

Józef Maślanka<sup>1</sup>

## Restoration of Boundary Markers and the Determination of Boundary Points in the Context of the Reliability of the Register of Land and Buildings<sup>2</sup>

**Abstract:** The restoration of boundary markers and the determination of boundary points are substantive technical surveying activities, legally regulated in Poland under Section 6 of the Geodetic and Cartographic Law on the delimitation of real properties. These activities are essential for both the proper functioning of the register of land and buildings (EGiB) as well as from the point of view of the owners who, for various reasons including peaceable possession, want to know the course of the boundaries of their properties and have them physically marked on the ground. According to the author of this research paper, the interpretations of the legal regulations on the restoration of boundary markers and determination of boundary points which have recently appeared in the Polish subject literature and geodetic journals, as well as the solutions applied in surveying practice, arouse considerable doubts and cause markerificant distortion of the data stored in the databases of the register of land and buildings as well as result in misinterpretation and incorrect application of these provisions by land surveyors. The article presents a descriptive formal analysis of the applicable provisions of law and the effects of their application on the quality of this data. The author opposes what is, in his opinion, an unauthorised, broad interpretation of the legal provisions, a consequence of which is the fact that a mere physical monumentation of a boundary point on the ground, performed under a technical procedure, fundamentally changes and increases the legal markerificance of this boundary point.

**Keywords:** cadastre, register of land and buildings, parcel boundaries, boundary points

Received: 5 May 2019; accepted: 10 June 2019

---

<sup>1</sup> AGH University of Science and Technology, Faculty of Mining Surveying and Environmental Engineering, Krakow, Poland, email: podwilk@agh.edu.pl  
ORCID ID: <https://orcid.org/0000-0002-7317-0292>

<sup>2</sup> The research was carried out as part of the statutory research of the Faculty of Mining Surveying and Environmental Engineering of AGH University of Science and Technology

## 1. Introduction

The physical determination of real estate boundaries using various types of boundary markers has always been of great historical importance to their owners [1–6]. It has been carried out over the centuries in various ways and, especially in the initial period, as part of informal, customary rules that can still be seen today e.g. in forests located in southern Poland, specifically in the form of “graphic” markers (combinations of crosses, lines) made with axes on trees (the so-called daps). With the emergence and development of state structures, formal jurisdiction and the cadastre, the determination of boundaries with boundary markers was already conducted in an increasingly formalised manner. This concerned both the procedure itself as well as the shape of these markers. Most frequently, they appeared in the form of stones or earth mounds as a result of proceedings that can be called today real property delimitation. The above-mentioned issues are discussed broadly in the historical literature and also that which is related more closely to geodesy and the cadastre [1, 5, 7–12].

The commonly occurring phenomenon of decreasing areas of the land that can be used for development, especially for housing development, and the associated increase in its value, force the need for the physical, unambiguous marking of the boundaries of cadastral parcels by establishing these boundaries with boundary markers and, more specifically, by the monumentation of boundary points. This also applies to the built-up parcels with small dimensions, those which barely meet the applicable area standards or the required distances from the existing elements of land development. It happens despite the constant development of the surveying and IT technologies used to determine the location of boundary points, their faithful record and permanent storage in cadastral computer databases, and despite the possibility of their precise restoration in the field. This is mainly due to the property owners’ need for peaceable possession and safe exercise of their property rights, expressed *inter alia* by erecting structures located on or near the boundary, with respect to appropriate distances provided for in legal regulations, as e.g. in [13].

A separate issue, and a very broad one, is the determination of the boundaries of parcels and their restoration in the areas covering about 5.3% of Poland where horizontal and vertical movements of land occur on large areas (displacements and deformations of surface area), caused by underground mining (e.g. Wieliczka or Upper Silesia in Poland) [14]. In these areas, even the exact coordinates of the boundary points recorded in the database of the register of land and buildings (EGiB), do not fulfil their task. In addition, from the point of view of the owners of the properties located in these areas, the current course of their boundaries is determined not by the theoretical coordinates of boundary points, which after the occurrence of displacements are inconsistent with the actual state in the field, but by the physical location of boundary markers visible in the form of permanent elements of land development (e.g. corners of permanent fences, corners of buildings), even if they have been displaced horizontally with the whole adjacent ground.

## 2. Materials and Methods

The issues regarding the restoration of boundary markers and the determination of boundary points are regulated in Poland by the Act of 17 May 1989 Geodetic and Cartographic Law [15] (hereinafter referred to as “PGiK”) as well as the Regulation of 9 November 2011 on technical standards [16]. The article presents the results of the analyses carried out by the author of the Geodetic and Cartographic Law as well as other legal provisions, and of the surveying literature regarding the restoration of boundary markers and the determination of boundary points. In the conducted research studies, the following types of analyses have been applied in various scope and in various combinations:

- a literal (linguistic) analysis of legal provisions, used to read a legal norm from the content of the legal provision itself,
- a comparative analysis covering both legal regulations included in various legal acts as well as the interpretations of the regulations presented in the literature,
- a historical analysis of legal regulations identifying the reasons for the creation and development of the legal regulations being discussed,
- a system analysis focused on studying the environment and the legal context of the analysed provision,
- a functional analysis indicating the purpose of the legal regulation (*ratio legis*).

Geodetic and Cartographic Law uses the concepts of the boundary point and the boundary marker, but without providing their formal definitions. From the point of view of the legislative correctness, this situation is incorrect and results in the necessity to look for these definitions in the secondary legislation to the Act, which, however, is inconsistent with the applicable legal hierarchy. For the purpose of this article and for the sake of clarity of further considerations, these definitions will be referred to from [17].

