

THE PROBLEM OF DEMONSTRATING CADASTRAL CHANGES IN SURVEYING DOCUMENTATION*

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Abstract

Surveying works for legal purposes comprise the preparation of various documents, which contain information about the cadastral data regarding real estate. The study has analyzed the documents produced as a result various surveying works, which contain the analysis of the changes in the data on cadastral parcels.

The surveying documentation which was analyzed gives rise to the documents describing changes in land records, such as:

*parcel subdivision,
consolidation and subdivision of parcels,
reparcelling and subdivision,
separation of mortgage bodies,
regulating legal status of real estate,
synchronization list.*

The performed analyses and comparisons revealed significant differences in the terminology of the documents containing the above information. At the same time, documents having the same title, and with a varied form and content, were encountered.

This paper provides examples of documents derived from the analyzed surveys, bearing the following names:

*the list of changes in land records,
the list of changes,
the record of changes in the cadastral data,
the record of changes in parcels,
the record of changes in the cadastral data of parcels,
the list of changes in land records (equivalents),
the synchronization list (equivalent),
the synchronization list.*

There is a general discussion among the surveyors on the vague requirements of the Cartographic Documentation Centres, related to the names and content of the individual documents to be attached to the basic trig data drawn from the surveying work.

Basing on the analyzed examples, it can be stated that even within a single Cartographic Documentation Centres, there are various habits of surveying contractors regarding the preparation of the documents related to unclear legal regulations. On the other hand, there are cases of more specific requirements of the Cartographic Documentation Centres for the title and content of the document, not necessarily justified by the formal and legal situation in this regard.

Keywords: *Synchronization List, regulation of the legal status of real estate, Austrian cadastre.*

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Introduction

The territory of the former Austrian cadastre is characterized by a specific configuration of the record parcels resulting from the fragmentation of the former cadastral parcel (AKIŃCZA et al., 2015). Therefore, the need emerged to demonstrate which former cadastral parcels correspond to the current record parcels. These relationships are presented in the relevant surveying documents, demonstrating changes in the cadastral data (BUŚKO et al., 2014). Among these documents, the one which is particularly important is the Synchronization List, sometimes referred to as the Equivalent. This paper will discuss the issue of preparing the Synchronization List in order to regulate the legal status of real estate. The principles for the preparation of the documentation will be analyzed on the example of a record parcel, which is a road parcel, in order to establish its land and mortgage register, which is a very common type of work in southern Poland. This type of work includes the necessity to prepare the Synchronization List, which will illustrate the relationships between the former cadastral parcels, and the current record parcel, which the documentation relates to. The Synchronization List will subsequently allow for the unification of diverse data in the real estate cadastre and in land and mortgage registers, which is important in terms of updating the information in both registers (PRZEWIĘŻLIKOWSKA, BUŚKO, 2014; BYDŁOSZ, 2015).

This study was based on the analyses of numerous surveying studies on the regulation of the legal status of land. The analysis made it possible to specify different types of documents demonstrating changes in the cadastral data, to formulate the reasons for the discrepancies in their names, form and content, and to formulate the conclusions on the methodology of their proper preparation. The analysis of the cadastral cartographic and descriptive documentation in Poland, regarding specific areas belonging to the different annexation territories, points to extremely varying usefulness of archival documentation to regulate the legal status of real estate, as it was demonstrated in the study (BUŚKO, MEUSZ, 2014).

Analysis of the legal acts with regard to the principles of demonstrating changes in the cadastral data

The subject of the documents related to demonstrating changes in the cadastral data is present in numerous legal provisions to be applied during the preparation of surveying documentation, which was mentioned in the paper (KWARTNIK-PRUC et al., 2012). This chapter will focus on the most essential rules governing the analyzed documents.

Article 24. 2b. 1) h) of the Geodetic and Cartographic Law (ACT, 1989), contains a general provision regarding surveying documentation, pursuant to which:

2b. Update of the information contained in the register of land and buildings is carried out through:

1) substantive and technical proceedings, based on:

h) the application of the interested record entity and surveying documentation specified in this application, accepted into the National Cartographic Documentation Center, (...).

