The UPRIS foresight exercise built upon the Regional Innovation Strategy (RIS) of the Lower Silesia region in Poland. The foresight complemented RIS with a broader based and longer-term know-how for sustainable regional development. It was a participative process involving panels of experts and regional stakeholders, which were to discuss future challenges facing Lower Silesia and possible options for meeting them. The panels elaborated normative scenarios, which served as a basis for developing an action plan for RIS and a plan for trans-regional cooperation. In this way, a cornerstone was laid down for sound, well informed and future-oriented policy-making in Lower Silesia.

Innovative Conditions in Lower Silesia

The Lower Silesia region in the South-West of Poland is the seventh largest and one of Poland’s fastest developing regions. Nevertheless, supporting the emergence of an efficient innovation system in Lower Silesia poses a significant challenge for regional decision-makers.

The region is home to a significant number of universities and research institutes, yet the services they offer need to be better adapted to respond to the needs of SMEs. Although there has been success in attracting foreign investments in recent years, involving prominent global players like Toyota, General Electric, Volvo, Volkswagen and Bosch, they in many cases rely on their own R&D resources instead of approaching local ones. New forms of cooperation between SMEs and large national or multinational corporations need to be sought and supported, and cooperation and knowledge transfer between R&D and the business sector further enhanced. Incentives should be created for enterprises to compete with the quality and innovativeness of their products rather than with relatively low labour costs. Finally, investment in research, technological development and innovation (RTDI) needs to be increased to approach the 3% Barcelona target.

To successfully meet the challenges mentioned above, decision-makers in Lower Silesia decided to place pro-innovation activities at the core of their strategic considerations, and to explore novel approaches and instruments to contribute to a more competitive region. In January 2005, a Regional Innovation Strategy was created to improve regional framework conditions for innovation and to define measures to establish and optimise the regional innovation infrastructure. The strategy document was approved by the Regional Parliament in April 2005.
Need to Reinforce RIS

Creating the RIS in Lower Silesia was an important milestone in supporting the development of innovation policy in the region. To elaborate the RIS, key sectors of economy and science characteristic of the Voivodship were identified and the regional innovative potential assessed by taking into account the innovative capability of research institutions, the availability of non-commercial business support institutions, innovation needs of SMEs and the scientific potential of Lower Silesia. Subsequently, pilot actions and new institutional arrangements were proposed, e.g. the establishment of a special unit for procuring funds for investments, an Innovation Council, a Centre for Regional Studies, a Bureau for Analyses of Innovative Processes as well as 30 ‘bridge activities’ implementing the RIS. Particularly, the document stressed the need in Lower Silesia for:

- establishing a dialogue between industry and science,
- raising awareness among regional policy-makers of the conditions under which enterprises can be encouraged to innovate,
- supporting cooperation and linkages between business support institutions in the region.

After finalisation of the RIS, it was recognised that this strategic document needed to be supplemented with additional insights and dimensions to provide a sound basis for sustainable regional decision-making and development. In addition, monitoring and implementation of the RIS required further specification and development.

About the UPRIS Project

In October 2005, the UPRIS project “Upgrading Lower Silesia – From Regional Innovation Strategy towards Operating System” started as one of 33 projects being supported in the second round of RIS funding by the EU (FP6). The general objective of these projects was to develop Regional Innovation Strategies in the NAC (Newly Associated Countries) regions by following the RIS-methodology in partnership with at least one further advanced EU-region.

In the case of Lower Silesia, the underlying question, which led to the establishment of UPRIS, was how to make the existing Regional Innovation Strategy more sustainable, applicable and suitable for guiding decision-makers. To approach this goal, regional foresight was regarded as the most appropriate means. By applying foresight, UPRIS aimed to:

- promote long-term, visionary thinking in Lower Silesia,
- raise awareness of problems and challenges in the region,
- supplement RIS with a broader societal scope and long-term focus provided by foresight,
- build consensus around the common vision for Lower Silesia,
- consider options for facing future challenges,
- and secure institutional and stakeholder support for the implementation of RIS and foresight results.

The FOR-RIS Approach

The UPRIS approach of applying foresight in the context of RIS was based on the experience and outcomes of the so-called ‘Blueprints Expert Group’. This EU expert group was established to produce practical guides on how to set up and execute foresight activities in regions facing different types of challenges.