A boundary point is one defining the course of a property boundary (the Regulation refers to real estate boundaries, not to the boundaries of the cadastral parcel), and the boundary marker is a permanent marker placed at the boundary point or a permanent element of land development located at that point. According to [17], boundary points should be established with terrestrial and underground markers. Terrestrial markers are made of concrete, natural stone or other durable material. Underground markers can be drainage pipes, bottles, concrete tiles or other similar objects. Monumentation is the establishment of the boundary point by placing a boundary marker in it or explicitly marking its location on the existing permanent element of land development located on the boundary of the property [17]. This can be e.g. a permanent fence post or a corner of a building.

It should be noted here that the restoration of boundary markers in light of the above-mentioned legal provisions applies to cases where, as part of the relevant

geodetic and legal procedure carried out earlier, the location of boundary points and their monumentation in the form of permanent boundary markers have already been performed. These markers have then been moved, damaged or destroyed, and the interested parties have commissioned their restoration in the field. The determination of boundary points occurs when their location has already been established, but for some reasons, often technical or legal limitations, they have failed to be monumented.

The original text of the Geodetic and Cartographic Law passed by the Sejm of the Republic of Poland in 1989 did not provide for the possibility of determining boundary points, but it was added to Article 39 on 1 January 1999 by the Act of 24 July 1998 amending certain acts specifying the competences of public administration bodies - related to the systemic reform of the state [18]. The determination of boundary points was added by the legislator in section 5 to Article 39, which reads as follows: "The provisions of sections 1–4 shall apply accordingly in the determination of boundary points entered previously into the register of land and buildings". It was quoted here literally because of the great importance of the formulations used and the resulting various legal interpretations.

Based on the provisions of the PGiK (Geodetic and Cartographic Law) and the subject literature [8, 11, 19–21], the following conditions can be adopted, the joint fulfilment of which allows the restoration of boundary markers:

1. It has been found that the boundary markers were moved, damaged or destroyed.
2. The location of boundary markers has been previously established under legal or administrative procedures.
3. There are documents that allow to determine the original location of the boundary markers.
4. The location of the markers is indisputable, i.e. not questioned by the parties.

In general, it is also indisputable in the literature that the procedure of the restoration of boundary markers is a material and technical activity and concerns only the restoration of boundary markers in their original location. It is not possible to determine the course of boundary lines or to change the position of boundary markers (location other than the original one) as part of the restoration proceedings, e.g. as a result of a consistent statement of the parties or a settlement. According to the Geodetic and Cartographic Law, the restoration of boundary markers is carried out by surveying contractors at the request of interested parties.

Pursuant to the provisions of the Geodetic and Cartographic Law, when determining boundary points, it is necessary to apply the "respective" provisions regarding the restoration of boundary markers. Therefore, the literal interpretation of this statement can be adopted, replacing the word "marker" with the word "point" in the regulations, and assume that for the boundary points, the above-mentioned conditions 2–4 and the additional condition specified in section 5 of Article 39 of the

Geodetic and Cartographic Law stating that boundary points have previously been entered into the register of land and buildings, are binding. The circumvention of condition 1 results from the obvious fact that the point, as a mathematical object, is not subject to physical displacement, damage or destruction on the ground [19].

However, there are considerable differences of opinion in the literature regarding the “respective” application of the legal provisions on the restoration of boundary markers for the determination of boundary points and on the issue of the prior entering of the points into the register of land and buildings, which will be shortly discussed later in this research paper.

It should be emphasised at this point that the analysis of the restoration of boundary markers and determination of boundary points is carried out in a specific research context in this article, i.e. in the context of the reliability of the register of land and buildings, i.e. that the information captured from the register of land and buildings (“EGiB”) is trustworthy for the user, in particular for an “ordinary” citizen. The user’s trust is built on the belief, sometimes verified experimentally, that the data obtained from the EGiB system is the data that can be described as “real”. This level of “reliability” of the data does not necessarily result from its highest quality (e.g. several-millimetre accuracy of determining the position of a boundary point by the coordinates), which usually depends on the needs of a specific user (sometimes even changing), but from the fact that they are accompanied by additional data (in one way or another), that unambiguously characterise them (meta-data). This allows the user to determine whether the information obtained from the data is “true”, although the quality of the “main” data is sometimes insufficient to implement the objectives.

The principle of trust in public authority or, more broadly, the state, is one of the fundamental and statutory rules of operation of public administration bodies in Poland [22], which links all the general rules of conduct. An obligation to inform the parties in a proper and comprehensive manner of factual and legal circumstances that may affect the determination of their rights and obligations is used to build and increase citizens’ trust in public administration bodies [22]. The public administration authorities that keep records of lands and buildings in Poland are represented by district governors, and in cities with county rights – the presidents of these cities. Therefore, they are held responsible for the broadly understood running of the register of land and buildings. This register is one of the most important public records in Poland, which defines the physical characteristics of real properties, and thus affects directly the very sensitive sphere of social life such as the property rights. The EGiB data are also used in numerous public registers operating in Poland, including sensitive ones such as land and mortgage registers or the tax system. Possible defects in the cadastral data may therefore be transferred to other registers, reducing their reliability and sometimes leading to administrative, judicial or tax decisions that are unfair to the citizen. Obviously, such a situation does not help in building citizens’ trust in the state or its authorities.

