BENEFICIAL IMPACT OF INSPIRE DIRECTIVE ON NATIONAL LEGISLATION: THE CASE OF POLAND

POZYTYWNY WPŁYW DYREKTYWY INSPIRE NA PRAWO KRAJOWE W PRZYPADKU POLSKI

Jolanta Orlińska

Surveyor General of Poland

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Abstract

The transposition of the INSPIRE Directive in Poland is carried through a separate SII Act together with the amendments of some related acts and regulations concerning the spatial data resources already existing in Polish legislation. The spatial data resources which constitute the Polish spatial information infrastructure are dispersed among various institutions responsible for development, maintenance and dissemination of these data. For the effective establishing of the infrastructure it is essential to concern the proper organization ensuring collaboration of interested authorities. New solutions introduced in the Polish law enable fulfilling this crucial condition for successful implementation of the Directive. Legal provisions secure the governmental bodies with tools for monitoring the process of creation and development of the infrastructure. Moreover the public institutions responsible for the implementation become engaged in operational management and planning of the process. Transposition of the INSPIRE Directive in Poland, gives an opportunity for comprehensive revision of the national data resources, technical standards, data flow and procedures of updating. As a result number of technical regulations were prepared in order to reorganize the system of conducting the public registers, especially in the field on geodesy and cartography. The new strategy for implementing this system includes the legal, financial and organizational issues.

Moreover, in accordance to the governmental strategy for building the information society, INSPIRE constitutes a coherent SDI module of this interdisciplinary infrastructure and sustains its harmonized development. As a part of mentioned above strategy further modernization of administration systems is foreseen.

The paper presents the Polish approach to the implementation of national spatial information infrastructure with the emphasis on the legal and organizational solutions and their influence on the development of public administration systems.

1. Introduction

The introduction of INSPIRE Directive regulations to national legislations of the 27 EU member states is a task of key importance for the construction and functioning of spatial information infrastructure within each of those states, as well in the scale of the entire Europe. Transposition of the INSPIRE Directive is a difficult, responsible, and long-term task, as it is related to the necessity of performing a detailed analysis of the existing state, from the legal, administrative, and technical point of view, taking into consideration the economic factors. Specific sets of spatial data comprised in spatial information infrastructure remain within the competencies of various institutions and agencies, different are the procedures of making available the information from individual public registers, also technical standards for maintaining the resources differ; thus, from the institutional point of view, the scope of regulations and other provisions, comprised in the adjusting to regulations of the Directive is wide indeed.

Therefore, it is indispensable to define thoughtfully the legal instruments of transposition and to develop draft legal solutions in such a way, as to consider the specificity of public administration agencies and public register in a given member state. It is also vital to take into consideration the stakeholders – potential participants in spatial information infrastructure – who remain outside the public administration, as well as all users and uses (Figure). As can be seen, the INSPIRE Directive affects every citizen of the state, and every role which that citizen performs within that state.

An indispensable stage in the process of preparing legal rules, in case of that so comprehensive area of regulations, is conducting consultations with experts from various fields, as well as social consultations, including consultations with trade-specific organizations. At the same time, the proposed legal and organizational solutions have to be agreed with all ministries. In numerous European countries the topics dealt with by the INSPIRE Directive – the scope of spatial data – affects also the functioning of self-governments which, due to the area range of activities of specific units, constitute a large circle of potential co-developers of the infrastructure.

The legislation process is carried out at the government level, until the draft legal act is completely agreed, together with assessment of consequences of the regulation, where detailed descriptions are provided of both the outlays on the implementation of the proposed regulations, as well as the influence of the regulation upon specific spheres of activity of the state and national economy. After exhausting the path of consultations and co-ordination by the government, the work of the parliament still provides possibilities of debating specific entries in the proposed regulation, by MPs – representing citizens, as well as representatives of unions and other social organizations.

Adjusting the national regulations is rendered difficult, as not all the detailed implementing rules of the Directive are known, for example those which state precisely the information content of annexes II and III to the Directive. Thus, also the assessment of the scope of adjusting the spatial data resources to the requirements of INSPIRE can only be estimated, while the analyses concerning costs are of preliminary character.

