



## **DETERMINING THE COURSE OF BOUNDARIES BASED ON POINTS SHARED BY SEVERAL PROPERTIES AND ENTERING THIS DATA INTO THE REGISTER OF LAND AND BUILDINGS**

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### ***Abstract***

This research paper is a continuation of the previous study presenting the results of the research carried out by the Author on determining the course of boundaries of cadastral parcels and entering this data into the database of the register of land and buildings. The visibly higher level of legal consciousness of the society observed since the Third Polish Republic was founded, associated with rising values of real properties (especially those intended for residential development) has increased the expectations and requirements of property owners towards the reliability of the data contained in the register of land and buildings, relating to the location and course of property boundaries.

The Author of this research paper describes and analyzes the issues of determining boundaries of cadastral parcels, primarily with regard to the public register – the one which is absolutely essential for the Polish state – the register of land and buildings. The basic element of the land register survey is a computerized cadastral database. This database contains the results of proceedings and procedures for establishing the course of boundaries. Also, other public registers and individual users, including property owners and contractors of surveying works, use the data stored in this database.

The Author identifies and analyzes these legal regulations in force which, in the Author's opinion, are ambiguous and contribute to their incorrect interpretation and implementation. He also points to the adverse

effects of the aforementioned provisions of law on the manner of entering the data into the database of the register of land and buildings as well as on its quality. The Author demonstrates suggested solutions for the identified shortcomings and problems e.g. by introducing changes aimed at improving the procedure of delimitation of real properties with undetermined legal status or unknown address of the owner, as well as by changing (extending) the application scheme regarding the cadastral database.

**Keywords:** cadastre, register of land and buildings, boundaries of parcels

## INTRODUCTION

Publications in surveying and legal issues frequently deal with the problems regarding the determination of boundaries of cadastral parcels or boundaries of properties. Numerous studies on this subject include comprehensive books e.g. (Felcenloben 2008, Felcenloben 2011, Kwartnik-Pruc and Hanus 2014, Wolanin 2016), research papers in scientific magazines (Pęska 2014, Mączyńska, 2018) and studies (PN-EN ISO 19152, INSPIRE v.2.2.2). They focus mainly on formal and legal or practical aspects. The Author of this research paper describes and analyzes the issues of determining boundaries of cadastral parcels, primarily with regard to the public register – the one which is absolutely essential for the Polish state – the register of land and buildings (hereinafter abbreviated as “EGiB” or “register”). The basic element of the register survey is the computerized cadastral database (PGiK, 1989). This database contains the ultimate results of material and technical activities as well as administrative and court proceedings aimed at determining the course of boundaries. Also, this database is used by other public registers (c.f. Article 21 of the Act (PGiK, 1989)) as well as individual users, including property owners and contractors of surveying works.

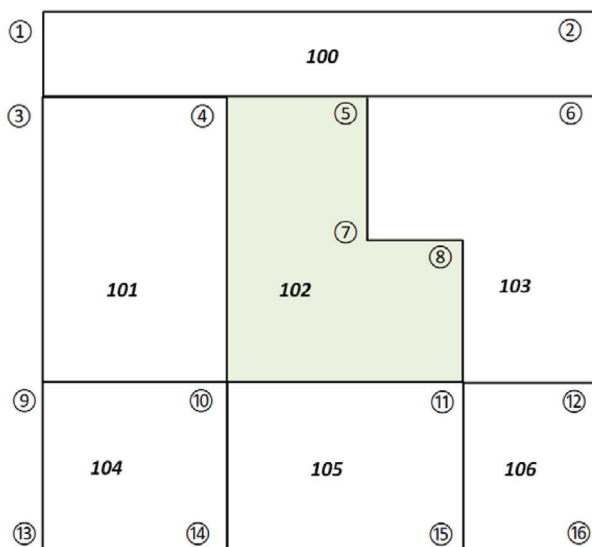
Selected formal, legal and technological problems regarding the determination of the course of boundaries pursuant to the provisions of law on the register of land and buildings, have already been described by the Author in (Maślanka, 2018). This paper presents the results of further research and analyzes carried out by the Author. The research is conducted using the method of formal and semantic analyzes of the legal provisions related to the discussed issue as well as the method of qualitative and quantitative studies of representative geodetic surveys and the data contained in the cadastral databases, prepared based on these surveys.