Whereas, §46 of the Regulation on the register of land and buildings (REGULATION, 2001) provides as follows:

3. Changes in the descriptive cadastral data, relating to record parcels or buildings, identified during the execution of surveying works are entered into the Record of changes in the cadastral data, which should include:

1) the identifier of cadastral units;

2) the number of the appropriate land registration unit or item of the files of building structures;

3) the number of land and mortgage register;

4) denotation of the object of the cadastral database, whose data have changed;

5) the existing cadastral data and the data that result from the performed surveying works;

6) the preparation date of the record;

7) the name and surname of the contractor and the signature of the person representing the contractor;

8) the name, surname and signature of the person who prepared the document and the date of its preparation;

9) the name, surname and signature of the manager of surveying works, if appointed;

10) the number of professional qualifications of the person who prepared the document, or the number of professional qualifications of the manager of surveying works.

Article 97 of the Real Estate Management Act (ACT, 1997) mentions the following documents:

- *the list of changes in land records,*

- *the synchronization list, if the designations of record parcels in the real estate cadastre are different than in land and mortgage registers.*

Articles 100 and 108 of the Act (ACT, 1997) provide that the Council of Ministers shall specify *the types and content of these documents* in the relevant regulations, which are the list of changes in land records and the synchronization list.

Therefore, subject to Article 100 of the Real Estate Management Act, the Regulation on the manner and procedure for performing real estate subdivision was issued (REGULATION, 2004), in which §9.1. states as follows:

The map with the project of real estate subdivision includes, in particular:

11) the list of changes in land records;

12) the synchronization list, when in the land and mortgage register - or in the absence thereof - in other documents defining the legal status of the real property, the property being subdivided has other designations and other surface area than in the real estate cadastre;

2. The list of changes in land records and the synchronization list can be prepared as separate documents, which are appendices to the map with the project of real property subdivision.

Despite the requirement of Article 100 of the Real Estate Management Act to provide the content of these documents, there is no information in the Regulation (REGULATION, 2004) what *the list of changes in land records* should include, and with respect to *the synchronization list*, there is only a recommendation in which cases it should be prepared, and not what data it should contain.

Pursuant to Article 108 of the Real Estate Management Act, the Regulation on the real estate reparcelling and subdivision was issued (REGULATION, 2005). Chapter 4 of the Regulation is titled: *Preparation of the draft resolution on real estate reparcelling and subdivision and types and content of the documents necessary to the real estate reparcelling and subdivision proceedings*. Then, §9.1 of the Regulation lists the following documents:

1) the map with the surveying project of real estate reparcelling and subdivision;

2) real estate register, with the existing state and the new state demonstrated after the reparcelling and subdivision.

In this Regulation there is no precise definition on the contents of the documents either, and besides, there is a new definition of *the real estate register*, which was not found previously in any of the analyzed legal acts, in the context of demonstrating changes in the cadastral data. The term *real estate register*, which is to demonstrate *the existing state and the new state* is probably understood as the list of changes in land records, referred to in Article 97 of the Real Estate Management Act, or *the record of changes in the cadastral data*, as in the Regulation on the Register of Land and Buildings (REGULATION, 2001).

Article 26.1 of the Act on Land and Mortgage Registers (ACT, 1982) provides: *The basis for the designation of real estate in the land and mortgage register are the data in the real estate cadastre*. However, Article 27 of the Act provides that: *In the event of inconsistencies in the data of the real estate cadastre with the real estate designation in the land register, the District Court shall (...) correct the designation of the real estate based on the database of the real estate cadastre*. For this purpose, *an excerpt from the cadastral survey is attached, and when necessary - also copy from the cadastral map or other document constituting the basis for the correction of the real estate designation*. For this reason, it happens that the court asks for the document which forms the basis for changing the designation of a real property, for example, the synchronization list.

§76.1. of the Regulation on the establishment and running land and mortgage registers in information system (REGULATION, 2013) states:

The data regarding land and buildings are entered into the land and mortgage register on the basis of a copy of the cadastral map and the excerpt from the land register or other document prepared under the provisions of the Regulation of the Minister of Regional Development and Construction of 29 March 2001 on the register of land and buildings, unless otherwise provided.