### 3. Discussion

Under Article 29 of the Act of 17 May 1989 Geodetic and Cartographic Law [15], the determination of the course of property boundaries consists in:

- the determination of the location of boundary points and lines,
- the monumentation of these points with boundary markers,
- the preparation of relevant documents.

The delimitation is carried out basically in administrative proceedings regulated in [22] and conducted by the heads of communes (mayors, presidents of cities), taking into account specific provisions contained in the Geodetic and Cartographic Law. The exception to this principle, set out in [15], is the possibility of delimitation of real properties in consolidation proceedings. In the case of delimitation, keeping the order of conducting administrative or judicial proceedings is essential. It is not possible to conduct delimitation proceedings in court without carrying out the administrative proceedings first, except for the cases strictly specified in the Geodetic and Cartographic Law. An exception is when there is a case on property ownership or release, pending before a court, and to resolve this “main” case it is necessary to determine the boundaries of the real property in an “auxiliary” manner.

Court proceedings are the second stage of delimitation, only after the previously conducted administrative procedure, which has ended with the final decision to discontinue the proceedings. Such a situation occurs when there are no grounds for issuing a decision on the delimitation of real properties in the administrative proceedings (the boundary has failed to be established based on the collected evidence or a consistent statement of the parties), or the interested property owners have failed to settle.

The above explanations have been included in this article due to the need to resolve the difficulties encountered in interpreting the “previously determined” clause as one of the conditions necessary for the restoration of boundary markers or for the determination of boundary points, respectively. Only boundary markers or points that were determined as a result of the delimitation of real properties should be considered as determined ones, regardless of the mode or form in which it was conducted (final administrative decision, final court decision or settlement act) [21]. This statement is confirmed by the entry in section 1 Article 39 of the Geodetic and Cartographic Law, that in the event of a dispute regarding the location of the restored boundary markers, the parties may only apply to the court to resolve the case, and not to the head of the commune for the delimitation of the real properties under an administrative procedure. Therefore, if the “determination” of the location of points or markers has not been performed previously as a result of delimitation in an administrative mode (e.g. pursuant to §39 of the Regulation [23] – the so-called record mode of procedure, which also unfortunately uses the term “determination” of boundaries), the court shall deny such a motion by stating that the administrative course of delimitation has not been exhausted first.

In the author’s opinion, interpretations other than the one presented above are incorrect and inconsistent with the binding legal interpretative methods, under

which literal (or linguistic) interpretation should be used first, and only when this does not provide a definitive solution to the doubts that have arisen, other rules can be applied (system, purpose, historical ones, etc.). This is confirmed by the basic principle used to determine the content of applicable legal norms (interpretation of the law), briefly referred to in Latin as: *clara non sunt interpretanda*, which means that there is no interpretation of what is clear [24, 25]. It should also be pointed out that Article 39 regarding the restoration of boundary markers and determination of boundary points is contained in the same Section 6 of the Geodetic and Cartographic Law, titled "Delimitation of real properties", also containing Article 29, defining the concept of determining the course of boundaries. Article 39 of the Geodetic and Cartographic Law should be interpreted in conjunction with Article 29 section 1 of this Act. Even if the boundary points were monumented with boundary markers as a result of carrying out procedures other than delimitation ones (e.g. as a result of real estate subdivision), only the "restoration" of these markers performed under the boundary delimitation procedure makes it possible to consider these points "established" in the light of the Geodetic and Cartographic Law. This is evidenced by the literal entry in clause 11.1. of a delimitation specimen constituting an appendix to the Regulation of 14 April 1999 on the delimitation of real properties [17]. It states that the course of the boundary on sections marked accordingly on the boundary sketch "was established based on the restored boundary markers". If, during the delimitation procedure, we deal with boundary points whose location was determined as a result of a procedure other than the delimitation one, and they were not monumented, then the determination of boundaries is conducted pursuant to clause 11.2 of the delimitation specimen "based on the collected evidence".

The concept of "determination" of boundary markers results in fewer interpretative discrepancies than is the case for boundary points, and it is only associated with the delimitation [19, 21]. This does not mean, however, that the situation is clearly regulated and legible here. The difficulties in the application of legal provisions for the cases of boundary markers result from the lack of unambiguous legal regulations that also meet the needs and expectations of many property owners. The owners expect to be able to restore the displaced, damaged or destroyed boundary markers which were monumented earlier as a result of legal activities other than the real estate delimitation. Unfortunately, there are certain inconsistencies of the legislator, the consequence of which is the occurrence of gaps and contradictions in legal regulations, or even unjustified and unnecessary formal barriers that lead to some cases of law circumvention or over-interpretation. Besides delimitation procedures, the monumentation of boundary points appears in other surveying and legal procedures, including:

- the real estate subdivision [26],
- the real estate consolidation and subdivision [27],
- the land consolidation and exchange [28],
- the determination of a boundary course under the regulations on the register of land and buildings [23].

