

Digitization I

Building a geospatial society in Poland based on the INSPIRE Directive

Digitization improves the state's efficiency



A debate was held in the Rzeczpospolita daily offices on December 16, 2016, to discuss: "Digital Poland—goals, challenges, prospects." Its participants included government officials, among them, Deputy Ministers of Development and Digitization, leader of the Sejm (Parliamentary) Commission on Digitization, Innovation, and Advanced Technologies, and other persons.

I believe, this very interesting debate needs to be supplemented by adding to it some new strands. Here, I will make complete some of the statements made there by experts, and I will emphasize the importance of digitization as a connective tissue of the economic structure which is, in turn, made of: geology, surveying, spatial planning, and spatial information. While doing this, I will refer to my paper: "Space as the subject of value and strategic thinking" published in the *Infrastruktura* insert in *Rzeczpospolita* daily (25.02.2016) (1). According to the "Digital Poland" programme, the above-mentioned factors make up the public e-services.

e-administration

The institution of the Ministry of Development (MD) and the Ministry of Digitization (MD) is an achievement of historical significance in Polish economy. It ensures a necessary co-ordination in building an intelligent and efficient state we seem to need as badly today as never before. But it is also a great challenge for Poland must take part in the global digital revolution and, at the same time, it must build a contemporary e-administration.

Karmenu Vella
 European Commission
 B – 1049, Brussels Belgium,
 Rue de la Loi 200

Re: transposition of Directive INSPIRE into the Polish law.

Dear Sir,

President of the Republic of Poland Andrzej Duda on December 8, 2016, signed a law which modifies the competences of the National Spatial Data Infrastructure (NSDI).

The new law provides that on January 1, 2017, the Minister of Digitization, Anna Streżyńska, will assume the task to implement the INSPIRE Directive from the Surveyor General of Poland, who has so far reported to the Minister of Internal Affairs. The new law also says that the new Board of the National Spatial Data Infrastructure will be installed at the Ministry of Digitization starting on January 15, 2017.

The Minister of Digitization is the first public figure in all the time after the economic transition (1989) to have asked: how Polish geodesy has spent the PLN 2 billion, part of it on implementing the INSPIRE Directive, and what are its plans to spend the further PLN 400 million?

As I would like to answer these two questions in a press article, I address to you the following questions which are given in the attachments.

The implementation in the Polish law of Directive 2007/EC of the European Parliament and of the Council, dated March 14, 2007, which establishes the infrastructure for spatial information in the European Community (INSPIRE) includes major errors in relation to the original Directive. ■

We must certainly define the priorities of building a digital state in which we can optimize our processes and ensure maximum efficiency in spending public money, including the expenditures made by local government structures. After all, the ultimate goal is to give the people a system which meets their needs in the best possible way, that is, to give them an efficient e-state.

Spatial information

Spatial information (SI) has accompanied many human activities since times immemorial. Spatial information in the European Union is governed by Directive 2007/2/EC of the European Parliament and of the of 14 March 14 2007, which establishes the infrastructure for spatial information in the European Community (INSPIRE). According to the priority rule, the Community law is superior to the national legislation of EU member-states.

A key problem is whether Poland appropriately implements the INSPIRE Directive into its law on the infrastructure of spatial information. I refer to this question in my open letter to Karmenu Vella, the EU Commissioner for the Environment, Maritime Affairs, and Fisheries (letter below).

Polish law

Poland has the most unstable law among all the European Union member-states. A study done by Grant Thornton's analysts shows that in the years 2012-2014, the Polish lawmaker produced nearly 56 times more regulations than Sweden, 11 times more than Lithuania, and twice as many as Hungary (in terms of both, the number and size of the adopted laws). This means that in none other EU country individuals and business are experiencing a legal environment that is as volatile and unpredictable as in Poland. For instance, the greatest number of regulations has been adopted on the grounds of the Geodetic and Cartographic Law. And we now have 30 related ordinances which altogether cover more than 3,200 pages. A special time has come after March 2010, when the Geodetic and Cartographic Law was amended as many as 15 times.

