

Distr.  
GENERAL

CES/AC.71/2005/18 (Summary)  
1 February 2005

Original: ENGLISH

**UNITED NATIONS STATISTICAL COMMISSION and  
ECONOMIC COMMISSION FOR EUROPE  
CONFERENCE OF EUROPEAN STATISTICIANS**

**EUROPEAN COMMISSION  
STATISTICAL OFFICE OF THE  
EUROPEAN COMMUNITIES (EUROSTAT)**

**ORGANISATION FOR ECONOMIC  
COOPERATION AND DEVELOPMENT (OECD)  
STATISTICS DIRECTORATE**

**Joint ECE/Eurostat/OECD Meeting on the Management of Statistical Information Systems (MSIS)**  
(Bratislava, Slovakia, 18-20 April 2005)

Topic (ii): Development strategies for statistical information system

**INFORMATION SYSTEM FOR SUPPORT OF REGIONAL DEVELOPMENT IN THE  
SLOVAK REPUBLIC**

**Supporting paper**

Submitted by Infostat, Slovak Republic<sup>1</sup>

**Summary**

1. Optimal regional development is of significant importance for the Slovak Republic. This development can be attained only with the collection of accurate and complete data for all regions and their parts. For this purpose, the optimal needs for information system support of the regions are being developed.
2. To achieve regional development management, it is absolutely essential to establish an information platform in order to observe constantly the indicators of the municipalities and regions. This platform facilitates data collection, storage, management and analysis of all information on the regions and their parts. It also supports the preparation of high quality information for government, organizations and research institutes. They require almost every kind of indicators from municipality to national level that only an appropriately designed and developed information system with a powerful database management can provide.
3. Statistical indicators on the regions are prepared by various organizations such as the Ministry of Agriculture, cadastre, statistical office etc. With the new system, this information will be collected by and stored at the Ministry for Construction and Regional Development. Only the responsible organizations could gather and prepare the indicator's values for regional development. Basically, there is a need to exchange data prepared by different systems. It is important to establish a method, which integrates, unifies and standardizes the information that is exchanged between the Ministry for Construction and Regional Development and the organizations.

---

<sup>1</sup> Prepared by Lenka Priehradnikova, Anton Bencic, Miroslav Hudec

4. Unified Modeling Language (UML) has become a de facto standard methodology for modeling and designing information systems, so this methodology is used in the research. This paper illustrates the basic building block of object-oriented methodology and UML, to be used in the design of the information system for regional development. This research is a complex process and this direction promises a significant progress for regional development in the Slovak Republic. This research identifies all types of actors who need to communicate with the system and their rights and responsibilities. There are also processes for collecting, storing, presenting and administrating the system. The UML diagrams are used to describe these processes. These diagrams are static like the class diagram and dynamic like the use-case diagram, sequential and state diagram. All of these diagrams are used and described in this paper. UML language has the following properties:

- Visualization of system entities and behaviour resulting in graphic representation;
- Specification for precise, formal and complete definition of system elements and their relationships;
- Construction based on visualization and specification; and
- Documentation for all system elements. All analysis and design artifacts are documented in UML and included into the model of the information system.

5. The resulting system will be tested in a pilot application. After testing and eventually modifying some of the processes, the full version of the information system will be developed.

**Key Words:** Regional development, indicator, statistics, UML