It cannot be stated, however, that the course of boundaries is to be determined pursuant to the provisions of the Geodetic and Cartographic Law as part of these activities. In the case of real estate subdivision performed under the Real Property Management Act [29], apart from other relevant circumstances, there is even a different name regarding the determination of the course of boundaries of a subdivided property, namely their “adoption”. The adoption of the boundary course may, in most cases, be carried out by the surveyor, without the participation of interested parties (the owners of neighbouring properties are not even parties to the administrative proceedings regarding the subdivision of real estate) [30]. Also, the “determination” of the course of boundaries of cadastral parcels under §§ 37-39 of the Regulation [23] cannot be treated equally with the determination in the delimitation mode, which is confirmed e.g. by the judgements [31]. In the event the determination of the boundary is performed in the EGiB update mode, such a boundary is not even approved by any administrative decision. Therefore, in the light of the legal regulations currently in force in Poland, the boundary markers monumented on the ground as a result of the above-mentioned procedures cannot be restored. Such inconsistency of legal provisions is, however, completely incomprehensible and unacceptable to the owners of cadastral parcels. It leads to unnecessary conflicts, distrust in the Polish legal system and state institutions, as well as cases of undermining the value and reliability of the EGiB data. Faced with the inconsistent legal regulations and succumbing to the owners’ demands and their understandable needs, surveyors carry out such restorations in violation of the law, or at least by “stretching” it, which is not without negative consequences for the quality and reliability of the data stored in the databases of the register of land and buildings.

One of the activities that defines the importance of determining the course of boundaries in delimitation proceedings is, as it has already been mentioned, monumentation of boundary points with boundary markers. The legislator has therefore emphasised the importance of the knowledge of the physical location of markers on the ground, and not only the documentation containing even very precise geodetic data (e.g. the coordinates of points, angles, distances), but it is fully understandable only for surveyors. The legislator has violated this necessary requirement regarding the monumentation of points by stating in the successive secondary legislation to the Geodetic and Cartographic Law of 1996 and 1999, that in the case of natural and irregular boundaries, boundary markers are monumented at or near the main turn points of the boundary, providing data to enable the determination of all boundary points [17, 32]. As a result of this provision, a contradiction between the provisions of the Geodetic and Cartographic Law and the secondary legislation has occurred [17, 32] as to whether, how, and in which place on the ground the points should be monumented. It turned out that in the then legal state in force before 1 January 1999, there had been no legal possibility of marking those “unmonumented” boundary points that had undoubtedly been determined in the delimitation proceedings. Therefore, the lack of monumentation only, allowed in [17, 32], constituted an obsta-

cle to “determining” boundary points on the ground in the Geodetic and Cartographic Law according to its then-current wording. The Act [18], in force since 1 January 1999, has added section 5 to Article 39 of the Geodetic and Cartographic Law which allows to perform the “determination” of boundary points established as a result of delimitation proceedings. This amendment has undoubtedly aimed to remove the above-mentioned, unjustified barrier for establishing the previously determined but not monumented boundary points. At present, it is difficult to state clearly what the purpose of the authors of the introduced amendment was, because in the documents available on the official website of the Sejm of the Republic of Poland, usually accompanying statutory projects [33], there is no justification directly referring to the amendment introduced in Article 39 of the Geodetic and Cartographic Law [18].

It should be noted that the possibility of determining boundary points also applies to those established many years earlier under various legal provisions, which are no longer binding, including *inter alia* real estate delimitation. These include [34–38], as mentioned by Felcenloben in [8].

The additional condition set out in section 5 of Article 39 of the Geodetic and Cartographic Law that the boundary point shall be: “previously entered into the register of land and buildings” is ambiguous, which is confirmed by the occurrence of various interpretations in the surveying and legal literature [19, 39]. Following these interpretations, surveyors perform the activities of determining boundary points based on very different geodetic documentation, sometimes quite dubious from the legal and technical points of view.

Felcenloben understands the above-mentioned provision as the possibility to determine all the points entered into the EGIB database, which result from the documentation mentioned in sections 1–5 of §36 [23], without strictly adhering to the requirement of determining their position in the delimitation mode [19]. Pursuant to §36 of the Regulation [23], the course of the boundaries of cadastral parcels is entered into the register of land and buildings based on the surveying documentation accepted into the national geodetic and cartographic documentation centre (PZGiK), prepared:

- 1) in delimitation proceedings,
- 2) in order to subdivide a real property,
- 3) in land consolidation and exchange proceedings,
- 4) in real estate consolidation and subdivision proceedings,
- 5) for the purposes of court or administrative proceedings, and then used to issue a final court decision or final administrative decision,
- 6) for establishing the real estate cadastre and the register of lands and buildings, based on the previously applicable regulations,
- 7) by the National Border Protection Authorities, if this documentation determines the course of state borders with accuracy appropriate for the records,
- 8) as a result of plane land surveys of the existing or restored boundary markers or determined boundary points.

Felcenloben also states that the determination of boundary points is only possible based on these boundary points that have been entered into the EGiB database, and not based on the points contained in the documentation of the PZGiK database which, however, have not been entered into the EGiB database.

Radzio, on the other hand, interprets the statement: “previously entered into the register of land and buildings” as determining the most reliable and accurate version of the location of the point, identified by the surveyor as a result of a thorough analysis of numerous PZGiK materials. As he states: “It should be the last version, as a rule” [39].

After Felceloben [19], the adoption of the assumption that the determination of boundary points is only possible if they have previously been entered into the EGiB database, also means that:

- PZGiK documentation regarding a given point must contain its coordinates or the possibility of calculating them, because only the coordinates allow to identify the point in the EGiB database;
- it is not formally possible to establish boundary points determined as a result of delimitation proceedings that do not meet the above condition (no coordinates), although according to [23] they have the correct data contained on boundary sketches or field sketches in the form of distances to the elements of permanent land development, allowing for unambiguous and precise determination of their original location on the ground.