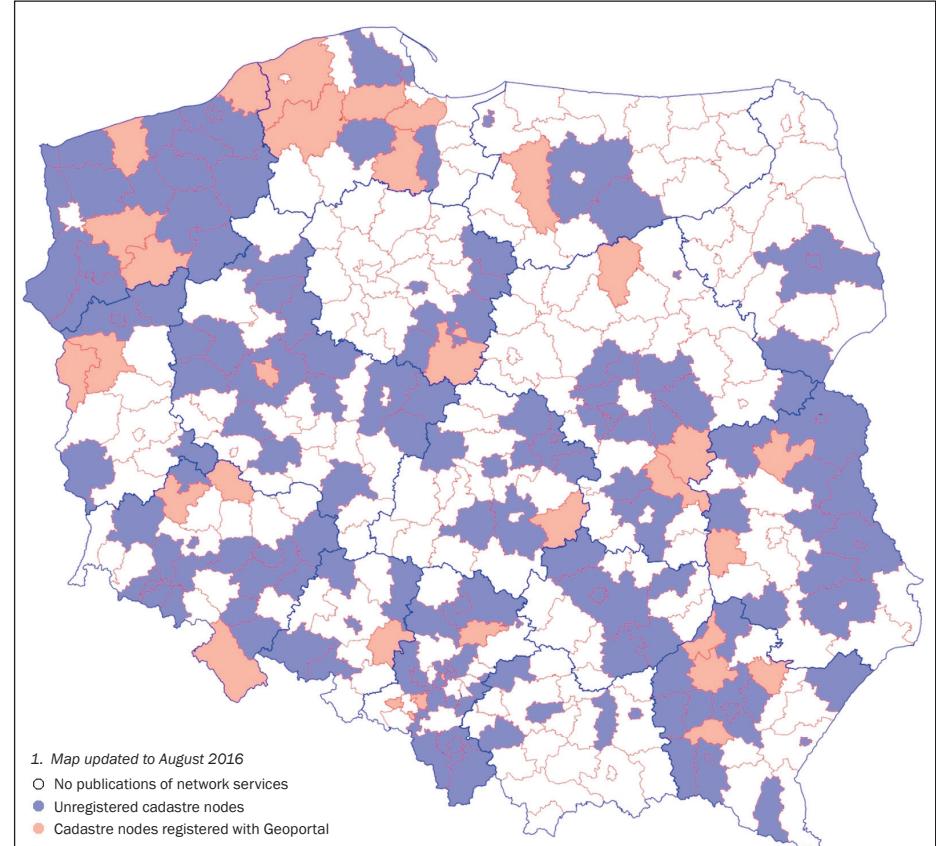
If the INSPIRE Directive is to become an efficient instrument in the hands of central and local administration, it must accept some specific realities of this country. In particular:

- to build cadastral nodes in all Polish counties (see attached map). Alas, 6 years after the adoption of the law on spatial infrastructure, only 157 counties (less than 50%) have such nodes, while in fact each of them should have one,
- to implement the concept of the spatial land management (2030), that is, to improve the land management order and, consequently, to improve the living comfort of the Polish people,
- and, later on, to serve the "goals of Community environmental policies and policies on activities which may potentially affect the natural environment."

A delay in the transposition of the INSPIRE Directive into the Polish law is a barrier preventing the citizens and entrepreneurs from using the measurable benefits offered by the EU law and it causes major losses (1) in the national economy.

Steps taken to merge the local, regional, and national geo-data resource into a single integrated system can provide a seed for building a National Spatial Data Infrastructure (NSDI).

Before that can be done, I must stress a peculiar shortcoming in this implementation, namely, lifting the obligation to use European and world standards and amendments to the Geodetic and Cartographic law which do not follow the intention of the Directive and are structured in a different way than the respective EU regulations.



Source: "Good practice of communes and counties in building geo-data infrastructure in Poland - 2nd edition, expanded." W. Izdebski, 2016

The state, as we all know, is an organisation. An improvement of the state's efficiency and productivity, therefore, requires a higher efficiency of processes going on in the state, especially its economic processes. The efficiency of these processes, self-evidently, depends most of all on public administration, a huge structure employing more than 426,000 people and comprising 2,478 municipal offices, 314 starosties, 66 town offices with the status of a county, 16 marshal's offices, and 16 voivodship (provincial) offices.

Digitization of the state

Computerization of the state (implementation of IT solutions) is impossible without having reliable geo-data. This is why building IT systems must be accompanied by simultaneous obtaining of data which represent appropriate quality. Land lots and address information are the source of such data. Since this source of information is scattered, we must work to have it integrated at the national level. The best solution available with the current technology is to integrate the data by way of using network services provided directly from where those official registries are working, that is, from counties or municipalities, and then by integrating these services at the national level to set up a national service. This solution does not require building any costly repositories or any infrastructures to support their operation.

Eng., Waldemar Izdebski, Ph.D., Warsaw University of Technology

Without an in-depth analysis of the expenditures made so far towards building the Spatial Infrastructure and of the obtained outputs, we cannot provide durable conditions for this infrastructure's development because we are not even sure if its resources are being used in a rational way.

A precise calculation of those expenditures is absolutely indispensable because the points raised in support of allocating more funds or using the money in a "wiser" way are often highly worrying. In simple words: can Poland afford this?

A successful building of a nationwide system requires overcoming any internal, isolationist administrative practices of respective government agencies and institutions in the interest of the whole state. It becomes obvious that this responsible task requires an interdisciplinary team of geo-data managers and IT experts.

The implementation of such a programme will improve the state administration and this, in turn, will increase the GDP by 1% every year (1). This solution "does not require setting up costly repositories or any infrastructures supporting them." This vast international project sho-

uld, in the first place, represent an economic importance to Poland and it should ensure a very efficient use of the European funds.

I suggest to start this work in counties to be crossed by the planned Via Carpatia road and in local government structures which are going to carry out the Mieszkanie+ (Apartment+) housing programme in their areas.

Eugeniusz Makowski

References:

- (1) Space as the subject of value and strategic thinking. Insert to *Rzeczpospolita* daily No. 225, 28.02.2016.
- (2) 4D cadastre as part of the legal and spatial order in Poland, Part 2. Insert to *Rzeczpospolita* daily No. 25.04.2014.
- (3) INSPIRE—insert to *Rzeczpospolita* daily, 31.12.2013