Correct transposition must be complete and must comprise all the regulations of the Directive, suitably transposed to the national legal system. Moreover, the transposition must embrace all the acts of national legislation, which in whichever way are related to the subject

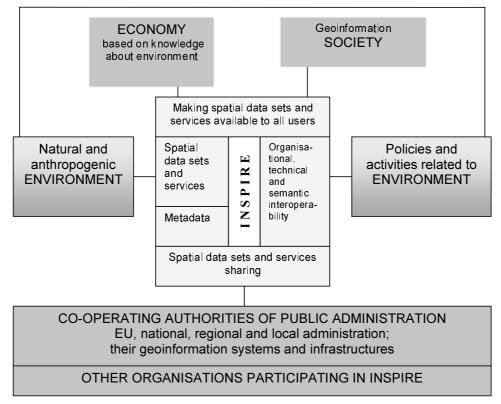


Figure. The fundamentals of INSPIRE (according to Prof. J. Gazdzicki)

matter of the Directive, but also those regulations, where the provisions of the EU act of law influence the hitherto existing ways of execution of public administration tasks.

The degree of difficulty of executing the process of adjusting law in a given member state depends vastly upon the legal system, division of competencies, organizational structure of public administration, and numerous other factors. Of particular importance is the correct selection of legal acts, which refer to spatial data, or activities of the administration based on spatial data, the gathering or making available of which has not been so far regulated by rules of common law.

In many countries the spatial data sets embraced by the Directive in specific spatial data themes, their maintenance and availability, are within the competencies of various authorities and agencies of state and self-government administration. Both the state administration and self-governments may function on several levels, whereas the number of public administration units at specific levels is often closely related to the administrative division of the country.

It also happens that the issues of spatial data resources are not regulated by law (acts of law, enactments) and no nation-wide uniform technical standards have been established, while the registers containing such data are subject to regulations of local law, or only technical specifications [prepared] during procurement procedure. Sets of spatial data being managed by institutions which are not part of public administration are subject of standardization and availability following the principles established by such institutions completely autonomously.

A vital factor influencing transposition, which should be taken into consideration, is the different level of progress in developing e-administration, as well as the level of implementation of definite technical standards and solutions in specific areas of administration functioning, as well as in its specific units. The level of difficulty in preparing the transposition thus depends also on the degree of modification of other regulations of national law, concerning the development of electronic administration, as well as of information society, along with the advancement in implementation of those regulations.

2. Polish conditions for transposition of the INSPIRE Directive

2.1. Legal status

In Poland, the transposition of the Directive and its implementation, for the reasons provided above, is a complex process. In the legal system, there is no one act of law, which in a complex manner would regulate the issues concerning spatial information. Like in other countries, the issues of spatial information, covered by the Directive, are regulated in suitable branch-specific provisions, many times in a non-uniform manner. There are several acts of law and enactments, which refer directly or indirectly to spatial data. At the same time, there are connections between specific acts of law, by means of administrative procedures that make reference to spatial data, or procedures of other public registers. Hence the necessity of amending the entire legal system – several acts of law that are inter-related with one another.

The most comprehensive scope of spatial data is regulated by the Act of law – Geodetic and Cartographic Law, which was passed in 1989 and amended only slightly since then. The system of keeping the state geodetic and cartographic registers, described by that act of law, is obsolete and does not suit the presently functioning systems of managing organization and information, it does not take into consideration the progress in technology, and is not adjusted to the current expectations of users, which increase with technological progress. What is more, it fails to meet the modern standards of law-making. The situation appears to be similar as regards technical standards of keeping the state geodetic and cartographic resource. Due to entrusting the task of running the resource to local government units, those issues are regulated by legal rules of national law. At present the legal system contains several enactments concerning procedural issues, and data scope issues, as well as standards of administrative documentation required in administrative processes. Technical standards are regulated by means of instructions and technical guidelines, developed several years ago. In practice, also modernized standards are in use, which function in the administrative circulation as "good practice" recommended by the Head Office of Geodesy and Cartography. The new regulations concerning technical standards call for authorization by law, in compliance with the present law-making practice, which is connected with amending the act of law.

2.2. Organizational structure

All the tasks in the field of geodesy and cartography defined by the Geodetic and Cartographic Law are tasks of the Geodetic and Cartographic Service created by government and self-government bodies.

Local government units perform those tasks as delegated functions. The delegation of state administration tasks by the Geodetic and Cartographic Law was made to 379 county (district) chief offices, to 75 municipalities, as well as 16 Marshall offices. The correct functioning of local governments in that respect is supervised by state administration – provincial inspectors acting on behalf of the voivode (governor of province) and at central level by the Surveyor General of Poland. Summing up, it should be stated that the organizational structure of the Geodetic and Cartographic Service is complex. In total, the tasks concerning geodesy and cartography in Poland are carried out by 487 offices.