The requirements formulated by Felcenloben in [19] are in contradiction with the provisions of Article 39 section 1 of the Geodetic and Cartographic Law of (as worth emphasising) 1989, thus formulated many years before 15 January 1997 when the legal possibility of running the EGiB survey in the form of a computer database appeared [40]. In the Geodetic and Cartographic Law itself, an appropriate provision concerning the EGiB survey run in the form of a database appeared in Article 24 as late as in 2010 [41]. The Geodetic and Cartographic Law requires only that there is documentation allowing to determine the original location of points, and does not require the co-ordinates of points to exist. Taking into account the very limited accuracy of surveying and computational technologies used many years ago, as well as the changes in coordinate systems occurring in Poland (the systems of the former cadasters: Prussian and Austrian, the Polish “1965” and “2000” systems, the local systems that were in force for example for the cities of Wolbrom and Andrychów located in the Lesser Poland), the coordinates of points are often the least accurate and helpful in determining points on the ground according to their “original” location [42]. In addition, as far as point coordinates are concerned, there are also problems indicated earlier in this research paper, concerning areas with land displacements and deformations, being the consequence of mining exploitation.

For the areas for which the geometrical database of the register of land and buildings has not been established yet for various reasons (e.g. no modernisation

of EGiB due to lack of financial resources), even the existence of the coordinates of points in boundary delimitation surveys stored in the database of the national geodetic and cartographic documentation centre (PZGiK) would not give grounds to perform the task of determining boundary points. It should also be noted that the requirement for coordinates does not apply to the restoration of boundary markers, so why it is raised as a necessary condition only for boundary points? After all, the restoration of the boundary marker is carried out technically by first determining the boundary point on the ground, then its marking e.g. with a wooden peg stuck into the ground, and finally monumenting this point with an appropriate boundary marker, after accepting its location by all parties.

It is necessary to pay attention to the negative consequences for the reliability of the EGiB database resulting from the adoption of the standpoint that the determination of boundary points under the provisions of Article 39 of the Geodetic and Cartographic Law concerns all surveying studies that were used to enter the data into the register of land and buildings (clauses 1–5 of §36 of the Regulation [23]). In the application scheme of the EGiB database, there is a class “EGB\_Punkt\_Graniczny” regarding the boundary point, whose one of the attributes is “ZRD”, or object location data source [23]. According to the current wording of the Regulation [23], the value of “1” of the ZRD attribute concerns: “Plane land surveys preceded by real estate delimitation, restoration of boundary markers, determination of boundary points or their location in another mode, including in the mode specified in §39 sections 1 and 2 of the Regulation”. It is therefore a special, selected group of points whose location has been determined as a result of real estate delimitation proceedings or in the so-called record mode of procedure, whereby the determination in the record mode currently applies only to two of the three cases provided for in [23], namely settlements according to the consistent statements of all property owners or settlements according to the last peaceable possession. These are therefore points that can be considered “strong”, despite the doubts and objections raised, that in [23] the points from the delimitation have been equated with the points from the record mode of procedure in terms of the ZRD values, which is inconsistent with the legal regulations. More on this subject is discussed in [43, 44]. However, if the possibility of determining boundary points that do not derive from real estate subdivision proceedings is accepted, then under the current legal regulations concerning the register of land and buildings [23], this will lead to a change in the value of the ZRD attribute of these points, which will not correspond to their actual “value”. This inevitably leads to a gradual loss of reliability of the data contained in the EGiB database, which unfortunately is carried out in accordance with the provisions of applicable laws. Let us analyse an example: boundary points have been “determined” under §39 section 3 of the Regulation [23], i.e. as a result of “the analysis of all available documents” such as cadastral maps at the scale of 1:2880 (maps of land records based on the maps from the former Austrian cadastre, covering the area of the present southern Poland until 1918). Under §37 [23], these documents

were previously considered unreliable, since it was decided to perform the activities to establish the course of the boundaries. The points were assigned the ZRD value equal to "9", which indicates their uncertain status (they did not receive the ZRD equal to "1"). If, however, a few minutes later, these points are determined in the procedure regulated in Article 39 of the Geodetic and Cartographic Law, these points will receive the value of "1" of the ZRD attribute, therefore equal to the points from the real estate delimitation proceedings. Thus, the physical determination of a point in the material and technical procedure results in a radical change in the database of the register of land and buildings, consisting in an unjustified "increase" of the legal status of this point. For this reason, the author of this research paper suggested in [43] that the ZRD value of "1" ought to be expanded with an additional detailed sub-list, allowing to unambiguously mark the origin of the coordinates of points, thus eliminating the currently existing disorder in this respect.

#### 4. Conclusions

To sum up, it should be stated that under the current legal status, both the restoration of boundary markers and the determination of boundary points is only possible if the location of these boundary points has previously been determined as a result of the real estate delimitation proceedings specified in the Geodetic and Cartographic Law.

The analysis of the legal provisions regarding the restoration of boundary markers and the determination of boundary points in terms of the reliability of the EGiB database has demonstrated that the current provisions are ambiguous, do not meet the current social needs and lead to a gradual loss of reliability of the EGiB data.

The attempts to solve this problem through an extended interpretation of the provisions that are currently in force in Poland, especially regarding the procedure for determining boundary points, appearing in the subject literature, should be considered unauthorised and adversely affecting the quality of the EGiB data and having a negative influence on the formation of knowledge and attitudes of land surveyors.

