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Administrative Legal Borders Run along Rivers**

1. Introduction

Presented in this article is the problem of administrative legal borders¹, run along rivers, concerns essentially Polish conditions. Nevertheless, taking into account the aim of the article – a river, part of geographical space, being almost everywhere, one can assume that the article is universal to some extent. It means, that conclusions resulting from it can be applied also to other countries.

Administrative borders are derived from cadastral boundaries. Yet, the majority of these boundaries were determined during establishing cadastre. It took place in the 70-ties of the last century. In turn, the determination of borders of Poland's territory took place in various acts, issued by the Cabinet of Poland. It has only been done by including communes (being cadastral units at the same time) to bigger units of Poland's territory division. The resulting conclusion is, that accurate determination of administrative border (as a series of coordinates of monuments of administrative line division), and especially this border which was determined by a river, is not possible because of lack of suitable documentation. For this reason, such a border is called "border according to real status in the field". It is not fully reliable and moreover not accurate.

Thus, one should tend to such a situation that all revealed boundaries in cadastre will be "legal boundaries" that is such boundaries which have suitable documentation, which are reliable and properly accurate. Yet, fulfilling such demand is especially difficult for these specific cadastral boundaries which can't be established in the field. They are, first of all, cadastral boundaries which have been determined along rivers, being at the same time administrative borders.

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¹ Authors use in the article two, almost changeable terms: "border" and "boundary". Nevertheless, the former is used to describe a line of territorial division of a country, the latter is used, on the contrary, in order to describe the outer line of cadastral units, like parcels.

Water is an unusual element. It changes itself with extraordinary dynamics, causing modifications in the whole surrounding environment. Water, bringing about changes of bed river, also forces inserting changes in the cadastre. Works performed on changes of shape of cadastral boundaries are made usually as administrative procedures², where various activities are performed. As a result of these activities real estate boundaries become.

2. Legal Boundary

According to [3], “legal boundary” is generally meant as a boundary which results from defined surveying-legal processes (Tab. 1). One can state more in detail, according to [3], that the **necessary conditions** in order to create a legal boundary, are:

- boundary is to be determined during mentioned surveying-legal processes,
- suitable surveying file is prepared, as result of these performed processes,
- surveying file has been verified and accepted by proper surveying documentation centre.

In turn, **sufficient condition** in order to approbate a boundary, determined by a surveyor – as legal boundary is, that it must be accepted, on the basis of the surveying file, by ultimate decision of head of suitable administrative office, or legally valid verdict of court.

After fulfilling these all mentioned conditions a real estate boundary gets legal status. It mainly means that boundary monuments are reliably determined with preserving special demands, and also with suitable accuracy, according to technical standards applied in surveying. Getting real estate boundary legal status also means that one can't essentially it change³. It is also worth adding, that if monuments of legal boundary have been destroyed or moved for any reason, then their relocation in the field can be done on the basis of the former prepared surveying file with demanded accuracy.

Generally in surveying works connected with cadastre function parallel two kinds of real estate boundaries. The former are boundaries determined in accordance with real status in the field. They became during establishing cadastre many years ago, and were determined without keeping the essential demands of reliability and accuracy [3]. The latter, on the contrary, that is legal boundaries described above, are determined in surveying-legal processes, for the purposes of real estate management, mainly [4].

Although both mentioned kinds of boundaries function parallel, yet there is a big difference between them [2]. It results from the fact, that boundaries in accordance with real status, were only showed to surveyor by owners, and although

² It also takes place (although rarely) court proceeding, sometimes.

³ The only exception are boundaries run along rivers, which can be changed because of natural causes.

they were measured and mapped, yet existing documentation made for them is not sufficient for their relocation in the field. Legal boundaries, on the contrary, are determined by surveyors in the field, in the presence of parties and boundary documentation of various kinds is prepared. It is appended to a surveying file, which in turn is submitted to a surveying documentation centre. This documentation is the basis for the next legal activities, that is an administrative decision or court verdict. Coordinates of boundary monuments, creating legal boundary in a uniform coordinate system, one can easily find in documentations prepared by surveyor. A list of surveying-legal processes, where legal boundaries become and documents which accept them, contains table 1.

Table 1. Surveying-legal processes, where legal boundaries become, and documentation accepting them

Surveying-legal process	Legal boundaries	Document accepting legal boundaries
Real estate delimitation	Outer real estate boundaries	Final administrative decision of head of commune. Legally valid court verdict
Real estate subdivision	New boundaries became as a result of real estate subdivision	Final administrative decision of head of commune. Legally valid court verdict
Land consolidation (agricultural lands)	New boundaries became as a result of land consolidation	Final administrative decision of head of district
Land assemblages and subdivision (developed lands)	New boundaries became as a result of land assemblages and subdivision	Commune board resolution about land assemblages and subdivision
Administrative and court cases connected with real estate ownership	Outer real estate boundaries	Final administrative decision of head of commune Legally valid court verdict

3. Administrative Border

According to appendix no 1 to project of ordinance by the Cabinet – in case of borders state register and areas of units of territorial division [8], administrative border is a broken line:

- delimitating two adjoining themselves units of country territorial division,
- separating territory of Poland from territory of one of neighbouring countries or from the open sea,
- determining the range of exclusive economic zone.

