

The Issues Regarding the Compliance of Data Contained in the Cadastre and Land Register in Poland

Marcin Karabin, Poland; Robert Łuczyński, Poland

Key words: cadastre, Polish cadastral system, land register

SUMMARY

This article presents the results of research on the compliance of data contained in the cadastre and land register in Poland.

In Poland, the cadastral system is a dual system. Physical data on parcels, buildings and premises are recorded in the cadastre, while data on owners is recorded in the land register. Additionally, physical data on parcels, buildings and premises from the cadastre are duplicated in the land register, and ownership data from the land register are duplicated in the cadastre.

This leads to the repetition of the same data in two independently kept registers. The former recording of those registers in analogue format and the exchange of information in the form of analogue documents led to many discrepancies in the data contained in these registers.

Presently, both registers are computerised but are not integrated with each other. The authors attempted to estimate the scale of discrepancies in the data recorded – both in the cadastre and in the land register – using randomly selected samples of data (parcels) from various districts.

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1. INTRODUCTION

In Poland, the cadastral system is a dual system. Physical data on parcels, buildings and premises are recorded in the cadastre, while data on owners is recorded in the land register. Additionally, physical data on parcels, buildings and premises from the cadastre are duplicated in the land register, and ownership data from the land register are duplicated in the cadastre.

This leads to the repetition of the same data in two independently kept registers. The former recording of those registers in analogue format and the exchange of information in the form of analogue documents led to many discrepancies in the data contained in these registers. Presently, both registers are computerised but are not integrated with each other.

As stated by Karabin-Zych and Karabin (2015), in order to achieve the full usefulness of those registers in operations concerning real estates, they must functionally efficient, as well as register updated data and be mutually coherent. This coherence concerns, first of all, the coherence of data which is twice registered in both registers.

The authors attempted to estimate the scale of discrepancies in the data recorded—both in the cadastre and in the land register—using randomly selected samples of data (parcels) from various districts.

2. LAND REGISTER

The land register in Poland has been set up order to establish the legal status of real estate. The authorities responsible for maintaining the land register are the land registration departments of the district courts.

Data from the real estate cadastre serves as the basis for describing real estate in the land register (pursuant to Article 26 of the Act (1982)).

In a situation where there are inconsistencies between the data concerning the designation of real estate (their primary source is the cadastre register) in the land register and the data from the real estate cadastre, the district court corrects the real estate designation on the basis of the real estate cadastre data (Article 27.1 of the Act (1982)).

Such a rectification may be made at the request of the owner ex officio, or as a result of direct checking of data in the real estate cadastre database or by notification of the unit conducting the real estate cadastre.

As stated by Karabin-Zych & Karabin (2015), according to previous assumptions, the coherence between data included in Section I of the land register (the objective section) with respect to indication of real estate and data from the real estate cadastre was to be checked at the data migration stage, that is during the transfer of the content of land books (in paper form) to the electronic format. Unfortunately, at the stage of computerisation of the land register, the majority of the systems used for the maintenance of the real estate cadastre did not allow for remote access to stored data. As a result, the opportunity to achieve data coherence at the stage of creation of the central database of the land register was missed.

3. REAL ESTATE CADASTRE

Pursuant to geodetic and cartographic law, the real estate cadastre is an information system that ensures the collection, updating and sharing (in a uniform manner across the country) of information on land, buildings and premises, their owners, and other entities controlling or managing the land, buildings or premises (Act, 1989).

The data contained in the cadastre are the basis for specification of the physical characteristics of real estate in the land register (numbers of parcels, area, etc.).

Subject information on the legal status of real estate (that is, its owners) should come from the land register (if it is established), which is a source (reference) register in this respect.

In accordance with §35 of the Cadastral Law (Decree, 2021), in relation to changes in the cadastral records, the Chief of District shall within 14 days notify the land register department of the local competent district court in the case of changes in data included in Section I of the land register.

4. INTEGRATED REAL ESTATE INFORMATION SYSTEM IN POLAND

The Integrated Real Estate Information System (ZSIN) in Poland has been undergoing continued development since 1999; it was initially implemented as a pilot project and, since 2013, its management has been the statutory responsibility of the General Surveyor of Poland. The principal objective of the developed system is to ensure the automatic exchange of information between the cadastre and the land register. (Karabin-Zych, Karabin, 2015)

The fundamental legal act regulating the functioning of the ZSIN is the Regulation of the Council of Ministers of January 17, 2013 on the Integrated Real Estate Information System (Journal of Laws, item 249).