2. If the change in the designation of the real estate referred to in section 1 applies only to its location, numbering of record parcels, cadastral unit or the manner of its use, the basis for the entry in the land and mortgage register is an excerpt from the land register.

the synchronization list, which contains the data on the record of changes in the cadastral data from the Regulation on the Register of Land and Buildings, however, is a document which is not cited in the Regulation (REGULATION, 2001). Therefore, pursuant to the content of the Regulation on land and mortgage registers (REGULATION, 2013), it should not form the basis for an entry in these registers. It should, however, be attached to the set of documents, as information of any changes in the cadastral data.

Table 1 is a summary of the analysis of the legal acts, which illustrates differences in the naming of the documents describing the changes in the cadastral data, used in various legal acts.

Table 1. Names of the documents in legal acts.

Name of the legal act	Name of the document							
	Surveying documents accepted into the National Cartographic Documentation Center	Record of changes in the cadastral data	List of changes in land records	Synchronization List	Real Estate Register with the existing state and the new state demonstrated	excerpt from the cadastral survey	Excerpt from the land register	Other document
Geodetic and Cartographic Law (ACT, 1989)	+							
Regulation on the register of land and buildings (REGULATION, 2001)		+						
Real Estate Management Act (ACT, 1997)			+	+				
Regulation on the real estate subdivision (REGULATION, 2004)			+	+				
Regulation on the real estate reparation and subdivision (REGULATION, 2005)					+			
Act on Land and Mortgage Registers (ACT, 1982)						+		
Regulation on the establishment and running land and mortgage registers in information system [REGULATION, 2013]							+	+

Source: own study based on the legal acts.

The problem of the preparation of Synchronization Lists in the former Austrian cadastre

The problem of the Austrian cadastre results from the fact of southern Poland belonging to the former Austrian partition, which affected the principles for the registration of information on real estate in this system (JAINDL, 2014; HANUS, HYCNER, 2010; SPANGL, 2012; PRZEWIĘŻLIKOWSKA, 2013).

The synchronization lists are drawn up in various types of surveying works, including:
real estate subdivision,
consolidation and subdivision of real estate,
reparation and subdivision of real estate,
separation of mortgage bodies,
synchronization lists.

The need to prepare the synchronization list results from the discrepancies between the contents of the land and mortgage register and the real estate cadastre in terms of real property designation or determining its surface area (ACT, 1997). It is a common element of the publications relating to the regulation of the legal status of real estate.

This study will analyze the case of preparing the documentation demonstrating changes in the cadastral data in relation to a record parcel which is a public road. The owner was going to establish a land and mortgage register for this record parcel. At the stage of analyzing the documents, significant differences occurred in the surface area of the current record parcel and the original cadastral parcels which it was consolidated from. Therefore, the need to prepare the synchronization list resulted from the need to clarify the ownership range for the road parcel.

The discussed road (record parcel 185/1) is presented on two maps. The current state is presented on the cadastral map in the scale of 1:1000 (Fig. 1). The archival state of the discussed road is presented on the cadastral map in the scale which is typical for the Austrian cadastre, i.e. 1:2880, presenting the parcel 435 (Fig. 2).



Fig. 1. The record parcel 185/1 (the road) on the cadastral map in the scale of 1:1000. Source: own study on base of Geodetic and Cartographic Resource.



Fig. 2. The cadastral parcel 435 (the road) on the cadastral map in the scale of 1:2880. Source: Own study on base of Geodetic and Cartographic Resource.

When beginning the analysis of the existing documents which are relevant for the synchronization. A draft comparing the content of the cadastral map with the cadastral map for the record parcel in question is drawn up (Fig. 3). The comparison draft for the road parcel 185/1 demonstrated that it includes the former parcel 435 (the road). At the same time, it clearly shows that the width of the current road changed significantly in relation to the old road. The current boundary of the record parcel divides the former cadastral parcels into two parts, one of which is included into the analyzed road parcel 185/1. Therefore, in order to synchronize the respective parts of the cadastral parcels and record parcels, conventional subdivision of the former cadastral parcels should be carried out, in order to separate these parts of the parcels which became part of the road parcel. Such subdivision is performed only in the graphic form on the cadastral map, in conformity with the course of the boundary line of the current record parcel. In this case, the division of the parcels was carried out only for a few parcels along the road.