2.3. Organization of the state geodetic and cartographic resource

The Geodetic and Cartographic Service keep several registers containing spatial data having reference character in relation to other data, such as real estate cadastre, large scale maps, including basic map and maps of utilities (territorial development), as well as topographic products in medium and small scales, geodetic and surveying control, and systems of spatial referencing, etc.

At present, the resource of geodetic and cartographic documentation has its organizational structure identical with the structure of units of the Geodetic and Cartographic Service, and is kept at the centres of geodetic and cartographic documentation of district (sometimes municipal) level, provincial level, and in the main centre.

At the district level, large scale resources are maintained: cadastre, basic map, classification of soils, register of real estate prices and values, geodetic register of utilities, detail control networks, local spatial information systems.

At the provincial (voivodeship) level: topographic maps, thematic and special maps, as well as regional spatial information systems, and the state register of boundaries of territorial division of the country in the given province.

At the central level: topographic maps, thematic and special maps, as well as geodetic control, gravimetric and magnetic control, state register of boundaries at the national level.

All those resources, both in terms of procedures and technology functioned independently of each other, so far.

The development of technology provides abundant possibilities of applying spatial data, and thus generates demand for their use in decision-making processes, as well as in numerous domain-specific systems related to spatial planning, economic planning, technical infrastructure, environmental protection, medical rescue activities, crisis management, etc.

In connection with the above, there is an urgent need for modernization of the state geodetic and cartographic resource, as well as the manner of making information and data available, in order to meet the increasing demands of the public administration, entrepreneurs, and citizens. At the same time, in compliance with the requirements of the INSPIRE Directive, spatial information infrastructure is developed in the country, while the state geodetic and cartographic resource, via the obligation of inclusion of a large part of its data sets in the infrastructure, becomes its vital part.

Taking the above into consideration in the process of resource modernization, which in its first step implies changes in the legal rules that determine the procedures of keeping specific public registers, and technical standards, also the requirements of the INSPIRE Directive regulations have been taken into consideration, along with implementing rules to that Directive.

2.4. Procedures concerning transposition of EU regulations

The way of transposing EU Directives are defined in the government guidelines. These contain not only the procedures related to agreeing a project with/in government structures, local government units, and social organizations, but also describe in detail the scope and form of documentation accompanying legal acts, e.g. tables showing the correlation between Directive and transposition measures – existing or draft ones, which enables the assessment of completeness and conformity of the transposition, as well as guidelines concerning the scope of amendments of the acts of law that function in the Polish legal system, which on principle may not in merit go beyond the scope of the transposition.

One of vital documents accompanying the draft act of law is the assessment of consequences of the regulation. The content of that document is agreed in the legislation process, in similar manner to what happens to the very draft of a legal act, or amendment. Among other things, the document specifies the sources of financing the changes being the consequence of putting into force the regulations concerning the manner of functioning of public administration.

Despite that fact that INSPIRE does not require collection of new spatial data, and refers only to those resources, which already exist in electronic form, the implementation of the stipulations of the Directive and development of infrastructure shall incur definite costs. These refer to:

- establishment of metadata for spatial data sets and services, as well as current updating of them,
- O harmonization of registers and spatial data, in line with the implementing rules to the draft act of law,
- o establishment and functioning of infrastructure geo-portal, as well as establishment of network services,
- O training and ongoing enhancement of knowledge, as well as gaining experience.

Putting the regulations into force occurs at the time of crisis of public finances. Because of that, the possibility of financing the tasks resulting directly from the INSPIRE Directive and its implementing rules is much limited, having in mind other urgent needs of the state. At the same time, means from European funds have been made available, for the purpose of IT development and information society, which to a large extent will assist the implementation of regulations and development of infrastructure.

3. Transposition of the INSPIRE Directive to the Polish law

3.1. The Act on spatial information infrastructure

In Poland, the transposition of the INSPIRE Directive, following a proposal of the government, took the form of a separate act of law (SII Act)¹, with simultaneous amendments of some national legal rules, having the purpose of adjusting the existing regulations concerning spatial information to the requirements of that Directive.

¹ Act of Polish Parliament of 4 March 2010 on spatial information infrastructure (SII Act).

