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## ENSURING EFFECTIVE GOVERNING FOR REGIONAL DEVELOPMENT

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## ОБЕСПЕЧЕНИЕ ЭФФЕКТИВНОГО УПРАВЛЕНИЯ ДЛЯ РЕГИОНАЛЬНОГО РАЗВИТИЯ

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## **Resume**

*The purpose of ensuring effective governing means to define effective institutional and legal mechanisms for regional development and to improve the administrative possibilities of organs of the country's government.*

**Keywords:** *Regional development, regional government, human resources, electronic management, coordination of teaching*

## **Резюме**

*Целью обеспечения эффективного управления является определение эффективных институциональных и правовых механизмов регионального развития и повышение административного потенциала органов государственной власти.*

**Ключевые слова:** *Региональное развитие, региональное управление, человеческие ресурсы, электронное правительство, координация обучения*

## **INTRODUCTION**

For defining optimized institutional structures, legal mechanisms of modern regional government, and consolidating of this process exists one of the most important preconditions for the implementation of the policy objectives and goals presented in the state strategy of regional development.

The following factors are important for regional development and effective regional management:

- Effective personnel management and professional development of human resources.
- Introduction of e-government system.
- Designing of e-government databases.

## **FORMULATION OF THE PROBLEM**

The process of regional development and regional governance is based on the cooperation of central and local governments, entrepreneurs and citizens. It's clear that, citizen participation in the regional development process will ensure greater transparency in regional governance, fairness, achievement of civil consent and increasing efficient regional governance.

Involving the population in the decision-making and development process of regional development makes them reliable partners in the regional development process, as they know best the problems and requirements of their settlement, region. At the same time, involving the population and cooperating with them also helps to increase their responsibility in caring for the common public welfare. Transparency of decisions made by central and local governments and trust in the government increases greatly and also increases the responsibility of citizens and care for their own environment. All the above mentioned will help in effective governance and regional development.

We pay particular importance to the use of statistical methods in the state strategy of regional development. Statistic modeling is crucial for the strategic development of the region, and the development of any process strategy in general of course. Statistical modeling is based on probabilistic and logical processes that help us to solve forecasting and analysis tasks, without them it is impossible to implement a regional development program.

Therefore, the existence of local and regional statistic data is especially important for the preparation of the state strategy for regional development, development strategies of the regions and local self-government units and their implementation.

The existence of human resources and their intellectual potential is very important for ensuring regional development. It's clear that, human resource development strategy must

be developed to set the key human resource priorities. Maximum involvement of stakeholders should be ensured in the strategy development process.

Professional training and professional development programs should be defined based on the strategy. The training conducted according to the programs should serve to equip the staff with the effective tools (knowledge, skills, methodology, etc.) needed to perform a specific job, taking into account the requirements. The foundation of a system fo/r public workers' raising the qualification and the mobilization of appropriate financial resources should be ensured.

The training of human resources should be one of the most important priorities in this direction. This will help to develop regional development strategies, as well as strategies of local authorities and effective foundation and implementation of programs.

The main concept of training of local self-government public workers should be prepared, which defines the basic principles and directions of the municipal public workers' training system, types and forms of training, coordinating links of the training system, training criteria and their compliance with the qualification requirements of officials.

It is necessary to establish a unified standard for the training, professional development and retraining of public workers and a system based on it, to create and implement special training programs for the training of public workers. Teaching should be coordinated within a unified policy and should be systematic.

Another achievement of the strategy for regional development is the introduction of components and services containing the e-government platform in order to increase the efficiency of the activities of local and regional authorities.

### CONCLUSION

Proceedings of local and regional authorities should be transferred to digital mode; Appropriate software and technical tools and legal mechanisms should be developed. The introduction of municipal (and state) services electronically should be ensured; Transferring the activities of regional administrations and local self-governments to the digital space, which will improve the quality of services provided to the population and increasing the participation of citizens and public organizations in self-government activities.

It is necessary to create a unified regional government portal, which will be loaded with information about regions and local self-government units, including investment and business opportunities, as well as announced tenders, procurements, competitions and the existing legal framework. Obviously, this requirement will only be feasible if we have local technical staff at the regional level to service such technology.

This confirms once again, the need to set the task which will predict the demand for higher education specialists in the region and makes the solution of the problem at the scientific level.

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## MODERNIZATION OF EQUIPMENT FOR GAS CLEANING BY COMPLEMENTARY MODELLING APPROACH

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*Abstract* In the past two decades, separation processes have experienced a clear trend towards process intensification, driven by revolutionary challenges in computer and manufacturing technologies. This trend calls for the development of innovative or upgrading of existing equipment units. Often, this brings about rising complexity and hence higher requested accuracy of process description, which is usually beyond the capabilities of conventional modelling methods. A new concept called complementary modelling has recently been suggested, which is based on using different modelling approaches in combination, while their rigor and complexity stretch over a wide range. Among these methods are the fluid-dynamic approach, i.e. direct application of the equations of fluid dynamics, the hydrodynamic analogy approach and the rate-based approach. In this contribution, the complementary modelling is outlined and illustrated with a case study related to CO<sub>2</sub> capture.

**Keywords:** Separation processes, complementary modelling, fluid-dynamic approach, hydrodynamic analogy, rate-based approach

### INTRODUCTION

Separation operations are central in numerous production cycles of chemical process industries, energy sector as well as of many other application areas. The process and equipment upgrading is very important for the success of sustainable production. Today, it is largely dominated by the idea of process intensification leading to substantially smaller, cleaner, safer and more energy efficient process technology (Reay et al., 2013). Among the ways to realize more intensive operations are process integration, covering both functional combination (e.g., reaction and separation) and jointed equipment, miniaturization of