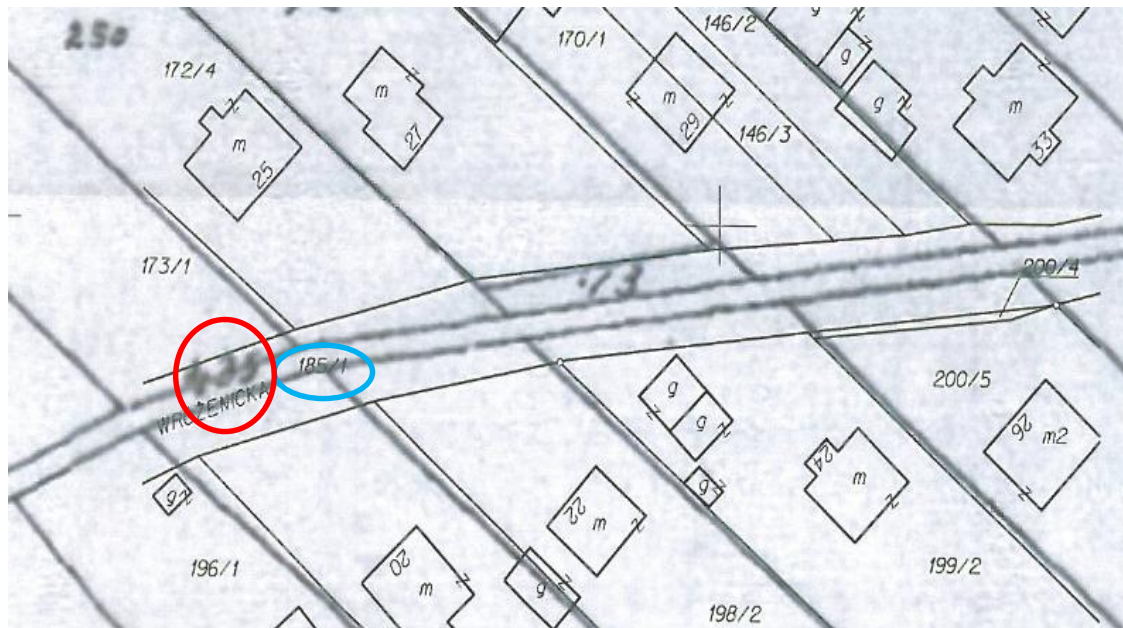


Fig. 3. A draft comparing the content of the cadastral map with the cadastral map for the road 185/1, comprising the former parcel 435. *Source: own study on base of Geodetic and Cartographic Resource.*

Regarding the record parcel 185/1, several documents were created over the years, recording changes in the data on these cadastral parcels and record parcels of different, inconsistent names and questionable synchronization in terms of the area.

The oldest of the existing documents is the one named The list of changes in land records (Equivalents) of 1992 (Fig. 4). There is the cadastral parcel 435 of the area of 0.4971 ha, equalized as the record parcel 185 of the area of 0.8006 ha. This is a document which demonstrated equivalents at the transition from cadastral parcels to record parcels, but in this case only of the numbers of the objects: cadastral parcel – record parcel, without equalizing their surface.

Wykaz zmian gruntowych

/równoważników/

dla dz. 44, 216, 118, 165, 185, 238, 228, 251,
229, 289, 324, obj. Spisem dróg publ.

STAN DOTYCHCZASOWY												STAN RÓWNY											
Nr. jednolitej regulacji	Obręb. grunt. pow. pow. kw. pow. kw.	Nazwisko (imię i nazwisko) rodziny mającej za interes właścic. (właścic. wsp.) Nazwa osoby prawnej (siedziba)	Powierzchnia		Kształt i sposób użytkowania	Klasa gruntu	Powierzchnia			Obręb. grunt. pow. pow. kw. pow. kw.	Nazwisko i imię osoby, która posiadała grunt w sprawie ewid. grunt. i budynków	Data dokonania zmian w sprawie ewid. grunt. i budynków											
			ha	a			m	ha	a				m										
427	58	Wrocławskie	499	009			44	000	000														
428	58	Wrocławskie	496	009			216	000	000														
429	58	Wrocławskie	403	000			118	000	000														
430	58	Wrocławskie	423	000			165	000	000														
431	58	Wrocławskie	446	000			185	000	000														
432	58	Wrocławskie	406	000			238	000	000														
433	58	Wrocławskie	460	000			228	000	000														
434	58	Wrocławskie	427	000			229	000	000														
435	58	Wrocławskie	430	000			289	000	000														
436	58	Wrocławskie	421	000			324	000	000														
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477	58	Wrocławskie	421	000																			
478	58	Wrocławskie	421	000																			
479	58	Wrocławskie	421	000																			
480	58	Wrocławskie	421	000																			