It is necessary to make appropriate changes in the legal regulations, allowing for the removal of formal and legal deficiencies and barriers whilst responding to the needs of property owners.

#### References

- [1] Fedorowski W.: *Ewidencja gruntów*. Państwowe Przedsiębiorstwo Wydawnictw Kartograficznych, Warszawa 1974.
- [2] Hycner R.: *Podstawy katastru*. Uczelniane Wydawnictwa Naukowo-Dydaktyczne AGH, Kraków 2004.

- [3] Johnson J.B., Smith L.S.: *The Theory and Practice of Surveying*. 17<sup>th</sup> ed. Wiley & Sons, New York 1913.
- [4] Kain R.J., Baigent E.: *The Cadastral Map in the Service of the State: A History of Property Mapping*. The University of Chicago Press, Chicago 1992.
- [5] Surowiec S. (red.): *Ewidencja gruntów*. PWN, Warszawa 1987.
- [6] Wilkowski W.: *Boundaries of land parcels in the polish cadastre*. [in:] Kereković D., Žróbek R. (eds.), *GIS for Geoscientists. Croatian Information Technology Association – GIS Forum*, University of Silesia, Zagreb 2012, pp. 58–66. [on-line:] <http://www.gis.us.edu.pl/index.php/past-gis-conferences/19-gis-odyssey-2012/movies/304-boundaries-of-land-parcels-in-the-polish-cadastre> [access: 8.04.2019].
- [7] Felcenloben D.: *Rozgraniczanie nieruchomości: teoria i praktyka z orzecznictwem sądowo-administracyjnym*. Gall, Katowice 2008.
- [8] Felcenloben D.: *Granice nieruchomości i sposoby ich ustalania*. LexisNexis, Warszawa 2011.
- [9] Ministerstwo Reform Rolnych: *Instrukcja techniczna*. Zakłady Graficzne S.A. Książnica-Atlas we Lwowie, Lwów 1931.
- [10] Ministerstwo Skarbu: *Instrukcja Katastralna II dla pomiarów uzupełniających*. Drukarnia Państwowa w Poznaniu, Warszawa 1927.
- [11] Pietrzak L.: *Stabilizacja granic w pracach geodezyjnych* [Stabilization of parcel boundaries in geodetic surveys]. *Przegląd Geodezyjny*, R. 90, nr 7, pp. 18–23.
- [12] Stoksik J.M.: *Geometry małopolscy do końca XVIII wieku. Z dziejów geodezji i kartografii wielkoskalowej w Polsce*. Archiwum Narodowe, Kraków 2013.
- [13] *Rozporządzenie Ministra Infrastruktury z dnia 12 kwietnia 2012 r. w sprawie warunków technicznych, jakim powinny odpowiadać budynki i ich usytuowanie*. Tekst jedn. Dz.U. 2019 poz. 1065 [Regulation of the Minister of Infrastructure of 12 April 2012 on technical conditions to be met by buildings and their location. Consolidated text of Journal of Laws of 2019, item 1065].
- [14] Malinowska A.: *Autoreferat – załącznik do wniosku z dnia 6 maja 2016 r. o przeprowadzenie postępowania habilitacyjnego*. Website of the Faculty of Mining Surveying and Environmental Engineering of AGH: <http://www.geod.agh.edu.pl/files/habilitacje/malinowska/autoreferat.pdf> [access: 8.04.2019].
- [15] *Ustawa z dnia 17 maja 1989 r. Prawo geodezyjne i kartograficzne*. Tekst jedn. Dz. U. 2019 poz. 725 z późn. zm. [Act of 17 May 1989 Geodetic and Cartographic Law. Consolidated text of Journal of Laws of 2019, item 725 with amendments].
- [16] *Rozporządzenie Ministra Spraw Wewnętrznych i Administracji z dnia 9 listopada 2011 r. w sprawie standardów technicznych wykonywania geodezyjnych pomiarów sytuacyjnych i wysokościowych oraz opracowywania i przekazywania wyników tych pomiarów do państwowego zasobu geodezyjnego i kartograficznego*. Dz.U. 2011 nr 263, poz. 1572 [Regulation of the Minister of Internal Affairs and Administration of 9 November 2011 on technical standards for the performance of plane and vertical land surveys as well as elaboration and transfer of the results to the national geodetic and cartographic resource. Journal of Laws of 2011 No. 263, item 1572].

