Regional innovation strategies

Regional innovation strategies are systematic, goal-oriented exercises carried out by regional partnerships with the aim to define or revise regional innovation policies.

Target and purpose

Regional-level authorities are increasingly involved in designing their own strategies to support and enhance innovative local dynamics and improve the performance of their regional innovation systems. National governments are also seeking to strengthen the national innovation system through these regional systems. Regional Innovation Strategies (RIS) refer to the process for conducting these goal-oriented exercises in specific regional environments.

A well-documented fact about regions and innovation is the OECD-wide diversity in regional innovation systems. Many typologies have been developed to characterise this diversity, based on qualitative assessments and on the use of a battery of quantitative indicators. The implication of this diversity is that there is no one-size-fits-all policy that can be applied to any region. Rather, policies need to be adjusted to specificities of the industrial fabric, innovation culture, political system, and the degree of autonomy held by regional authorities. Some regions may be stronger in knowledge generation, others in knowledge exploitation. RIS aim to identify these specificities and fine-tune the support system accordingly. The system assessment leads towards the definition of strategic priorities, their translation into specific operational goals, and a monitoring and evaluation system is there to ensure continuous adjustment and effectiveness of the policies.

Regional actors targeted by the RIS cover the whole range of stakeholders involved in innovation on a territory: universities, technology-oriented enterprises, knowledge-intensive business service firms (KIBS), other firms, start-ups and new technology-based firms, regional and local government or administration, public funding agencies, intermediaries (e.g. technology transfer offices, advisory bodies, etc.) and their networks, venture capital firms, non-university research institutes, etc.
Practice

Regional Innovation Strategies have been initiated and implemented in many OECD regions, in particular in those regions with important responsibilities and resources for innovation. The European Union has sponsored such exercises in over 150 regions since the mid-nineties, in the form of RITTS (Regional Innovation and Technology Transfer Strategies), RTP (Regional Technology Plans), RIS (Regional Innovation Strategies) and derived exercises. Regions in other OECD countries are also developing strategies as required by a national government or through their own initiative.

Implementing a RIS involves typically six steps:

1. **Initiating a regional dialogue on innovation:** This first step is important to reach a consensus on an innovation concept and to identify the range of actors involved in the regional innovation system. Very often, this step is a crucial but lengthy and complex operation as it involves the alignment of various agendas around innovation.

2. **Analysis of regional innovation needs and capacities:** A thorough assessment of the innovation system strengths and weaknesses is carried out. Tools for the assessment include: the exploitation of existing data and knowledge, new analyses, surveys (to firms generally), evaluations, innovation gap analyses, and foresight exercises among other tools. The work covers both the current state and future directions for the innovation system as such, and the configuration and effectiveness of the support system and policy initiatives. Consultants and experts from inside and outside the region are involved in such preparatory work, in interaction with the RIS managerial instances.

3. **Shaping the innovation strategy with direct involvement of all relevant stakeholders:** Various channels are used including working groups, forums, direct consultations, open conferences, visits, etc. Based on the analyses carried out in the previous step, a number of subjects are identified, analysed, discussed and expanded into more precise challenges and options for policy. During this step as well as in others, benchmarking with foreign experiences is generally performed.

4. **Selection of priorities for innovation support:** This is the most political step, as it involves a prioritisation process between the many policy options that have emerged from the previous steps. A broad balance should be placed between the many areas of actions that result from the strategic exercise. Budgetary issues come at the forefront here, as they place clear constraints on policy action. The importance of policy mix and sequencing should also be part of this prioritisation.

5. **Implementation of the strategy:** Development of a range of action plans, pilot projects, initiatives, etc., linking broad strategic orientations to actual field of action. These actions are defined in close coordination with the implementing bodies, and are associated with timelines, responsibilities, budgets, and targets.
6. Establishment and use of a monitoring and evaluation system for the strategy: Monitoring data and methods should have been embedded in the previous steps at the stage of action and programme definition. They are put in operation during this step and are used on a regular basis. External evaluations are carried out, less often than monitoring, but results feed back into the strategy for fine-tuning.

Typical priorities, and their associated lines of actions, emerging from RIS are:

- **Enhancing regional R&D and innovation capacities** in line with regional economic development objectives by supporting industry or technology-specific competence centres, competitiveness poles involving public and private organisations, promoting technology transfer, etc.

- **Stimulating innovation in SMEs** by promoting university-enterprise cooperation networks; by supporting business networks and clusters of SMEs, by facilitating SMEs’ access to advanced business support services, and by improving the effectiveness of these services (networks).

- **Promoting entrepreneurship and new firm creation** by facilitating the economic exploitation of new ideas, by fostering the creation of new firms from universities and existing firms, by creating new financial instruments and incubation facilities; by developing entrepreneurship training in education institutions, etc.

- **Improving human capital for innovation** by developing curricula tailored to the innovation system needs in different fields (not only science and technical aspects but also in management of innovation and other fields), fostering mobility between public research and businesses, encouraging companies to recruit innovation specialists, etc.