As emphasized by the Surveyor General of Poland, an important goal of the ZSIN is to enable the systems of districts to keep a cadastre in order to communicate with external registers, such as the land register, PESEL (Universal Electronic System for Registration of the Population) or REGON (National Official Business Register). From June 2018, intensive modernization of the system began in order to implement its basic functionalities. As a result of these activities, in 2019 the first goal was achieved, this being to make available to the user information on land parcels from all over Poland, including—thanks to the use of communication with the electronic land register—the possibility of accessing data on their owners. The implementation of its functionality was achieved thanks to its inclusion in the ZSIN system of the National Integration of Cadastral Records (KIEG) service and the Cadastral Parcels Location Service (ULDK), which ensured the accessibility of data in all districts. (Izdebski W, 2021).

On December 17, 2020, a mechanism for receiving electronic notifications about changes in the land register in the first district (Minsk Mazowiecki) was launched using the ZSIN service bus. In February 2022, 78,967 notifications were sent via the ZSIN, and since the service was implemented, nearly 376,000 documents. Currently, electronic notifications are received by 122 districts, constituting 32% of districts in Poland. [17]

In 2021, the communication between the district cadastral systems and the PESEL register was used more than 14,465,956 times. This figure is 516% higher than that for 2020. [18]

Unfortunately, the ZSIN system still does not offer all the functionalities provided for in the current regulation; in particular, the central repository of cadastral data has not been supplied with data from all districts.

As emphasized by many authors including Królikowski (2021), the previous approach to this system, which assumed the simultaneous modification of data both in the district cadastral systems and in the central repository of cadastral data, turned out to be ineffective and did not allow the full use of the ZSIN. In addition, the existence of a very extensive data model for cadastral datasets repeatedly led to a situation where the shortages of individual data made it impossible to update the ZSIN for the entire record unit.

The planned new regulation makes provisions for a change in this aspect. According to its provisions, the Central Repository of Cadastral Data Copies is based on the copies of the collection data of cadastral records provided by the Chief of District and on the data made available through network services (see [20]).

The main assumptions of the new ZSIN regulation are [19]:

- adaptation of the ZSIN model to the assumed functionalities;
- adaptation of the method of data transfer to ZSIN to ensure the completeness of data for the entire country, regardless of the state/quality of cadastral data in individual districts;
- improvement of communication mechanisms between districts and local courts which maintain the land register;

- improving the mechanisms for use of the land register system by districts in the process of daily utilisation of cadastral systems;
- improvement of communication mechanisms between districts and the PESEL and REGON systems for updating address data in cadastre.

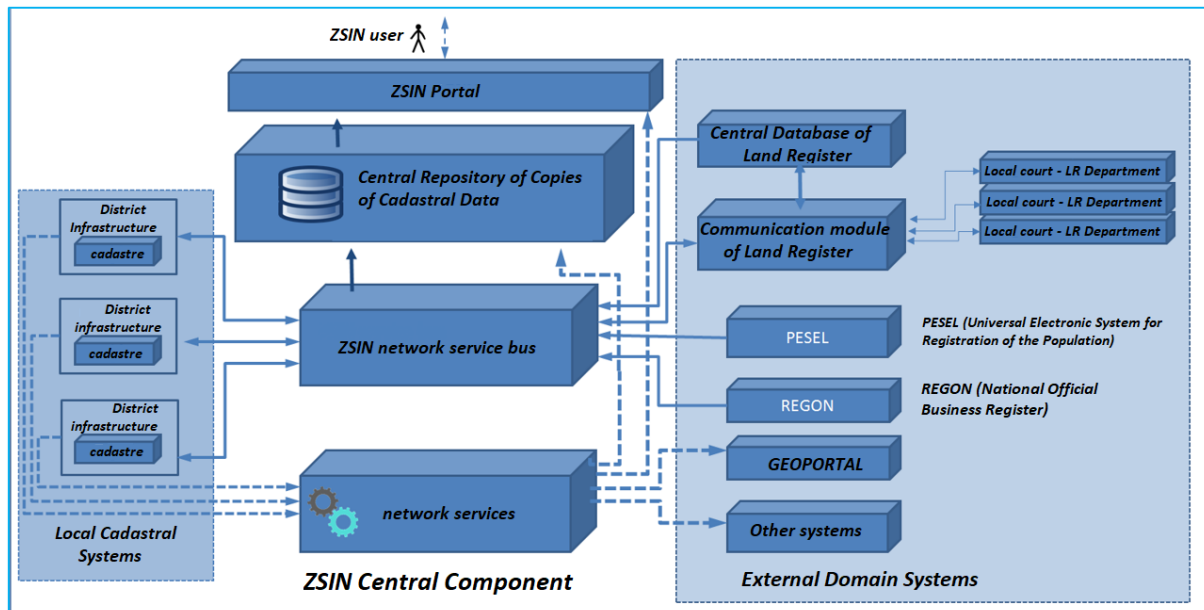


Fig.1. Diagram of the ZSIN architecture – planned solution

Source: [20], english translation – authors

5. ANALYSIS OF COMPATIBILITY OF DATA INCLUDED IN THE REAL ESTATE CADASTRE AND IN THE LAND REGISTER

Compatibility of data duplicated in both systems—the real estate cadastre and land register—is crucial. This confirms the quality of the data collected in the systems. The correctness of the data enables their use for various purposes, including official ones.