- [17] *Rozporządzenie Ministrów Spraw Wewnętrznych i Administracji oraz Rolnictwa i Gospodarki Żywnościowej z dnia 14 kwietnia 1999 r. w sprawie rozgraniczania nieruchomości.* Dz.U. 1999 nr 45, poz. 453 [Regulation of the Ministers of Internal Affairs and Administration as well as Agriculture and Food Economy of 14 April 1999 on real estate delimitation. Journal of Laws of 1999 No. 45, item 453].
- [18] *Ustawa z dnia 24 lipca 1998 r. o zmianie niektórych ustaw określających kompetencje organów administracji publicznej – w związku z reformą ustrojową państwa.* Dz.U. 1998 nr 106, poz. 668 [Act of 24 July 1998 amending certain acts specifying the competences of public administration bodies – related to the systemic reform of the state. Journal of Laws of 1998 No. 106, item 668].
- [19] Felcenloben D.: *Dopuszczalność wznowienia znaków i wyznaczania punktów granicznych w trybie art. 39 Prawa geodezyjnego i kartograficznego* [Permissibility of resuming border signs and determining border points in the mode of art. 39 of Geodetic and Cartographic Law]. *Przegląd Geodezyjny*, R. 90, nr 2, 2018, pp. 17–23.
- [20] Kwartnik-Pruc A., Hanus P.: *Geodezyjne aspekty rozgraniczeń i podziałów nieruchomości.* Wydawnictwa AGH, Kraków 2014.
- [21] Wolanin M.: *Podziały, scalenia i rozgraniczenia nieruchomości oraz procedury ewidencyjne.* Wydawnictwo C.H. BECK, Warszawa 2016.
- [22] *Ustawa z dnia 14 czerwca 1960 r. Kodeks postępowania administracyjnego.* Tekst jedn. Dz.U. 2018 poz. 2096 z późn. zm. [Act of 14 June 1960 The Code of Administrative Procedure. Consolidated text of Journal of Laws of 2018, item 2096 with amendments].
- [23] *Rozporządzenie Ministra Rozwoju Regionalnego i Budownictwa z dnia 29 marca 2001 r. w sprawie ewidencji gruntów i budynków.* Tekst jedn. Dz. U. 2019 poz. 393) [Regulation of the Minister of Regional Development and Construction of 29 March 2001 on the register of land and buildings. Consolidated text of Journal of Laws of 2019, item 393].
- [24] Koszkowski M.: *Clara non sunt interpretanda a wykładnia umów.* *Monitor Prawniczy*, nr 21, 2009, [on-line:] <https://czasopisma.beck.pl/monitor-prawniczy/artukul/emclara-non-sunt-interpretandaem-a-wykladnia-umow/> [access: 8.04.2019].
- [25] Wyrok NSA z 25.09.2015 Nr I FSK 563/14 [Judgement of the Supreme Administrative Court of 25.09.2015 Ref. No. I FSK 563/14], [on-line:] <http://orzeczenia.nsa.gov.pl/doc/06D0DE1AF0> [access: 8.04.2019].
- [26] *Rozporządzenie Rady Ministrów z dnia 7 grudnia 2004 r. w sprawie sposobu i trybu dokonywania podziałów nieruchomości.* Dz.U. 2004 nr 268, poz. 2663 [Regulation of the Council of Ministers of 7 December 2004 on the manner and procedure for real estate subdivision. Journal of Laws of 2004 No. 268, item 2663].
- [27] *Rozporządzenie Rady Ministrów z dnia 4 maja 2005 r. w sprawie scalania i podziału nieruchomości.* Dz.U. 2005 nr 86, poz. 736 [Regulation of the Council of Ministers of 4 May 2005 on real estate consolidation and subdivision. Journal of Laws of 2005 No. 86, item 736].

- [28] *Ustawa z dnia 26 marca 1982 r. o scalaniu i wymianie gruntów*. Tekst jedn. Dz.U. 2018 r. poz. 908 [Act of 26 March 1982 on land consolidation and exchange. Consolidated text of Journal of Laws of 2018, item 908].
- [29] *Ustawa z dnia 21 sierpnia 1997 r. o gospodarce nieruchomościami*. Tekst jedn. Dz.U. 2018 r. poz. 2204 z późn. zm. [Act of 21 August 1997 on real estate management. Consolidated text of Journal of Laws of 2018, item 2204 with amendments].
- [30] *Geodetic Chamber of Commerce. Letter of Surveyor General of 20 November 2012 Ref. No. KN-5025-77/12 to the President of the Geodetic Chamber of Commerce*. [on-line:] [www.gig.org.pl/?mod=aktualnosc&id=7121](http://www.gig.org.pl/?mod=aktualnosc&id=7121) [access: 8.04.2019].
- [31] *Judgement of the Provincial Administrative Court in Krakow of 30.02.2015 Ref. No. III SA/Kr 1766/14*. [on-line:] <http://judgment.nsa.gov.pl/doc/9367156B91> [access: 8.04.2019].
- [32] *Zarządzenie Ministrów Gospodarki Przestrzennej i Budownictwa oraz Rolnictwa i Gospodarki Żywnościowej z dnia 5 sierpnia 1996 r. w sprawie rozgraniczania nieruchomości*. M.P. 1996 nr 50, poz. 469 [Ordinance of the Ministers of Spatial Management and Construction as well as Agriculture and Food Economy of 5 August 1996 on real estate delimitation. Official Journal of 1996 No. 50, item 469].
- [33] *Letter of the Prime Minister of 10.04.1998 (Ref. No. RM 10-19-98, Document No. 273)*. [on-line] <http://orka.sejm.gov.pl/proc3.nsf/opisy/273.htm> [access: 8.04.2019].
- [34] *Dekret z dnia 13 września 1946 r. o rozgraniczeniu nieruchomości*. Dz.U. 1946 nr 53, poz. 298 [Decree of 13 September 1946 on real estate delimitation. Journal of Laws of 1946 No. 53, item 298].
- [35] *Dekret z dnia 21 września 1950 r. o rozgraniczeniu nieruchomości Skarbu państwa lub nieruchomości nabywanych dla realizacji narodowych planów gospodarczych*. Dz.U. 1950 nr 44, poz. 398 [Decree of 21 September 1950 Delimitation of real properties owned by the State Treasury or real properties purchased for the implementation of national economic plans. Journal of Laws of 1950 No. 44, item 398].
- [36] *Rozporządzenie Rady Ministrów z dnia 12 grudnia 1958 r. w sprawie postępowania przy podziale i rozgraniczaniu nieruchomości na terenach budownictwa domów jednorodzinnych*. Dz.U. 1959 nr 1, poz. 1 [Regulation of the Council of Ministers of 12 December 1958 on the procedure for subdivision and delimitation of real estate in areas intended for single-family housing. Journal of Laws of 1959 No. 1, item 1].
- [37] *Rozporządzenie Ministra Gospodarki Terenowej i Ochrony Środowiska z dnia 28 sierpnia 1972 r. w sprawie trybu ustalania, rozgraniczania i podziału terenów budownictwa jednorodzinnego i zagrodowego na obszarze miast i osiedli*. Dz.U. 1972 nr 35, poz. 242 [Regulation of the Minister of Local Economy and Environment Protection of 28 August 1972 on the procedure for determination, delimitation and subdivision of areas intended for single-family housing and farm buildings in cities and housing estates. Journal of Laws of 1972 No. 35, item 242].

