

## Strategic Program

The research groups are the following:

1. Competitiveness, Innovation and Sustainability (CIS) – studies the factors for economic efficiency in regional productive systems, which are subject to the restrictions imposed by the sustainable use of natural resources and the preservation of environmental quality.
2. Public Policy Institutions Innovation (PI<sup>2</sup>) – analyses public policies and governance structures and practices in particular regional contexts. The concept of regional innovation systems will also be addressed, complementing the economic perspective of the previous group with the analysis of the drivers of social inclusion, citizenship and quality of life.
3. Tourism Development (TD) – further develops the general analysis of regional innovation systems developed by the previous two groups on a specific sector of paramount importance to the Portuguese economy and that, by its nature, is deeply related with the territorial structure and the dimensions which are linked to the natural and built heritage and to an appropriate supply of services and infrastructure.
4. Systems for Decision Support (SDS) – besides the specific role of providing data bases and developing tools and techniques to support decision making, this group is also aimed at providing the GOVCOPP with the modelling and data analysis skills required by the global work of the unit.

The two strategic action subprograms are the following:

### 1. THE REGION OF THE FUTURE

This program will define, in abstract terms, ideal regional governance structures and practices, connected to a regional innovation system. This exercise will be done for the context of the Centro Region and the Inter-municipal Community of Aveiro and will be structured according to the following fields.

- 1.1. Foresight of a Regional Innovation System**, defining an optimal trade-off between economic efficiency, environmental sustainability and social cohesion.
- 1.2. Regional Supply of General Interest Services**, such as health, education, social security, culture, etc.
- 1.3. Environmental Sustainability**, analysed according to three main perspectives: mobility, settlement patterns and transport costs; efficient use of energy in public infrastructure and for private industrial and domestic purposes; the preservation of the natural environment and sustainable use of resources.

**1.4. Governance and Institutional Design**, focussing particularly on the analysis of new forms of organising and managing public services and the promotion of citizen's participation decision making processes.

**1.5. Tourism as a sector case study**, the industry of the future in a region of the future.

## **2. BUILDING OF A REGIONAL DECISION SUPPORT SYSTEM**

This subprogram will develop a flexible tool for decision making, based on the available information and on the most advanced techniques for data treatment, forecast and modelling. This tool will incorporate modules for supporting the management of organizations and supply chain flows, as well as supporting strategic decision making and public participation, based on a combination of quantitative and qualitative methods that allow scenario analyses, multicriteria decision making and the definition of declared preferences. The work will be organized according to the following fields:

**2.1. Regional database** – will organize all available information coming from official statistical sources (INE, EUROSTAT, etc.), from specialized sources (sectorial databases) or from fieldwork done in the GOVCOPP's projects.

**2.2. Software library** – will store all programs acquired or developed by the GOVCOPP, integrating them according to a decision-making tool perspective.

In parallel to the two strategic action subprograms, the GOVCOPP will develop an internationalization program for creating new research networks and to strengthen the existing ones, aiming at cooperating in areas at the scientific frontier, at exchanging researchers and, in particular, PhD students and post-doc researchers. This policy shall lead to an increase in scientific articles with international co-authorship as well as in the amount of international projects.

Contrasting with the research on the scientific frontier, the GOVCOPP will also be an agent of dissemination of knowledge and competences, through the organization of conferences and seminars and the conception of projects that answer particular needs of enterprises and other public and private organizations and the offer of a diversified set of consultancy services. To think globally and in the long term to better allow the local agents to decide and to act efficiently in a global context is the GOVCOPP's lemma and the synthetic definition of its mission.

The general objectives which will guide the research unit's (RU) action for the following six years can be synthesised by the following dichotomies:

**1 – WORKING AT THE SCIENTIFIC FRONTIER/SOCIAL RELEVANCE OF RESEARCH RESULTS.** The RU aims to generate scientific advances on subjects related to the unit's knowledge core, by making new theoretical contributions, by developing new techniques and models and by producing new information. These scientific results, in addition to their intrinsic value, are seen as contributions to increase the economic efficiency of productive systems and the quality of local and regional governance.