Analysis concerning the levels of compatibility of data stored in the real estate cadastre and in the land register was performed by the Department of Cadastre and Land Management of the Warsaw University of Technology and published in Karabin-Zych & Karabin (2015). This research was conducted as part of master's theses and engineering diplomas concerning this field of study.

In the article, the authors present the results of continued research conducted under the supervision of M. Karabin and R. Łuczyński over the period 2014-2022.

Tab. 1. The list of discrepancies in data included in the real estate cadastre and in the land register for studied objects.

Item	Type of data analysed in the real estate cadastre and in the land register	Object no. 1	Object no. 2	Object no. 3	Object no. 4	Object no. 5
		Number of land books with discrepancies/ all data % of discrepancies	Number of land books with discrepancies/ all data % of discrepancies	Number of land books with discrepancies/ all data % of discrepancies	Number of land books with discrepancies/ all data % of discrepancies	Number of land books with discrepancies/ all data % of discrepancies
1.	Real estate location	6/25 24%	68/70 97%	45/80 56%	37/62 60%	4/50 8%
2.	Subject data (first and second names, family name, parents' names, name of a legal entity)	5/25 20%	5/70 7%	7/80 9%	5/62 8%	1/50 2%
3.	Share in rights of owners, lessees or other possessors	4/25 16%	5/70 7%	4/80 5%	1/62 2%	2/50 4%
4.	Indication of real estate with respect to parcel register numbers	3/25 12%	10/70 14%	5/80 6%	4/62 7%	1/50 2%
5.	Area of real estate	7/25 28%	25/70 36%	20/80 25%	17/62 27%	34/50 68%
	Source:	[6]	[3]	[14]	[8]	[16]

Source: based on [6], [3], [14], [8], [16], [15], [13], [11] – authors

Item	Type of data analysed in the real estate cadastre and in land register	Object no. 6	Object no. 7	Object no. 8	Total values
		Number of land books with discrepancies/ all data % of discrepancies	Number of land books with discrepancies/ all data % of discrepancies	Number of land books with discrepancies/ all data % of discrepancies	
1.	Real estate location	7/80 9%	17/80 21%	90/220 41%	274/667 41%
2.	Subject data (first and second names, family name, parents' names, name of a legal entity)	4/80 3%	25/80 31%	21/220 9%	73/667 11%
3.	Share in rights of owners, lessees or other possessors	6/80 5%	8/80 10%	23/220 10%	53/667 8%
4.	Indication of real estate with respect to parcel register numbers	6/80 8%	16/80 13%	11/220 1%	56/667 8%
5.	Area of real estate	24/80 19%	14/80 18%	17/220 8%	162/667 24%
	Source:	[15]	[13]	[11]	

Source: based on [6], [3], [14], [8], [16], [15], [13], [11] – authors

Tab. 2. List of the level of compatibility of land register content with the real estate cadastre.

Item		Object no. 1	Object no. 2	Object no. 3	Object no. 4	Object no. 5	Object no. 6	Object no. 7	Object no. 8	Total values
1.	The number of land books compatible with the real estate cadastre	13	1	17	21	16	54	34	68	224
2.	The number of land books with discrepancies	12	69	63	41	34	26	46	152	443
3.	% of incompatible land books	48%	98%	79%	66%	68%	32%	58%	69%	66%
	Source:	[6]	[3]	[14]	[8]	[16]	[15]	[13]	[11]	

Source: based on [6], [3], [14], [8], [16], [15], [13], [11] – authors

Even allowing for the occurrence of just one non-empirical error, such as the lack of a district name or typographical errors, the level of data inconsistency in both registers is high. After comparing the data contained in the 667 land books with the cadastral data, the compliance rate is only 33%.

A common mistake in determining the location of real estate was simply an incomplete entry in the land register regarding the administrative description of the location of the real estate, that is, the data concerning the name of a voivodeship, district, commune or cadastral block.

There were also instances of the old nomenclature of administrative units from before the administrative reform in which 16 voivodeships were created in Poland.

In the second category of compared data, that is subjective data, a relatively small percentage of discrepancies was recorded (11%).