## MATERIAL AND METHODS

Pursuant to the Act of May 17, 1989 Geodetic and Cartographic Law (PGiK, 1989), determining the course of boundaries in delimitation proceedings consists in:

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

In order to illustrate the essence of the problem described and analyzed in this research paper, a fragment of the cadastral map demonstrated in Figure 1 and a description of the situation referring to this Figure were used. This situation is representative of numerous cases encountered in surveying practice. Figure 1 illustrates the numbers and boundaries of cadastral parcels as well as the numbers of boundary points. For the purpose of the analyzes presented in this research paper, it was assumed that all the parcels illustrated in this Figure are included into different real properties, which formally means that they are entered into various land and mortgage registers. The owner of the parcel No. 102 filed a motion addressed to the Commune Head to commence delimitation proceedings in order to delimit the parcel No. 102 and the parcel No. 101. Acting pursuant to the Geodetic and Cartographic Law (PGiK, 1989) and the Code of Administrative Procedure (KPA) (KPA, 1960), the Commune Head issued a relevant decision and authorized a surveyor with level 2 qualifications to perform the delimitation procedure.



Source: own study

**Figure 1.** Example of the map in the register of land and buildings

The boundary points No. 4 and No. 10 are located at the corners of the parcels No. 101 and 102, which are shared by more than two parcels and thus by various real properties. As a result, some serious problems and doubts arise, regarding the following:

- a) summons of the parties to the proceedings,
- b) establishment of the course of the boundaries in the field,
- c) preparation of the documentation on the establishment of the boundaries,
- d) demonstration of the data contained in the delimitation survey in the database of the register of land and buildings.

Acting within the power granted by the Commune Head, the qualified surveyor will face the following limitations:

- a) they may not summon the persons who are not subject to the proceedings (they are not mentioned in the Commune Head's decision as parties to the proceedings) to the boundary determination procedure in the field; in the discussed example, it would concern the owners of the parcels No. 100, 104 and 105,
- b) during the performance of the boundary determination procedure in the field, the surveyor may not, or at least should not, determine the location of the boundary points marked as No. 4 and No. 10 in Figure 1, as these points belong to the real properties that are formally not included in the delimitation proceedings,
- c) when preparing the documentation from the boundary determination procedure in the form of sketches and boundary reports, the surveyor should not describe the boundary points No. 4 and No. 10 as being determined, due to the fact that the Commune Head's decision does not include some of the parties that should participate in the proceedings and decide about the location of these points,
- d) surveyor's failure to determine the location and to describe the boundary points No. 4 and No. 10 in the delimitation documentation may be treated, both by the Commune Head and by the parties, as failure to carry out the tasks involving the determination of the course of the "entire" boundary between the parcels No. 101 and 102, that is, the boundary from the point No. 4 to the point No. 10, including these points No. 4 and No. 10.

The above limitations mean that the surveyor is in a quite difficult situation, because the limitations mentioned in the sub-clauses *a* to *c* are in contradiction to the case mentioned in the sub-clause *d*.

The Author of this research paper has conducted quantitative and qualitative studies of geodetic delimitation surveys concerning real properties located in 40 cadastral units consisting of one to several cadastral districts. The research studies covered the total of 200 cases of property delimitation procedures con-

ducted in Lesser Poland and Silesia provinces. This research paper presents an exemplary, representative part of the performed studies in the form of the results obtained from the analysis of delimitation surveys of real properties located within the Luszowice cadastral district in the Radgoszcz cadastral unit (No. 120406\_2.0002), the county of Dąbrowa Tarnowska (Lesser Poland province). In 2016, i.e. at the time of the modernization of the register of land and buildings, the database of the geodetic and cartographic documentation center (PODGiK) in Dąbrowa Tarnowska contained seven delimitation surveys with the following numbers: 261-98/1982, 261-913/1985, 3364.20-3/1996, 3428.14-9/1998, 3364.19-2/2000, 3428.05-54/2007 and 3428.04-68/2008 from years 1982-2008. All of these surveys dealt with the situations which resembled the one described earlier and illustrated in Figure 1, and therefore, all of them were affected by the above-mentioned problems. Unfortunately, the Author of this paper encountered similar cases in numerous cadastral districts undergoing modernization of the register of land and buildings. One of the first and basic activities performed during the modernization procedure is the analysis of the source materials from the National Geodetic and Cartographic Documentation Center database (PZGiK) which, according to (JoL 2016, no 1034), should be analyzed and properly used to create the register database. At this stage of the work, flaws and defects of surveys are frequently identified, which sometimes even undermine the reliability of the data contained in them.