The course of administrative borders is identical as the course of cadastral boundaries. It results from the fact, that sections of borders of administrative divisions are created from cadastral boundaries. It is done step by step in such a manner that pieces of parcels boundaries create boundaries of cadastral units, then borders of commune, district and province. Information about obligatory administrative borders are kept in the Country Borders Register by the Country Surveying Documentation Centre.

The course of province borders is enacted in Act [10] where communes, included in individual provinces, have been mentioned. Yet, one should add, that this information is repeated in an Announcement of the Prime Minister of Poland – in the case of the list of communes and districts included in the provinces [7]. From this document clearly results that communes have been assigned to individual districts, first of all. Thus, district not province will have essential significance during determining the administrative border of a commune, which is in turn a unit of a country cadastral division.

4. Administrative Border Determination

Administrative border determination consists of surveying and legal parts. The former is connected with the identification of these cadastral parcels which create the borders of a territorial administrative unit. Thus, this activity concerns the determination of the numbers, boundaries and areas of mentioned parcels. The latter – legal one, accepts determined borders by a suitable Ordinance of the Cabinet.

Because the official territorial division of Poland is multilevel, inserted changes on lower level influences on the upper level [1]. So, a consequence of correction of any cadastral parcel, which creates line of territorial country division, are also changes of administrative borders.

These changes can also become because of inserting to cadastre new boundaries, for example after a performed subdivision. These changes every time should be the result of surveying-legal works which plan can be showed as follows:

- accepting commission and submitting surveying work in the local surveying documentation centre,
- verifying boundary measurement, analysis surveying-legal documentation, comparison field boundaries with boundaries showed in documents,
- determination of coordinates of boundary monuments and setting them out in the field,
- presentation boundaries to parties and creating boundary protocol,
- completing a surveying file, verifying surveying file and accepting it by surveying documentation centre,
- releasing an administrative decision or a court verdict.

No doubt that the most important works are those connected with the analysis of surveying-legal documentation. While their duration this documentation is verified in order to determine the most probable course of boundary lines [5]. Equally important is the demonstration of the determined boundaries to the parties. A surveyor, who proceeds it, must show skill in carrying on negotiations between parties. Conversation with participants of boundary demonstration can't lead to litigation between parties in the field. It is worth adding that both verifying measurement and setting out monuments in the field, although very important, are very simple activities.

It is possible, that a surveyor needn't take part during process of determination course of administrative border of country division. It happens in the case, when a boundary is correctly determined, yet an administrative procedure is run only for boundary correction. It is connected with annexing a smaller unit to a bigger one or separating from a bigger unit to a smaller unit of an administrative territorial division, or a cadastral unit. Such modifications need only performing legal activities. It is connected with working out an ordinance accepting changes of the borders of a country territorial division.

Before enacting such an ordinance, according to Acts [10, 11, 12], the Cabinet is obliged to get opinions from the heads of these administrative self-governed units, whose planned changes affect. Possible corrections of these borders are made in order to improve conditions of performing public tasks and to preserve social, economic and cultural regional ties.

An ordinance is enacted officially or at the application of parties. They could be:

- council of district,
- council of town,
- council of commune.

The application contains: argumentation for changing boundaries, documents, maps and information proving the necessity of changes. It is also demanded arrangement with habitants of the area including changes and opinions from authorities of the adjoining administrative units.

From the time of putting into execution obligatory administrative country division (1st January, 1999) the ordinance – in the case of changes to the borders of provinces, has been enacted only two times. Both dealt with the corrections of borders the Małopolskie province. The former, issued in 2001 caused, that from January the 1st commune Sławków belongs to Będzin district in Śląskie province. As a result of the second one, issued a year later, from the beginning of 2003, commune Szerzyny, belongs to the district Tarnów, Małopolskie province instead of Jasło district, Podkarpackie province. At the same time five ordinances, concerning changes of borders of districts and over twenty ordinances concerning changes of borders of communes, have been issued.

5. Administrative Borders Run along Rivers

One should remark, that there is no in Poland any clear regulations dealing with rules of determination of borders of self-governed units, run along rivers. Thus, one should only determine them similarly, as it happens in the case of determining country borders. The course of country borders, if they run along natural water streams are determined, according to [6], as:

- *mediana*, that is the medium line of a river – in case of un-navigable rivers, or
- *talweg*, that is line of the main stream of a river – in the case of navigable rivers.