In 2004, the FOR-RIS exercise, highlighting how foresight could be applied to conduct or enhance a regional innovation strategy, was finalised. The FOR-RIS approach underlines that methodologically foresight and RIS can be easily integrated, as differences between them complement each other, especially in relation to the time horizon taken into account, stakeholder groups involved, perspectives considered, methodology used, and the spectrum of recommendations given. Compared to RIS, a foresight process is more oriented towards medium- to long-term issues, involves a broader variety of regional actors and generates a broader and more reliable information base, as it is open to all topics of interest, not only economic ones. Thus, foresight can help identify issues and drivers that have potentially large impact on the region and that might not have been detected or approached by the conventional RIS methodology.

The UPRIS Foresight Process

The UPRIS foresight process is based on a participatory and expert-based approach. It was designed by Steinbeis-Europa-Zentrum (SEZ), which also supported and guided the partners from Lower Silesia in executing it. Whereas SEZ accompanied the project as an expert on the implementation of foresight processes in regions, the partners from Lower Silesia, the Wroclaw Centre for Technology Transfer (WCTT) and the Marshal Office of the Lower Silesia Voivodship (LSV) were responsible for implementing the concept in Lower Silesia, and for guaranteeing a timely and effective execution of the whole process. Furthermore, they also provided local know-how on the specific needs and situation in Lower Silesia regarding, e.g., relevant actors, available funds, innovation infrastructure and existing support measures.

To officially inaugurate the UPRIS project in Lower Silesia, a kick-off conference brought together all project partners as well as potential stakeholders and addressees of foresight results. In the months following the meeting, project structures
and bodies, such as the secretariat, were established to ensure methodological and administrative support for the process.

The next step was to provide background information and materials to prepare project partners and participants for their tasks and to raise their awareness of the context, aims and possible outcomes of the UPRIS foresight process and foresight exercises in general.

Then, a steering committee was established, which comprised 15 high-level stakeholders from the region as potential beneficiaries and addressees of foresight results. In addition, the project secretariat, supported by SEZ and the steering committee, identified seven medium-level stakeholders from Lower Silesia with various backgrounds to form a task force. The task force was expected to support the foresight process and the implementation of its results.

During a first meeting of the task force in May 06, the members discussed the existing RIS and identified issues that had to be further dealt with during the foresight process. The subsequent meeting in June aimed to train the task force members in foresight methodology and techniques and to directly apply what was learned. By this interactive approach, the meeting produced first outcomes in terms of identifying potentially relevant thematic areas of the foresight exercise. A STEEPV analysis was conducted, which enabled identifying factors (social, technological, economic, environmental, political and normative [values]) having direct or indirect impact on the current and future development of Lower Silesia. In addition, major problems and challenges in Lower Silesia were identified and ranked according to their potential impact on policy design and implementation as well as the level of regional mobilisation required to meet them.

On this basis, in November 06, the task force members, supported by the secretariat, took a major decision on three broad topics to be further elaborated by the foresight panels:

1. **Wroclaw as a Metropolitan Area**: future role of the regional capital in driving the development of the whole region,
2. **Knowledge-based Economy**: development of human and social capital as well as linkages between science and business,
3. **Infrastructure**: business support institutions, transport of people and transfer of data.

### A Panel-based Approach

Subsequently, the members of the three foresight panels were carefully selected depending on their expertise and interests, as they were the main source of information the UPRIS foresight exercise drew upon.

In December 06, a joint meeting for all panel members was held to prepare the panels for participation in the subsequent meetings and to communicate objectives and expected outcomes. During the event, the participants were assigned to the panels: ‘Wroclaw’ 8 members, ‘Knowledge-based Economy’ 11 members and ‘Infrastructure’ 18 members.

In the following, three consecutive 1-day meetings for each panel took place, guided by a professional moderator. During the first meeting, the panels dealt with problem definition and worked out a detailed overview of the subjects, including problems and challenges, driving forces as well as current measures and activities. The second panel meeting aimed to explore the future and focused on selecting factors of change considered to be decisive in the future, discussed the interdependencies between them as well as possible developments and trends. After having defined and discussed different possible future states of affairs, the third panel meeting provided a forum to work out and agree upon a common vision as well as to identify steps, decisions and prerequisites that would enable reaching this vision.

After each panel meeting, the moderator compiled the statements, assumptions and opinions in a panel report. The time in-between meetings was used for consultations as well as for feedback on results. At the end of the panel work, the results of each panel were compiled into three separate reports, together with additional input from the panel members. On this basis, a final foresight report including three topical scenarios of possible futures in Lower Silesia were written.