From the interviews which the Author carried out with the surveyors, including court experts, who performed delimitation proceedings, and from the results of the above-mentioned studies of the delimitation surveys, it follows that if a situation like the one described at the beginning of this research paper occurs, the surveyors use one of the following solutions:

- a) the surveyors summon only the persons mentioned in the Commune Head's decision to the boundary determination procedure in the field; in the boundary sketch, they outline the course of the boundaries, including the points No. 4 and No. 10 as points being determined (without any form of remarks, caveats or exclusion clauses), and describe them in the boundary report; they carry out their permanent monumentation in the cases specified in Section 6 of the Act (PGiK, 1989), and they do not pay attention to the above-mentioned defects regarding failure to correctly determine all parties to the proceedings,
- b) the surveyors summon the persons mentioned in the Commune Head's decision to the boundary determination procedure in the field and, additionally, they notify the owners of other properties of the activities aimed at the determination of the course of the boundaries and, as in the sub-clause *a* above; they determine the location of the points No. 4 and No. 10 and carry out their permanent monumentation, if allowed by the outcome of the boundary determination procedure,

- c) the surveyors summon only the persons mentioned in the Commune Head's decision to the boundary determination procedure in the field; in the boundary sketch, they outline the course of the boundaries "along the direction" determined by the points No. 4 and No. 10, and describe them in the boundary report; in order to avoid "touching sensitive points" No. 4 and No. 10, however, they create additional points "on the line", e.g. marked as 4a and 10a, which are shifted away from the points No. 4 and No. 10, towards the inside of this boundary section by a "round value" (e.g. 1 m) and, if allowed by the outcome of the boundary determination procedure, they carry out their permanent monumentation.

In order to complete the above description of the situation in which the surveyor is performing the delimitation proceedings, it is important to mention the serious legal consequences set out in Article 277 of the Penal Code (KK, 1997). Under its provisions, "Whoever destroys, defaces, removes, alters, conceals from view or fraudulently establishes boundary markers, shall be subject to a fine, restriction of liberty or imprisonment of up to 2 years". This has resulted in the solution described in clause *b* above (notification of the persons not mentioned in the Commune Head's decision), which is a proof of significant doubts and concerns of the surveyor performing delimitation proceedings subject to this Commune Head's decision.

However, the surveyor should also be aware of other consequences resulting from (KK, 1997), regarding offenses against reliability of documents, including attestation of untruth in the documents of legal significance.

Based on this type of delimitation surveys, the data on boundary points with the legal situation and location similar to the points No. 4 and No. 10, is entered into in the databases of the register of land and buildings. In surveying practice, these points are usually assigned the value of the ZRD attribute (boundary point location data source) equal to "1" which, according to (JoL 2016, no 1034) means: "field surveys preceded by delimitation of real properties, restoration of boundary markers, determination of boundary points or establishment of their location in another mode, including the one specified in §39 sections 1 and 2 of the Regulation [(JoL 2016, no 1034) – Author's note]". Unfortunately, in (JoL 2016, no 1034), boundary points which were determined in very different procedures, and these procedures were with completely different legal defects (delimitation of real properties, determination of boundaries of cadastral parcels based on the regulations of the register of land and buildings), were combined under one value of the ZRD attribute. The user of the database of the register of land and buildings which appears e.g. in the form of a numerical map, can be misled by assuming that the points No. 4 and No. 10 have a strong and reliable source, and thus they can be used for further procedures, administrative and court proceedings, as well as for surveying work, including for the preparation of

maps for design purposes. Such a situation may lead to serious, negative consequences, including even material damages, as well as legitimate complaints and claims of the parties. In addition, this type of data is repeated in subsequent geodetic surveys, administrative decisions or even court rulings, which sometimes leads to irreversible effects.