Fig. 4. Stage I – 1992 – The list of changes in land records (Equivalents), the cadastral parcel 435 of the area of 0.4971 ha, and the record parcel 185 of the area of 0.8006 ha. *Source: own study on base of Geodetic and Cartographic Resource.*

In 1995, the modernization of the cadastre was carried out on the analyzed area. It regarded the demonstration of changes in the surface areas, also resulting in the renumbering of record parcels. Therefore, the record parcel 185 of the area of 0.8006 ha, due to a change in its surface to 1.1117 ha, received a new number 185/1. This change is presented in a document called The list of Equivalents, which is a summary of the conducted modernization (Fig. 5).

WYKAZY RÓWNOWAŻNIKÓW
część B

Nie nadające się do ujawnienia w księgach wieczystych
bez przeprowadzenia zabiegów prawno-techn.
przez zainteresowanych posiadaczy gruntów

Stan dotychczasowy											
Lp.	Nr jedn. rej.	Ks. Wiczz. 28813	Nazwisko i imię, imiona rodziców właściciela (władającego) Nazwa osoby prawnej siedziba	Numer	Określenie położenia	Rodzaj użytku lub przezn. budynku	Klasa	Powierzchnia		Określenie zasady zmiany data i rodzaj dokumentu	
								ark. mapy	dnali		ha
1	2	3	4	5	6	7	8	9	10	11	
	203	KW 28813	Gmina Kraków	783C	74	obr.61 Włożeńce		0	08	58	modern.oper.ewid. gruntów H-3420/3095 z dn.1996.07.12
				783C	833A	79	" "	0	12	02	" "
				833A	833	185	" "	0	80	06	Błędna pow.dz.185 w dotychczasowej ewidencji

Stan nowy										
Nr ark. mapy	Numer działki	Określenie położenia	Rodzaj użytku lub przezn. budynku	Kl.	Powierzchnia		Nr jedn. rej.	Określi. Księgi wiecz. Rep. KW	Nazwisko i imię imiona rodziców właściciela (władającego) Nazwa osoby prawnej (siedziba)	Data dokonania zmian w operacie ewidencji gruntów i budynków
					ha	a m ²				
12	13	14	15	16	17	18	19	20	21	
783C	74/1	obr.61 Włożeńce		0	11	27	203	KW 28813	Dotychczasowy	
783C	833A	79/1	" "	0	14	34	" "	" "	" "	" "
833A	833	185/1	" "	1	11	17	" "	" "	" "	Na podstawie Dec.302/1276/94/ZI Gmina Kraków

Fig. 5. Stage II - 1995 - The lists of Equivalents after the modernization, the parcel 185 of the area of 0.8006 ha - the parcel 185/1 of the area of 1.1117 ha. Source: Own study on base of Geodetic and Cartographic Resource.

Other documents which are important for the synchronization are individual studies on the cadastral parcels with the numbers 281/4, 282/4 and 259/3. These parcels have been identified on the cadastral map as located within the area of the road parcel 185/1. The analyzed documents are the result of the previously carried out subdivisions of the cadastral parcels located next to the road. Basing on the analyses of numerous studies on the synchronization, it can be concluded that this type of subdivisions, carried out during the synchronization, were presented in various forms. In all the cases, the result was a map, and the settled area. However, the graphic form, the name of the map, and the form of the record of the area settlement were not uniform. For the analyzed cadastral parcels, their subdivisions are presented in the form of documents in Figures 6 and 7. In one case, the documentation consists of Complementary map of the subdivision of cadastral parcels together with Record of changes in cadastral parcels (Fig. 6), and in another - Cadastral map, with the so-called Settlement of cadastral parcels (Fig. 7).