According to Act [8], the border of Poland is a vertical plane passing through a border line, separating the territory of Poland from territories of other countries and from the open sea. The course of a country border is determined by international treaties and marked by monuments in the field. If these treaties don't state otherwise, one can determine country border according to:

- **straight line**, running from one monument to another – on field sections and in the places where a country border crosses stagnant waters or flowing waters, passing on the other side of a river or other reservoir,
- **medium line of river bed** – on rivers, streams and un-navigable canals (*mediana*),
- **medium line of main fairway or medium line of main stream** – on navigable rivers (*talweg*).

Records, have been used most often so far in protocols, concerning the boundaries of administrative and cadastral units, run along rivers, were announcements that boundaries were run along the medium line of a river bed. Changes which take place in the shape of river bed through flowing river accumulative-erosion processes, can also cause differences in boundaries location, determined by a river. Lack of coordinates of the corners of a boundary described in protocols only descriptively, can lead to wrong interpretations of boundary location.

In this connection, administrative borders fixed along rivers, should be determined through the analytical method on the basis of up-to-date bank lines in order to create a boundary running along the medium line of a river bed. Coordinates of points creating an administrative border are determined on the basis of coordinates of points measured during surveys, connected with fixing of river banks lines. They are midpoints of line segments, connecting to the closest points located on the opposite sides of a river. Such fixed boundaries can't be really determined in the field, indeed, yet they can be mapped, and coordinates of their corners can be used for surveying computations. Mathematical determination of boundaries will cause that it also will be necessary to initiate changes in the cadastre. Changes will concern numbers, shapes of boundaries and areas of these parcels which segments of their boundaries create an administrative border.

6. Conclusions

Presented in 2 to 5 chapters analysis leads to the following conclusions:

- 1) There are two kinds of administrative boundaries run along rivers: boundaries in accordance with real status in the field and legal boundaries.
- 2) The best method of determination of administrative boundaries run along rivers is analytical method. It depends on computation coordinates of points located on both sides of the river and then use them to fix the medium line of a river.
- 3) Determination of administrative boundaries run along rivers must be performed in accordance with all the rules of professional surveying art.
- 4) Relocation of borders of units of country territorial division is connected with changes of some parcels cadastral boundaries, and also with changes of areas of these parcels.
- 5) Legal boundaries of administrative territorial units are created through a decision made in Ordinance of the Cabinet.

References

- [1] Bieda A.: *Weryfikacja granic administracyjnych prowadzonych wzdłuż rzek w aspekcie aktualizacji katastru*. AGH, Kraków 2011, (Ph.D. thesis, unpublished).
- [2] Bieda A., Hanus P.: *Determination of real estate boundaries for the purposes of subdivision process*. Geomatics and Environmental Engineering, vol. 4, no. 1, 2010, pp. 15–20.
- [3] Hycner R.: *Podstawy katastru*. Uczelniane Wydawnictwa Naukowo-Dydaktyczne AGH, Kraków 2004.
- [4] Hycner R.: *Zagadnienia geodezyjno-prawne gospodarki nieruchomościami*. Wydawnictwo GALL, Katowice 2007.
- [5] Hycner R., Hanus P.: *Wykonawstwo geodezyjne*. Wydawnictwo GALL, Katowice 2007.
- [6] Góralczyk W., Sawicki S.: *Prawo międzynarodowe publiczne w zarysie*. Wydawnictwo Prawnicze LexisNexis, Warszawa 2006.
- [7] *Obwieszczenie Prezesa Rady Ministrów z dnia 29 czerwca 2010 roku w sprawie wykazu gmin i powiatów wchodzących w skład województw*. M.P. z 2010 r. Nr 48, poz. 654.
- [8] *Projekt rozporządzenia Rady Ministrów w sprawie państwowego rejestru granic i powierzchni jednostek podziałów terytorialnych kraju (w brzmieniu skierowanym do rozpatrzenia przez Komitet Rady Ministrów ds. Informatyzacji i Łączności)*. [on-line:] <http://bip.msw.gov.pl/download.php?s=4&id=10204>.
- [9] *Ustawa z dnia 12 października 1990 roku o ochronie granicy państwowej*. Dz.U. z 1990 r. Nr 78, poz. 461 z późn. zm.

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- [10] *Ustawa z dnia 8 marca 1990 roku o samorządzie terytorialnym, później ustawa o samorządzie gminnym*. Dz.U. z 1990 r. Nr 16, poz. 95 z późn. zm.
- [11] *Ustawa z dnia 5 czerwca 1998 roku o samorządzie powiatowym*. Dz.U. z 1998 r. Nr 91, poz. 578 z późn. zm.
- [12] *Ustawa z dnia 24 lipca 1998 roku o wprowadzeniu zasadniczego trójstopniowego podziału terytorialnego państwa*. Dz.U. z 1998 r. Nr 96, poz. 603 z późn. zm.