

Title

THE PROBLEM OF INTEGRATION OF GEOSPATIAL INDICATORS AND DATA IN OFFICIAL STATISTICS

Theme proposed by: the National Institute of Statistics

Director:

Professor Giani-Ionel Grădinaru, PhD

Purpose:

The primary goal of this project is to design a set of geospatial indicators at the level of official statistics in Romania. The research focuses not only on defining potential statistical indicators but also on evaluating the quality of geospatial data and, concurrently, the sources of geospatial data.

Objectives:

To achieve the primary goal of the project, three main objectives were considered. The first objective focused on evaluating geospatial data sources. The second objective aimed at identifying methods for integrating and communicating geospatial data within official statistics, while the third objective involved designing the structure of a system of indicators relevant to official statistics.

Design/Methodology/Approach:

The identification of the most suitable sources of geospatial data, assessment of geospatial data quality, possibilities and limitations in geospatial data collection and use, statistical methods to support official statistics in identifying spatial correlations and uncovering hidden patterns in geospatial data, tools and technologies for visualizing and communicating geospatial data, identification of statistical topics, and description of statistical variables.

Results/originality:

The analysis of geospatial data and data sources, with a focus on the feasibility of integrating geospatial data into official statistics; the proposal of tools and technologies for visualizing and communicating geospatial data to be used by official statistical institutions; the structuring of a relevant indicator system; the enhancement of the capacity of official statistical institutions to use and integrate geospatial data in their analyses.

Impact on the society:

Geospatial data can provide a more comprehensive perspective on complex issues, such as environmental and natural resource management, urban planning and transportation, or emergency response. Using these data in the development and improvement of public policies can contribute to problem-solving and enhance the quality of life.