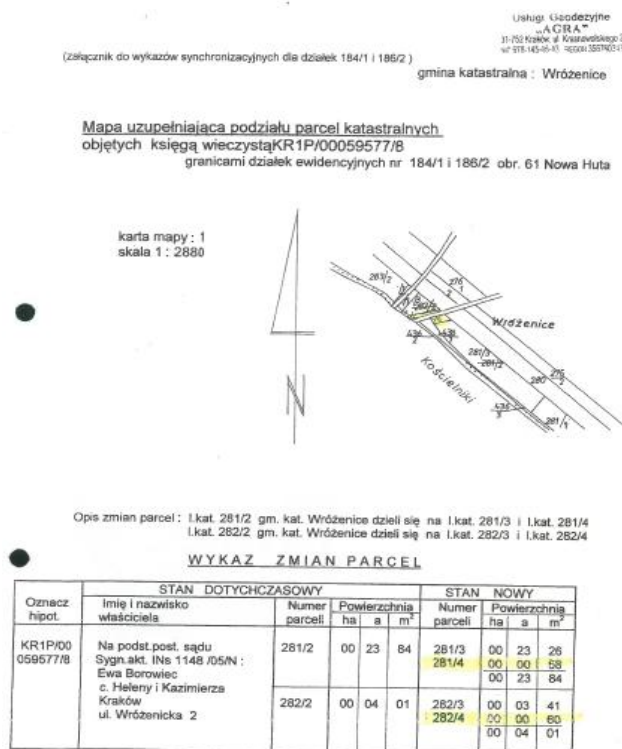


Fig. 6. Complementary map of the subdivision of cadastral parcels with Record of changes in cadastral parcels. Source: Own study on base of Geodetic and Cartographic Resource.

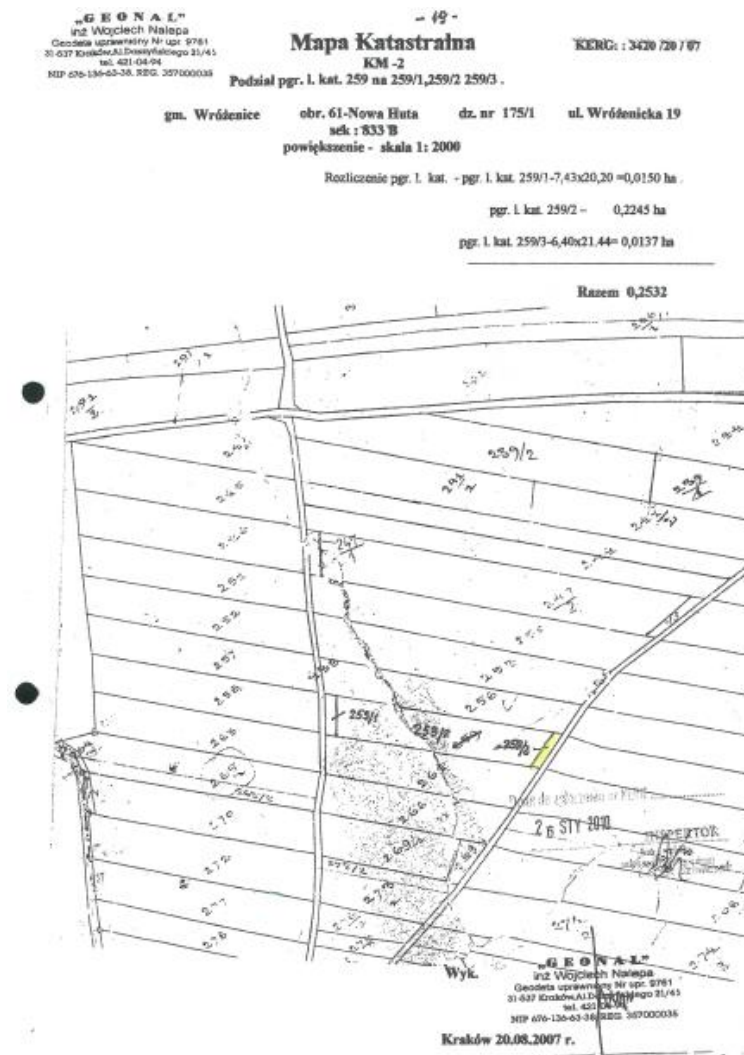


Fig. 7. Cadastral map with Settlement of cadastral parcels. *Source: Own study on base of Geodetic and Cartographic Resource.*

Basing on the performed subdivisions of the cadastral parcels, they were drawn on the cadastral map in the scale of 1:2880 (Fig. 8).