### Appropriateness and feasibility

Any region can engage into the development of a strategic vision for place-based innovation, and develop subsequent initiatives and actions in order to support the innovation dynamic. The range of actions that can be developed at the regional level *per se*, will differ according to the division of labour between the various levels of authorities (local, regional, national, supra-national) with responsibilities for innovation support. When these vertical coordination needs are taken into account, the role for regional actors in providing complementary action for innovation promotion can be clarified and developed.

The development of RIS with a leadership of regional authorities and private actors requires a solid political commitment towards innovation, and a consensus maintained over time over its priority in the regional policy agenda. Such a long term commitment should rely on robust public-private, partnerships for innovation. Strategies should be built upon a correct understanding of the explicit and latent business needs and potential for innovation, in particular SMEs. Policy designers and implementers need a high degree of understanding of the innovative firm’s behaviour, they need to be able to look at their own action with a strategic view, and be open to evaluation. The commitment and involvement of regional stakeholders for the definition and for the implementation process needs to be secured.
The RIS are appropriate mechanisms for promoting innovation at the regional level when they succeed in identifying the specific competitive advantages of the region, as well as innovation systems bottlenecks, and if the strategies are detailed and robust enough to tackle these opportunities and challenges. Too generic plans, with similar objectives throughout regions, or with unclear link with implementation of policies, will fail in meeting this role for the RIS.

Success factors

Experience accumulated with RIS throughout the OECD indicates a number of success factors for those operations. To sum up, future-oriented regional innovation policies would need to display four key characteristics:

1. **Work with “policy mix” approaches** as spurring and attracting knowledge-based activities and talent demands much more than R&D, technology and innovation policies, but extends over a broad spectrum of policies. This has important implications in terms of institutional settings and governance of policies at regional level.

2. **Use strategic intelligence to assess effectiveness** of different policy instruments and the strategy as a whole. Evaluation models are not as straightforward for effectiveness of some policies, notably of the “competitiveness poles” and clusters. In particular, characteristics of the changing nature of innovation (multi-disciplinary, multi-actor, shorter product life cycles, etc.) need to be taken into account when assessing viability and innovation potential of poles. More generally, strategic intelligence should be in operation so that RIS become dynamic processes, which can be adapted and updated over time. Here benchmarking and exchanges with foreign experiences and peers provide useful additions to domestic intelligence.

3. **Ensuring linkages** so that localised clusters/growth pole strategies, which are typical outputs of the RIS, acquire a stronger knowledge dimension and tap into knowledge sources, both local and global.

4. **Recognise the diversity in possible regional development paths**: traditional “triple helix” types of analyses (looking at the role of government, business sector, and knowledge production organisations) are not sufficient and should be supplemented by analyses of the “fourth factor” of the regional innovation systems. That fourth factor covers the socio-cultural regional environment and the extent to which the forming of coalitions at regional level contributes to the creation of “constructed regional advantages”.


Risk factors

The RIS are exposed to five main types of risks:

1. **Promoting inward looking approaches, confined to regional boundaries**: lack of attention to knowledge links between domestic and foreign firms; to disintegration and integration of global value chains and the productive activities of multinational firms and SMEs; the use of local “supply matching demand” frameworks, lack of incentives for supporting cross-border policy initiatives, etc.

2. **A difficulty to apply a truly systemic view in policy-making**: e.g. policies have a focus on organisations rather than on functions in the system; evaluations analyse single instruments’ effects rather than goals achievements through the combined use of several instruments within specific framework conditions; the broader (socio-cultural) regional environment is underplayed, complementarity and synergy between policy areas are impaired by policy fragmentation.

3. **A continuing dominance of a technology-led development model**, with a neglect of many other factors for new forms of innovation, that include: creativity potential and organisational innovation, considered across all sectors and in particular in services. A difficulty to move from supply-side policies to demand-side stimulation policies.

4. **Poor strategic management of clusters, poles and various “local agglomeration” initiatives** which are justified with short-term arguments, neglecting growth and transformation potential of the poles. This is very dangerous in the present context, as it might foster lock-in into dead-end activities.

5. **Path-dependency and inertia in policy systems**, which prevent swift adaptation to changes in the context. Deficiencies in strategic intelligence in policy-making further emphasises that problem.

Evaluation

Traditional evaluations measure input additionality (such as new R&D investments) and output additionality (such as new research results, patents, publications). Behavioural additionality (in terms of new innovation culture, new collaboration patterns, change in firm organisation for innovation, etc.) should also be assessed when evaluating RIS (see Policy Instrument Brief on evaluation).

Evaluating RIS involves both an evaluation of the process over time (the multiple references below provide good guidance in this respect), and evaluations of relevance and effectiveness of the strategy to spur regional innovation. Systemic evaluations are therefore required, linking broad objectives set in the strategy to the range of instruments implemented to address them.
Further resources


The Innovating Regions in Europe website (updated until December 2008) provides a broad documentation on regional innovation strategies carried out within its 235 member regions in Europe: www.innovating-regions.org/


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