**2 – SOCIAL SCIENCES RESEARCH CORE/PROMOTION OF TECHNOLOGICAL SPILL-OVERS.** As a university with a strong technological content, the UA is seeking to balance the specialisation pattern by strengthening the areas of humanities, arts and social sciences. The GOVCOPP is the

principal R&D centre of the UA seeking this strategy, by gathering different branches of social, political and managerial sciences into a coherent research program. Being a medium sized centre, rather than trying to be a general purpose research unit on social sciences, we intend to be seen as a major actor in Centro Region linking policy making to managerial sciences and territorial planning. In parallel to its main competence core and because GOVCOPP is actively involved in issues such as innovation systems and institutional basis for competitiveness, we will play an important role in supporting the UA in the activities of technological diffusion, consulting and incubation.

**3 - SPECIALISED KNOWLEDGE/MULTIDISCIPLINARY ACTIVITY.** GOVCOPP is organised in research groups, reflecting the main disciplinary fields in which it is involved. As stated before, the balance, in specific territories, between good governance and efficient production is the broad objective which confers coherence to the unit.

**4 - GLOBAL KNOWLEDGE/REGIONAL EMPOWERMENT.** International networking and advanced research enable GOVCOPP to act as a centre for absorption, creation and use of state of art knowledge in social, political and managerial sciences. Thinking globally, GOVCOPP can act locally, providing the technical and scientific support that regional authorities, firms and other organizations need to be influent and competitive actors at global scale

To fulfil these objectives, GOVCOPP will be organised according to a matrix structure, where the specific work of each research group is horizontally integrated by two interdisciplinary strategic action subprograms.

## **1 – THE REGION OF THE FUTURE**

An ideal regional governance structure and practice, connected to an ideal regional innovation system, will be defined in abstract terms and then applied to the specific context of the Centro Region and the Inter-municipal Community of Aveiro (CIRA). This vision and its application to regional contexts will be structured according to the following subprograms:

**1.1. Foresight of a Regional Innovation System,** defining an optimal trade-off between economic efficiency, environmental sustainability and social cohesion. This will encompass the analysis of the regional competitive potential, both in terms of specific capacities and economic governance structure. The first is related to the sectorial pattern of specialization, as well as the endowment of human resources, physical infrastructure, services supporting the production activity, learning and R&D infrastructure, natural resources and historical heritage; the second gather the individual action of firms, local and regional governments, learning, R&D and incubation institutions, thus creating a synergetic regional system.

**1.2. Regional Supply of General Interest Services** (Health, Education, Social Security, Culture, etc.). This will include the study of the supply model (public or private services, partnerships), the analysis, for each type of service, of the trade-off between economies of scale and territorial access and the definition of the governance structure.

**1.3. Environmental Sustainability.** This will address three main subjects: mobility and the relationship between settlement patterns, accessibility and transport costs; efficient use of

energy in public services and for private industrial and domestic purposes; preservation of the natural environment and sustainable use of resources, including the balance of the main fluxes generated by urban metabolism (water, air, heat and solid wastes).

**1.4. Governance and Institutional Design.** This includes the analysis of new forms of organising and managing local and regional governments and public services, as well as new forms of citizen organisation and public participation.

**1.5. Tourism as a specific case study.** As a strategic sector for the Portuguese economy, closely intertwined with the territory, the governance structure and the economic fabric, tourism provides the scope to analyse an industry of the future in a region of the future.

## 2 – BUILDING OF A REGIONAL DECISION SUPPORT SYSTEM

Decision making under increasing uncertainty and complexity must be based on the best available information and on state of art modelling, integrated in a multi-purpose software tool. Accurate information, generated by the best available data, should provide the objective basis both for the efficient management of daily operations and for strategic thinking in terms of anticipation and proactive response to future exogenous changes. State of art modelling is the means to project future trends and to evaluate the outcomes of intervention in complex systems. The software tool must be sufficiently general to be applied both for the multipurpose requirements of business and public management, strategic foresight and multi-criteria evaluation. It must be sufficiently flexible and integrated to become a Decision Support System (DSS). The DSS must be specially designed to fit the needs of specific regional systems and should integrate the following components, each one organized by a specific subprogram:

2.1 **Regional database** including all available information, provided either by official statistical institutes, by specialised sources (Industrial Associations, Regional or National Administrations, etc.) or by specific surveys undertaken by GOVCOPP projects;

2.2 **Software library** with all programs acquired or developed by GOVCOPP projects, necessary to apply the methodologies and run the models which sustain the various forms of decision making.

In addition to its use by public and private decision makers, the DSS will also be designed to support collective foresight and public participation exercises, using for this purpose a set of multi-criteria functions and stated preferences techniques.