.
The patenting activity in Western Sweden is among the highest. In relation to the population, WS has about 420 patents per million inhabitants and OECD about 250. The number of patents per million inhabitants is higher than for the OECD in most fields and, in particular, in road vehicles, machinery and instruments, see table 4.2. It is, however, lower in one field, electric & electronics, and biogenetical engineering & pharmaceuticals.
Visible results

- Today, Western Sweden is among the most advanced EU region, creating highly competitive jobs and attracting investors.

- A growth pattern believed to be as much as 20% higher than without the support of the innovation strategy.

- A fundamental change within the scientific community: “serving the region” became the shared motto.

- A real cluster policy enabling collaborations at all stages between stakeholders.
Main drivers of changes

- A regional innovations strategy – with State support - developed, deployed and improved since the early 2000
- A complete “mobilisation” of all stakeholders
- An understanding that universities and R&D centres will be the “heart” of changes
- A cultural shift towards entrepreneurship, innovation and technology
- A very strong involvement of traditional and technology-based industrialists
What makes a successful region?

- Role of the regions as stimulator and co-ordinator of regional innovation systems is crucial. A good co-ordination between national and regional policies is necessary.

- Wide consultation of partners to create a common understanding of issues at stake and regional consensus on priorities. Associating this partnership in the implementation of the programme, including the selection of projects, creates a sense of ownership and lasting commitment.

- Project selection is an essential phase in the implementation of the strategy.

- The shared vision of the processes involved in innovation shapes the priorities and the design of the programme implying strong « positive » monitoring.
What makes a good strategy?

Hard Factors

All well-known need for an innovation infrastructure:

- Incubators
- Science/technology parks
- Technology transfer office(s)
- Financial schemes
  - Pre-seed
  - Business angels
  - Seed
  - Post seed
  - Grants
  - Soft loans,
  - VC type
- Etc.
What makes a good strategy?

Soft Factors: the usual missing ingredient

- Strong consensus between different decision-makers
- A portfolio of “real hands-on” specialists/advisors
- The capacity to analyse and detect those firms (existing and start-ups) that have a strong growth potential
- The ability to enter into “innovation supply chains”
- The leadership at regional levels
- A culture of “risk taking for the good”
- A capacity to think global and “out of the box”
Why is it important? An example

- **TRAINING – ADVICE SUPPORT**
  - Incubators CREALYS GRENOBLE
  - INNOEXPERT (CCI Lyon)
  - BUSINESS CENTRE (EM Lyon)
  - BUSINESS INCUBATORS (NOVACITES FRAC CREATION)
  - Business development and reception service (CCI)

- **FINANCING**
  - « Venture Capital » (National or International) (Sudinnova, Siparex Venture, Banexi, Partech)
  - « Seed capital » - National (thematic)
    - Regional (Amorçage Rhône Alpes)
  - « Business development venture capital »
    - Rhône-Alpes Création
    - Banque Pop., Crédit Agricole
    - Rhône-Dauphiné Développement
  - « Réseau Entreprendre »
    - Loans on trust + Sponsorship
  - « ARJE » (Regional repayable short-term loans for new businesses – 1-5 years)
  - « P.C.E. » (BOPME loans)
    - « Mille et Un Talents » (Regional grants)
  - Source: RHONEALPES CREATION
A few conclusions from a “believer”

- A significant number of Russian regions have the ability and the potential to become leading regions with a strong international exposure.
- EU experience demonstrates a lot depends on the ability of policy-makers and business communities to “sign a pact for growth & success”.
- It is of outmost importance to attract teams that have a real international experience and involve them from design to implementation.
- Not everyone can succeed and time is needed.