- [38] *Ustawa z dnia 22 maja 1958 r. o terenach dla budownictwa domów jednorodzinnych w miastach i osiedlach*. Dz.U. 1958 nr 31, poz. 138 [Act of 22 May 1958 on areas intended for single-family housing in cities and housing estates. Journal of Laws of 1958 No. 31, item 138].
- [39] Radzio W.: *Ad vocem do niektórych tez dr. inż. Dariusza Felcenlobena*. Przegląd Geodezyjny, nr 4, 2018, pp. 16–18.
- [40] *Rozporządzenie Ministrów Gospodarki Przestrzennej i Budownictwa oraz Rolnictwa i Gospodarki Żywnościowej z dnia 17 grudnia 1996 r. w sprawie ewidencji gruntów i budynków*. Dz.U. 1996 nr 158, poz. 813 [Regulation of the Ministers of Spatial Management and Construction as well as Agriculture and Food Economy of 17 December 1996 on the register of land and buildings. Journal of Laws of 1996 No. 158, item 813].
- [41] *Ustawa z dnia 4 marca 2010 r. o infrastrukturze informacji przestrzennej*. Tekst jedn. Dz.U. 2018 poz. 1472 [Act of 4 March 2010 on spatial information infrastructure. Consolidated text of Journal of Laws of 2018 item 1472].
- [42] Maślanka J., Latoś, S.: *Analiza dokładności map numerycznych i cyfrowych*. Geodezja: rocznik Akademii Górniczo-Hutniczej im. Stanisława Staszica, z. 2, 1998, pp. 163–177.
- [43] Maślanka J.: *Determining the course of boundaries based on points shared by several properties and entering this data into the register of land and buildings*. Infrastruktura i Ekologia Terenów Wiejskich [Infrastructure and Ecology of Rural Areas], nr IV/1, 2018, pp. 879–890. DOI: <https://doi.org/10.14597/INFRAECO.2018.4.1.060>.
- [44] Maślanka J.: *Ustalanie przebiegu granic działek ewidencyjnych w trybie przepisów o ewidencji gruntów i budynków oraz wykazywanie ustalonych granic w bazach ewidencyjnych – wybrane aspekty formalno-prawne i technologiczne* [Determining the course of the boundaries of cadastral parcels pursuant to the provisions on the register of land and buildings and entering the determined boundaries into cadastral databases – selected formal, legal and technical aspects]. Infrastruktura i Ekologia Terenów Wiejskich [Infrastructure and Ecology of Rural Areas], nr III/1, 2018, pp. 741–754. DOI: <https://doi.org/10.14597/INFRAECO.2018.3.1.050>.

## **Wznawianie znaków granicznych i wyznaczanie punktów granicznych w kontekście wiarygodności ewidencji gruntów i budynków**

**Streszczenie:** Wznawianie znaków granicznych i wyznaczanie punktów granicznych to czynności geodezyjne o charakterze materialno-technicznym uregulowane prawnie w Polsce w rozdziale 6. ustawy *Prawo geodezyjne i kartograficzne* dotyczącym rozgraniczania nieruchomości. Znaczenie tych czynności jest bardzo

duże zarówno dla funkcjonowania ewidencji gruntów i budynków (EGiB), jak też między innymi z punktu widzenia właścicieli, którzy z różnych powodów, w tym możliwości spokojnego wykonywania prawa własności, chcą mieć fizycznie oznaczone w terenie granice swoich nieruchomości i znać te oznaczenia. Pojawiające się ostatnio w literaturze polskiej i w czasopismach geodezyjnych interpretacje przepisów dotyczących wznawiania znaków i wyznaczania punktów granicznych oraz stosowane dosyć masowo w praktyce geodezyjnej rozwiązania budzą zdaniem autora artykułu spore wątpliwości oraz powodują zarówno istotne zniekształcenie danych zapisywanych w bazach EGiB, jak i niewłaściwe rozumienie oraz stosowanie tych przepisów przez wykonawców prac geodezyjnych. W artykule dokonano opisowej analizy formalnej obowiązujących przepisów prawa oraz skutków ich stosowania dla jakości danych EGiB. Autor przeciwstawia się w artykule nieuprawnionej jego zdaniem, rozszerzającej wykładni przepisów prawa powodującej, że samo tylko fizyczne utrwalenie punktu granicznego na gruncie, przeprowadzone w procedurze o charakterze technicznym, zasadniczo zmienia i podnosi prawne znaczenie tego punktu granicznego.

**Słowa**

**kluczowe:** kataster, ewidencja gruntów i budynków, granice działek ewidencyjnych, punkty graniczne działek