### The UPRIS Scenarios

The UPRIS scenarios are examples of normative scenarios, as they present descriptions of futures that are either desirable or feared by regional stakeholders. The scenarios will be disseminated to regional decision-makers and other stakeholders in Lower Silesia to raise awareness of the long-term challenges, to activate dialogue between regional actors and to promote creative, visionary thinking.

Each scenario starts with outlining the role of the respective topic (Wroclaw, knowledge-based economy, infrastructure) for the future development of an efficient innovation system in Lower Silesia. Then, the following sections highlight

- the current situation and challenges identified,
- different visions of the year 2020 comprising both negative and positive aspects as well as the desirable vision from each panel’s point of view and
- recommendations for action, milestones and concrete measures to realise the desirable future.
Implementation and Policy Impact

In addition to fostering ‘thinking about the future’, the UPRIS foresight exercise aimed to ‘concretise’ the RIS and to pave the way for the subsequent implementation of foresight results. For that reason, policy-makers were engaged and strongly encouraged to participate in the foresight process.

Furthermore, based on the scenarios, the project secretariat developed two action plans:
- a RIS action plan proposing a set of pilot actions and concrete projects to be funded in the region, and
- a plan for trans-regional cooperation of Lower Silesia with other European regions.

Both action plans proposed concrete measures in the field of RTD, innovation infrastructure, support for start-ups and for the development of clusters. Thus, to enhance capacity building in those fields, additional activities such as workshops for SMEs, women entrepreneurs and cluster actors were organised, and studies performed of available financial instruments, programmes, and innovation services in the region.

Funding of Foresight Results

The action plans also pointed out different funding schemes that could be utilised to finance projects. During the 2007-13 period, Lower Silesia will receive significant resources from the EU-budget for supporting research and innovation. Thus, in addition to considering national and regional budgets, the action plans explored the EU-level funding schemes such as the Structural Funds, the Seventh Framework Programme for Research (FP7) and the Competitiveness and Innovation Programme (CIP).

The Structural Funds, in particular, received special attention in the action plans due to a remarkable increase in available resources (approx. seven times more compared to the previous funding period) as well as an intensified focus on innovation. Approximately 40% of the whole Structural Funds budget in Lower Silesia is to go to projects supporting innovation and SMEs. Yet, at the moment, the share of project proposals realising this goal does not exceed 3% of all applications. Thus, the UPRIS action plans will significantly contribute to closing this gap. In addition, they will facilitate effective coordination of the funding programmes employed for the development of Lower Silesia.

Lessons Learned

Based on the experience gained during the realisation of UPRIS, the following aspects seem to be crucial for foresight practitioners to guarantee smooth and effective execution of regional foresight exercises:

1. **Leadership and facilitation**: committed actors are needed to keep the process going forward, such as thematic leaders and a project secretariat.

2. **Balanced participation**: stakeholders need to represent key organisations and institutions driving development in the region. Direct participation of decision-makers ensures that they own foresight results and thus will be more willing to implement them.

3. **Communication**: constant communication at all process levels: between the project partners, the moderator and the foresight participants. This will keep the process alive, especially in-between meetings. Disseminating information via a website and at regional events and establishing links to other projects in the region is necessary to attract attention and avoid ‘re-inventing the wheel’.

4. **Flexibility**: a foresight exercise must retain flexibility to be able to adapt to modifications in clients’ needs and to accommodate helpful suggestions from participants that were not initially foreseen in the work plan.

5. **Follow-on**: as important as exploring and discussing trends and driving forces is drawing out their implications in terms of recommendations for action addressed to regional decision-makers.

Sources and References

The scenarios are available (in Polish) on the project website: [http://www.upris-dolnyslask.pl/](http://www.upris-dolnyslask.pl/)

Further information:

About the EFMN: Policy Professionals dealing with RTD, Innovation and Economic Development increasingly recognize a need to base decisions on broadly based participative processes of deliberation and consultation with stakeholders. One of the most important tools they apply is FORESIGHT. The EFMN or European Foresight Monitoring Network supports policy professionals by monitoring and analyzing Foresight activities in the European Union, its neighbours and the world. The EFMN helps those involved in policy development to stay up to date on current practice in Foresight. It helps them to tap into a network of know-how and experience on issues related to the day to day design, management and execution of Foresight and Foresight related processes.