## **ANALYSIS OF RESULTS OF CONDUCTED RESEARCH STUDIES**

According to the Author of this research paper, the main cause of the problems described above is a gross error occurring quite commonly already at the stage of initiating delimitation proceedings, namely not all the parties, as understood under the provisions of the Code of Administrative Procedure (KPA, 1960), are included in these proceedings by the Commune Head's decision. This refers to the owners of the parcels with numbers 100, 104 and 105, which the boundary points No. 4 and No. 10 belong to, respectively. The Commune Heads, defending their decisions and, at the later stage of the proceedings, the administrative decisions issued, often refer to the following circumstances justifying the solutions which they adopted:

- the principle of the authority being bound by the scope of the party's motion resulting from (KPA 1960) and confirmed by the decisions of administrative courts, as well as the risk of annulment of an administrative decision due to referral to a person who is not a party to this case (WSA 504/08 2009),
- the principle resulting from (PGiK 1989) allowing delimitation proceedings to cover not all, but only some of the boundaries of a specific real property, together with adjacent properties or other land,
- using the term of a real property instead of a cadastral parcel in the Act (PGiK 1989) and in delimitation decisions,
- avoiding delimitation of real properties with undetermined legal status, e.g. roads (the parcel No. 100 in Figure 1); if included in the proceedings, such properties significantly hinder and delay the procedure and impose additional duties on the Commune Head, such as the need to apply to the court for the appointment of a curator.

These arguments cannot be accepted, however, in the light of applicable legal regulations and as confirmed by administrative court decisions, some of which are referred to later in this research paper, as well as in the light of the various negative consequences they may bring for the reliability of the data stored in the databases of the register of land and buildings, and consequently for the reliability of other public registers based on these records.

Due to the fact that the provisions of the Act (PGiK, 1989) do not define the concept of a party in delimitation proceedings, Article 28 of the Code of Ad-



ministrative Procedure applies (KPA, 1960). Delimitation proceedings involve the determination of the location of boundary points and boundary lines between real properties, and therefore they are directly related to the enforcement of the private property ownership rights. Delimitation proceedings are carried out in the interest of all the owners of neighboring properties – the established boundary has legal consequences not only for ownership rights and the boundaries of the applicant's property, but for other participants as well (NSA 479/98, 1998).

Within the meaning of Article 28 of the Code of Administrative Procedure, in relation to Articles 152 and 153 of the Civil Code (KC) (KC, 1964), the attribute of being a party to delimitation proceedings applies to persons who, under the provisions of the Civil Law, are entitled to the property subject to delimitation proceedings by holding ownership (co-ownership) rights, the right of perpetual usufruct or other subjective limited property right to land to a given extent (e.g. right-of-way). Pursuant to Article 341 of the Civil Code, this may also apply to persons who are spontaneous possessors of a property, supported by the presumption of compliance with the current legal status (WSA 504/08, 2009). Each owner or perpetual user of properties under delimitation proceedings which include the boundary points and boundary lines, shall be a party to these delimitation proceedings (WSA 1135/08, 2008).

Pursuant to the provisions of the Act (PGiK, 1989), the obligation to correctly determine the parties in delimitation proceedings rests with the authority that carries out these proceedings (commune head, mayor or president of a city, respectively), and not with the surveyor authorized to perform the task of determining the course of boundaries. This is confirmed in (JoL 1999 item 453), under which in the case of impossibility of determining the persons entitled to act as parties in delimitation proceedings, the surveyor shall postpone the performance of the task of determining the course of boundaries and notify the competent authority (WSA 504/08).

Failure of a party to participate in delimitation proceedings results not only in a defective decision but also the legal defectiveness of the entire proceedings, and in the case of defectiveness of the entire proceedings, it is necessary to conduct them again, what is instituted by the resumption of proceedings (WSA 504/08).

During delimitation proceedings conducted at the request of the party (applicant), the will of this party determines the scope of the proceedings, but the issue of the so-called tripoints of parcels, i.e. the point where the real property delimited according to the will of the applicant merges with the third property, is of great significance. However, as far as the tripoint is concerned, the applicant's will determines neither the scope of the proceedings nor the circle of participants (WSA 1710/15).