Fig. 8. Cadastral parcels after the subdivision, on the cadastral map 1:2880. *Source: Own study on base of Geodetic and Cartographic Resource.*

The parcels separated on the cadastral map were then marked on the map in the scale of 1:1000. Figure 9 illustrates two of the separated parcels (l. kat. 282/4 and 281/4).

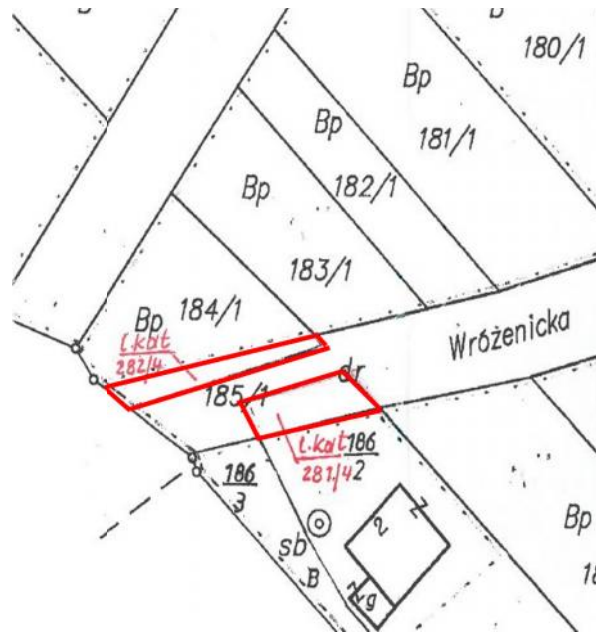


Fig. 9. Parcels after the subdivision on the cadastral map 1:1000. Source: Own study on base of Geodetic and Cartographic Resource.

Based on the above documents, the Synchronization List (the Equivalent) was drawn up in 2010 (Fig. 10). Then, in the Existing state, there is a hybrid, which includes the record parcel 185 with the surface it had before the modernization in 1995, which is 0.8006 ha, and three cadastral parcels: 281/4, 282/4 and 259/3. These objects were equalized as the record parcel 185/1, occurring in the New state of the Synchronization List.

WYKAZ SYNCHRONIZACYJNY (RÓWNOWAŻNIK)

dla dz. ewid. Nr 185/1 - obr. 61 - Nowa Huta

STAN DOTYCHCZASOWY						
l.p.	Nr KW	Imię i nazwisko właściciela (władającego)	Polożenie nazwa - b. gna. kat. lub jedn. ewid.	P.gł. Lkat. dz.	Powierzchnia ha a m ²	Restrykcje/zusługi zmiany
1	KR1P/0025446/3	Gmina Kraków	obr.61 Nowa Huta	dz. 185	80 06	modernizacja opern ewidencji gruntów
2	KR1P/0028957/3	Ewa Borowicz c. Kaminierski i Dębny Nr. 208b Dv. SN.P. AC. 777.6.1-2015.07 c.dn. 2012.08.22 Gmina Kraków	sgm.kst. Wólczynek	Lkat. 281/4 Lkat. 282/4	09 58 00 06	
3	KR1P/0032149/1	Tadeusz Maj s. Twójta i Marii d/s. ewid. Pow. SN.P. AC. 777.6.1-2015.07 c.dn. 2012.08.22 Gmina Kraków	sgm.kst. Wólczynek	Lkat. 259/3	01 57 0 82 61	

STAN NOWY														
Nr arkusza mapy	Nr działki	Określenie położenia - obr. jedn. ewid.	Powierzchnia			Nr jedn. rej.	Nr KW	Imię i nazwisko właściciela (władającego)	Uwagi					
8	9	10	ha	a	m ²	11	12	13	14					
8320	185/1	obr. 61 Nowa Huta	1	11	17				Gmina Kraków					

Niniejszy wykaz synchronizacyjny stanowi wykaz synchronizacyjny Nr II-3429/30/95 z dn. 12.07.1996r. w zakresie działki 185/1 obr. 61 Nowa Huta.