The stipulations of the SII Act make references to the basic aims of the Directive. The main purpose is the establishment of the national spatial information infrastructure, being a constituent of the European infrastructure. At the same time, the aim is to optimize spatial data acquisition and maintenance by public administration units, as well as to improve spatial information availability to all users.

The essence for accomplishing the above-mentioned aims is the implementation, in the domain of spatial information, of interoperability principles, defined by the European Interoperability Framework for European Public Services from the legal, organizational, semantic, and technical perspective. It implies that introduction of modern, advanced solutions concerning spatial information infrastructure in every above perspective will contribute to the development of electronic administration.

The SII Act defines the principles and manner of establishing and use of spatial information infrastructure, as well as authorities competent in that respect.

Most important, from the point of view of infrastructure users, are the provisions concerning access to spatial data. Access to spatial data, as well as use of such data take place via network services, by means of electronic communication, including also the services of discovery, view, downloading, and transforming of data. The SII Act provides common and free of charge access to the two former types of services, namely discovery and view, which are most often used, and which enable access to the necessary information, as well as getting acquainted with such information. The use of other services is possible, observing the regulations referring to public registers containing the data made available. An exemption to that rule applied to mutual sharing of data between authorities. Spatial data sets comprised in the infrastructure, as well as spatial data services, kept by administration agencies, are subject of providing access **free of charge** to other agencies **of administration** in the scope indispensable for performing public tasks by the latter. That provision is a consequence of other regulations binding in Poland, namely the Act of law on computerization of entities executing public tasks.

Access to spatial data sets and services does not apply to data, which due to the international agreements binding for the Republic of Poland, public safety, or other reasons stipulated in separate regulations, have been considered classified, or are subject to restrictions in providing access.

Spatial information infrastructure will be developed and maintained by agencies of administration and third parties, who have been enabled to join it.

Due to the substantial distribution of the spatial data resources, a major problem is the provision of suitable interoperability between all interested authorities. In the SII Act, that problem has been solved successfully, by introducing a hierarchical, three-level organizational structure, comprising:

- at level one the coordinator for entire infrastructure, being the minister responsible for public administration, who executed his/her coordination tasks with the assistance of the Surveyor General of Poland, and is aided by the Council for Spatial Information Infrastructure, being a consultative body,
- o at level two leading bodies in the 12 thematically defined parts of infrastructure,
- o at level three bodies that keep public registers, which contain spatial data included in the infrastructure.

The SII Act lists 12 leading bodies, assigning to each of them the suitable themes from among the 34 themes of infrastructure, at the same time having in mind the existing competencies of a given authority. Assigned to each theme in spatial information infrastructure is a **leading body** of public administration, which coordinates the work and assures the implementation of the SII Act within the scope of its theme.

The following have been included in those bodies:

- o minister competent over construction, and spatial and housing planning,
- o minister competent over maritime economy,
- O minister competent over culture and protection of national heritage,
- o minister competent over agriculture,
- o minister competent over environment,
- o minister competent over health,
- O Surveyor General of Poland,
- O Chief Geologist of Poland,
- O Chief Inspector of Environmental Protection,
- O Chief Nature Conservator Nature.
- O President of the Central Statistical Office.
- O President of the National Board of Water Management.

Agencies of administration that keep public registers, which contain sets of spatial data related to – listed in the attachment to the SII Act – spatial data themes, make up and maintain the network of services pertaining to spatial data sets and services, and are responsible for establishing, updating, and making available the sets of metadata.

The infrastructure is established, maintained, and developed, as well as functions as a result of **cooperation** among subjects that make it up. In that context, as well as due to the necessity of providing uniform and efficient spatial information infrastructure, the SII Act provides for the establishment of the Council for Spatial Information Infrastructure.

The Council for Spatial Information Infrastructure is an inter-ministerial committee, in which the leading bodies are represented, as well as other agencies of the state administration, local authorities, along with interested scientific institutions and NGOs. The Council will provide its opinion for the undertakings planned regarding the development of infrastructure, and shall initiate improving the efficiency of infrastructure, concerning organization and technical issues, as well as broadening its thematic scope, which will assure real influence of the ministries, organizations, institutions, and circles listed above upon the directions of its development.