In (PGiK 1989), the legislator presented a method of the commencement of delimitation proceedings different from the one adopted in the Code of Adminis-



trative Procedure, thus imposing an obligation to carry out the explanatory proceedings preceding the issuance of the decision on the initiation of delimitation proceedings upon the competent authority. It consisted in e.g. the determination whether the application qualifies for recognition in these proceedings or whether the person who filed the application was a party thereto, the identification of the parties and participants of these proceedings as well as the examination of the legal status of the boundaries of the real property subject to delimitation (NSA 1124/11).

Therefore, it is unsubstantiated to accept the view that the public administration body competent in the case of property delimitation is bound by the party's application and cannot investigate its validity, including the scope of the claim, at this stage of the proceedings, i.e. before issuing the decision to initiate delimitation proceedings (NSA 1124/11).

## CONCLUSIONS

For the avoidance of the occurrence of the situation described above, the Author of this research paper proposes the introduction of amendments to both the provisions defining the proceedings and delimitation documentation, as well as the provisions defining the application scheme of the database of the register of land and buildings.

In the first case, following the solution applied when determining boundaries of cadastral parcels already adopted in (JoL 2016, no 1034), the procedures of identifying and summoning parties in the case of real properties with undetermined legal status or unknown address of the owner should be simplified. It is also necessary to make the authorities conducting delimitation proceedings of real properties sensitive to the issue of correct application of the binding legal regulations. This may include e.g. district governor's refusal to enter the outcomes of delimitation proceedings into the database of the register of land and buildings due to the legal defects described above. In the Author's opinion, delimitation proceedings under the provisions of the Geodetic and Cartographic Law should be transferred to the authorities responsible for managing the database of the register of land and buildings (district governors), which would significantly streamline the procedure and improve the quality of the proceedings, ensuring the consistency with the register survey.

In the case of the application scheme of the register of land and buildings, it is necessary to change the scope (scale) of the values that the ZRD attribute (boundary point location data source) can assume, so that the information captured from this attribute would not result (as is currently the case) in blurring and distorting the characteristics of the data recorded in this database. However, in order to preserve the stability of the existing legal solutions in this respect, the

Author suggests that for the ZRD attribute with the value equal to “1”, a more detailed “sub-list” should be added (in UML notation, the “Enumeration” stereotype class), having the following values:

- 101 – geodetic field surveys preceded by delimitation of real properties carried out in court proceedings,
- 102 – geodetic field surveys preceded by delimitation of real properties carried out in court proceedings, but without including all the parcels based on this point into these proceedings (comment: transitional attribute, basically referring only to the data from the previous “archival” surveys),
- 103 – geodetic field surveys preceded by a settlement, referred to in Article 31 section 4 of the Act (PGiK, 1989),
- 104 – geodetic field surveys preceded by a settlement, referred to in Article 31 section 4 of the Act (PGiK, 1989), but without including all the parcels based on this point into this settlement (comment: transitional attribute, basically referring only to the data from the previous “archival” surveys),
- 105 – geodetic field surveys preceded by delimitation of real properties carried out in administrative proceedings (final administrative decision issued)
- 106 – geodetic field surveys preceded by delimitation of real properties carried out in administrative proceedings, but without including all the parcels based on this point into these proceedings (comment: transitional attribute, basically referring only to the data from the previous “archival” surveys),
- 107 – geodetic field surveys preceded by restoration of boundary markers,
- 108 – geodetic field surveys preceded by determination of boundary points,
- 109 – geodetic field surveys preceded by determination of the course of parcel boundaries under §39 section 1 of the Regulation (JoL 2016, no 1034),
- 110 – geodetic field surveys preceded by determination of the course of parcel boundaries under §39 section 2 of the Regulation (JoL 2016, no 1034),
- 111 – geodetic field surveys preceded by determination of the course of parcel boundaries under §39 section 1 or section 2 of the Regulation (JoL 2016, no 1034), but without including all the parcels based on this point (comment: transitional attribute, basically referring only to the data from the previous “archival” surveys),
- 112 – geodetic field surveys preceded by determination of the course of parcel boundaries in a mode different from the above-mentioned ones.

This proposal is also consistent with the principles of the GML (Geography Markup Language) used in the register of land and buildings, based on XML (eXtensible Markup Language), which allows for flexible expansion of the data storage structure.

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