A similarly low percentage of discrepancies (8%) was recorded in terms of shares of ownership rights registered in the land register.

For any discrepancy regarding the property designation with respect to the numbers of cadastral parcels, it was found that there were differences between the registration parcel numbers appearing in the cadastre and those in the land register. These errors applied to 8% of the analyzed land books.

The discrepancy in the area of the property refers to the difference between the total area of parcels forming the real estate from the cadastre and the real estate area registered in the land register.

Most of the inconsistencies in the surface area of real estate resulted only from the accuracy of the entries (rounded up or down to the nearest acre).

In the previous research of Karabin-Zych & Karabin (2015), for a data sample of 249 randomly selected land books, the data in the analyzed registers were fully consistent in only 75 books - 30% of the total. The analysis of specific discrepancies revealed some of them to be typographical errors, but there were also those that would require the initiation of appropriate administrative or court procedures in order to establish the correct entries in the registers.

6. SUMMARY

It should be expected that the introduced ZSIN functionalities will in the long term allow for a significant improvement in the quality of data collected in the cadastre and land register.

The key issue is the implementation of direct access from the district level (more precisely in the cadastral systems) to the land register and also to the PESEL and REGON registers.

It is difficult for the authors to estimate the percentage of inquiries to external systems that caused changes in the cadastre (update) and how many of them were the so-called control (checking data with source registers).

Whatever the percentage, taking into account the number of inquiries, for example, to the PESEL register, which in 2021 increased more than five times compared to the previous year, this will significantly improve the quality of personal data collected in the cadastre in the long term.

The second type of implemented functionalities – that is, the possibility of electronic exchange of notifications about changes in the land register – should contribute to the cessation of data discrepancies resulting from the inefficient exchange of paper documents.

In order to put an end to the problem of discrepancies, a similar functionality should ultimately be implemented on the side of the land register, as provided for in the provisions regulating the functioning of the ZSIN.

According to the authors, for data compliance, the need for double registration of the same data should be eliminated, and data should only be present in the source register.

As Łuczyński stated in his publication, (Łuczyński, 2013) ‘Considering that the warranty of reliability of the land register does not prevent the records in Sections I-O, concerning in column 4 the documents included in the real estate cadastre, data concerning the way of use (column 5) and the area (column 6), which are presented in another public register (cadastre), should not be repeated in the land register. If the land register prevents (as stipulated by the warranty) records concerning the ownership, this may form the basis for establishment of the legal status of the property with respect to the material rights only. Presentation of information concerning the area and the way of use, as well as the necessity to update this data in the property registers, results in the redundancy of data in the development of administrative procedures, and it gives rise to the probability of errors being made in the process of transferring information between two registers.’

Subsequent conclusions of Łuczyński after conducting this research also remain valid. Łuczyński (2013) stated, ‘The following data is required for connection between the cadastre and the property registers: in property registers, the numbers of parcels included in the cadastre; and in the cadastre, the numbers of land register. It is not necessary to present other data in both registers – except for this data, which are required for the connecting of two registers – since it results in data redundancy and creates the possibility of errors in the form of inconsistencies between the same information included in two various registers. Elimination of data redundancy is advantageous for the simplification of administrative and civil procedures – elimination of the necessity of notification concerning changes in data, which are unnecessarily recorded on two public registers.’

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BIOGRAPHICAL NOTES

Marcin Karabin Ph.D., D.Sc. Born in Warsaw in 1976. Studied Geodesy and Cartography at the Warsaw University of Technology. Graduated with M.Sc. in Geodesy in 2000. Obtained his Ph.D. with the dissertation titled “Conception of the model of cadastral system in Poland based on chosen solutions in European Union countries” at the Warsaw University of Technology in 2005. Obtained his D.Sc. with the dissertation titled “A concept of a model approach to the 3D

cadastre in Poland” at the Warsaw University of Technology in 2014. Licensed surveyor since 2006. Has professional licenses in the fields of “Land surveying, implementation and inventory surveys” and “Delimitation and division of real estate (plots) and preparation of documentation for legal purposes”. Current position: full-time research worker at the Warsaw University of Technology (Department of Cadastre and Land Management, Faculty of Geodesy and Cartography), also providing surveying services as a licensed surveyor since 2006.

CONTACT

Marcin Karabin
Plac Politechniki 1
00-661 Warsaw, POLAND
Room 428A
Tel. + 48 22 234-14-17
Mobile: +48-608-402-505
E-mail: Marcin.Karabin@pw.edu.pl

Robert Łuczyński
Plac Politechniki 1
00-661 Warsaw, POLAND
Room 18
Tel. + 48 22 234-75-39
E-mail: Robert.luczynski@pw.edu.pl