3.2. Amending the Geodetic and Cartographic Law

The SII Act comprises amendment of the existing legal rules, in the scope that is indispensable for establishing spatial information infrastructure. Those changes shall apply mainly to the Act of law of May 17, 1989 – geodetic and cartographic law and aim at modernizing the state geodetic and cartographic resource. Within the framework of adjusting the provisions of that SII Act to the requirements of Directive, some 50% of the essential content of the Geodetic and Cartographic Law have been changed, concerning the issues of the state geodetic and cartographic resource, also new rules and competencies have been defined for the geodetic services, which have not been regulated so far.

In line with the provisions of the SII Act, the Surveyor General of Poland is responsible for as many as 15 of the 34 spatial data themes. Most of the objects of the themes assigned to geodetic services are kept in the registers and databases of the state geodetic and cartographic resource. Moreover, information and data contained in the state geodetic and cartographic resource are of referential character for other spatial data comprised in the infrastructure.

The amended provisions of the Geodetic and Cartographic Law have the aim of defining spatial data databases, as well as stipulating the rules and technical standards of establishing and keeping those databases; adjusting the regulations that define the competencies of the units of the Geodetic and Cartographic Service to the tasks resulting from the provisions stipulated in the draft SII Act; establishing the principles for spatial data exchange within the framework of the state geodetic and cartographic resource, rules of use of those sets by public entities, as well as rules of making such data publicly available.

The amended regulations of the Geodetic and Cartographic Law introduce the obligation of keeping registers, records, and databases constituting the state geodetic and cartographic resource in ICT systems and, what follows, is conducive to substantial speeding up the computerization of the entire resource, and implementing modern IT technologies, having in mind the harmonization of data sets kept by the Geodetic and Cartographic Service.

Changes are to be made concerning the following databases: national register of basic geodetic, gravimetric, and magnetic control networks; r land and buildingsregiste; geodetic register of utilities; national register of boundaries and areas of the territorial division units; national register of geographic names; register of localities, streets, and addresses; register of prices and values of real properties; topographic objects; general geographic objects; detail geodetic control networks; aerial and satellite images, as well as orthophotomaps and digital terrain model.

The SII Act provides a delegation for passing 11 enactments – implementing rules concerning the state geodetic and cartographic resource. The new delegations enable the preparation of draft version of regulations, introducing new quality in technical standards and procedures of resource functioning, simultaneously providing perspectives of development.

Implementing rules assume official reference character of registers kept by geodetic and cartographic administration for other entities of public administration. They shall provide harmonization of the collections of state resource, their integration and interoperability. ISO norms will be used for modelling databases and defining standards of data exchange, based on XML and GML—in uniform manner for all data sets. A common, for all databases, manner of defining and describing of objects will be introduced. The enactments will also determine the minimum scope and format of metadata sets.

Harmonization of data sets will be achieved in particular by achieving consistence of definitions of spatial objects between databases, introduction of a uniform system of spatial references, introduction of mechanisms of legal, technical, and organizational procedures; free exchange of data between registers (elimination of unnecessary use of various formats of data exchange), limitation of unjustified redundancy of data and information about the same objects in databases, etc. In consequence, single acquisition of data about the object will be guaranteed for the entire state geodetic and cartographic resource, regardless the level of detail in a given database or cartographic product. Connected with that is also the introduction of – a different than before – system of periodic updating of databases and state geodetic and cartographic resource register; this will be based upon making maximum use of

data from other registers. Management of those processes and integrated databases will be carried out by means of a dedicated ICT system.

Taking into consideration the fact, that at present the resource is trusted to numerous self-government agencies to keep, those agencies vary substantially in the degree of computerization of the resource and administration, and under various local conditions, the provisions of the Geodetic and Ccartographic Law ensure the possibility of cooperation between agencies of the Geodetic and Cartographic Service. They may, via agreements **establish and maintain common elements of technical infrastructure,** designed for storing data sets and making them available, having in mind minimizing costs of establishing and maintaining that infrastructure, as well as optimizing access to data, data security and quality. Exchange of data contained in databases, between agencies responsible for keeping those databases takes place **without charging, in the scope indispensable for execution of the statutory tasks of those agencies**.

The Surveyor General of Poland may also actively participate in the execution of tasks related to re-organization of the state geodetic and cartographic resource, in cooperation with local government agencies and units, complying at the same time with the primary principle of superiority of the state, in relation to self-government agencies. So far, due to the very rigorous, strict, and exclusive division of competencies, coupled with absence of forms of cooperation that would have been clearly indicated by law, the involvement of the Surveyor General of Poland into the tasks of local government agencies has been much restricted.

As for today, the Surveyor General of Poland, in compliance with regulations, coordinates the activities of the public administration agencies as well as other entities executing public tasks, and also cooperates in their execution – on the basis of separate agreements – regarding the merits and financing. That provision applies first of all to geodetic and cartographic administration.

The Surveyor General of Poland prepares and submits, through the mediation of the Minister of Internal Affairs and Administration, the drafts of government programmes regarding the execution of tasks in the field of geodesy and cartography, as well as develops a system and programme of trainings in the domain of geodesy and cartography, and cooperates with scientific centres, R&D centres, and professional organization in providing such trainings, in the context of continuous advancement of technologies and thorough changes of the law.

The above regulation, providing the Surveyor General of Poland with competencies of coordinating and supportive type, are of key importance for organizing and efficient implementation of the SII Act on spatial information infrastructure.

Further changes are planned in the Geodetic and Cartographic Law, which this time will comprise also administrative procedures, and shall assist the continuation of computerization of services provided by geodetic and cartographic administration agencies, outside the area related to implementation of the INSPIRE Directive.

3.3. Amendments to other acts of law, due to transposition of the Directive

Moreover, within the framework of transposing the INSPIRE Directive, provisions of other acts of law are also amended, this applies to the following acts of law: Law on geological prospecting and mining, the Act of June 29, 1995 on public statistics, the Act of April 27, 2001 – environmental protection law, the Act of April 16, 2004 on conservation of nature, the Act of January 20, 2005 on recycling of vehicles taken out of service.

Development of spatial information infrastructure is a difficult and complex undertaking. At the European community level that is expressed by issuing of, anticipated in the INSPIRE Directive, comprehensive regulations and decisions of the European Commission, which have binding force in EU member states. The implementation in Poland is determined by the coming into force of the SII Act (June 7, 2010) and promulgation of numerous implementing rules connected with it.

4. Conclusions

The advantages resulting from the INSPIRE Directive may be perceived from a two-fold perspective: that of state transposing the Directive and that of the European Union. The transposition of the Directive should be executed in such a way that the interests and needs in all aspects should be duly satisfied.

In the legal aspect, the expected positive results – in European context – will be in the first place the unification of law concerning spatial information in the European Community, and establishment of a legal basis for the development of a cohesive and homogeneous European infrastructure for spatial information, composed of national infrastructures constituting parts of INSPIRE, providing at the same time interoperability in the entire area of the EU.

The transposition of the Directive shall result, in this respect, in direct advantages for individual member states. An essential effect of the Directive transposition will be the amending and making cohesive the national legal rules concerning spatial information, as well as adjusting them to the needs of users and technological requirements. Another unquestionable advantage is provision of the possibilities of execution of implementing rules of the Directive, in line with the national needs and conditions.

In Poland, the SII Act has already began to give measurable benefits, attaching a proper rank at government level to spatial information. Spatial information infrastructure is becoming a part of information infrastructure of the state. The activities of state administration, aiming at integration of public registers, and computerization of public administration take into consideration the services of infrastructure. Many domain-oriented systems, presently designed within the framework of computerization of the state, take into consideration the use of spatial data as reference or source data.

The content of the SII Act discussed here contributes to dissemination of the content of public registers and explains the scope of spatial information gathered in those registers, being at the disposal of public administration. It enforces the verification of systems managing access to registers and procedures of their updating, in connection with the increasing expectations of present and future users. In the light of facilitated access to the resource, the units of administration extend the scope of cooperation and intensify their activities towards making complete and effective use of spatial data. Interest in technical parameters of spatial data increases, which as a result will lead to development of technical standards of the data gathered, so that they satisfy the needs of as many users as possible. Also, the scope of data used by ministries gradually expands. Moreover, making data available in an infrastructure geo-portal raises the awareness of the entire society, as to the scope of data held in state registers and making potential use of such data. The number of users of the resource via the functionality of Internet access point also increases.

In the domain of geodesy and cartography, the most significant advantage is the marked stimulation and channelling the technological development of the state geodetic and cartographic resource. The technological changes initiated by implementation of the provisions of the SII Act will be continued and shall entail also the modernization of the Geodetic and Cartographic Service organization, as a natural consequence of the achieved level of computerization and access to network services.

Jolanta Orlińska jolanta.orlinska@gugik.gov.pl