Podpisano: M. Ostrowski, Geodeta
"GEOLOG" Sp. z o.o. ul. Młocznik 12
01-653 Warszawa - tel. 22 629 11 11
ul. Chałubińskiego 11 - 01-653 Warszawa
REGON 143832 - KRS 0000390300

Sporządziła: K. Szostak
dn. 1.02.2010r.
GEOGRAFIA I URZĄDNIKI

Fig. 10. 2010 - Synchronization List (Equivalent), Existing state - the area of 0.8261 ha - New state - the area of 1.1117 ha. Source: Own study on base of Geodetic and Cartographic Resource.

The List, therefore, synchronized the objects which in the Existing state included both the former cadastral parcels as well as the record parcel, of the total area of 0.8261 ha, whereas the New state demonstrates the current record parcel 185/1 of the area of 1.1117 ha. Therefore, the difference

in the former and the new states is 0.2856 ha. The discrepancy in the area of the parcels illustrated in the Synchronization List proves that these three cadastral parcels "added" to the record parcel 185, however, still do not cover the whole parcel 185/1. Therefore, it is clear that the synchronization has not been completed yet, and the Synchronization List should only be regarded as a certain stage leading to the full synchronization of cadastral and record parcels.

The fact that it is allowed to carry out the process of synchronization in the former Austrian cadastre in stages, is demonstrated by another survey of the performance of the Synchronization List of 2012, relating to the analyzed record parcel number 185/1. It is associated with identifying yet another cadastral parcel number 247/3, as part of the road parcel 185/1 (Fig. 11).

WYKAZ SYNCHRONIZACYJNY (RÓWNOWAŻNIK)

DLA SĄDU REJONOWEGO KRAKÓW-PODGÓRZE WYDZIAŁ KSIĄG WIECZYSTYCH

korygujący wykaz zmian gruntowych
z operatu KERG 3420-5/2010 z 04.03.2010r.

dla działki 185/1 obr. 61 Nowa Huta złożonego przy KW 450562

WYKAZ SYNCHRONIZACYJNY DLA DZIAŁKI NR 185/1 OBR 61 NOWA HUTA

KERG: 2613-37/2012

STAN DOTYCHCZASOWY						
Lp.	Nr KW	Imię i nazwisko właściciela (władającego)	Państwo nazwa - h, g, km, lub, jedn. ewid.	p. gr. l. kat. dz.	Powierzchnia ha a m ²	Rodzaj rodz. oznac.
1	2	3	4	5	6	7
1	KRIP/002154463	Gmina Kraków	Obr 51 Nowa Huta	06185	00 36	
2	KRIP/000954728	Rewa Baranów, s. Karolierka i Heleny miejsc. obs. 3347, 40, 7721, F. 3933-92, s. 9, 52, 2409, Gmina Kraków	h, g, km, Wólki	06204 06284	00 58 00 50	modernizacja operatu ewidencyjnego
3	KRIP/000331981	Tadeusz Maj, s. Tomiła i Marii miejsc. obs. 3027, 35, 7724, F. 4073-07, s. 17, 24, 2496, Gmina Kraków	h, g, km, Wólki	06292	01 37	
4	KRIP/003444982	Dariusz Maj, s. Karolierka i Katarzyna miejsc. obs. 3347, 40, 7721, F. 3933-92, s. 9, 52, 2409, Gmina Kraków	h, g, km, Wólki	06273	01 38	
RAZEM					0 84 99	

Niniejszy wykaz synchronizacyjny stanowi wykaz synchronizacyjny N/11-3439/2012 z dn. 17.07.2012r. w zakresie działki 185/1 obr. 61 Nowa Huta.

STAN NOWY									
Nr. arbu. mpy	Nr. działki	Określenie położenia obr. jedn. ewid.	Powierzchnia			Nr jedn. reg.	Nr KW	Imię i nazwisko właściciela (władającego)	Uwagi
			ha	a	m ²				
8	9	10	11	12	13	14	15	16	17
833HA	185/1	Obr. 61 Nowa Huta	1	11	17		jak w kol. 2	Gmina Kraków	
RAZEM			1	11	17				

Fig. 11. 2012 - Synchronization List (Equivalent), Existing state - area 0.8459 ha – New state - area of 1.1117 ha.
Source: Own study on base of Geodetic and Cartographic Resource.

It should be noted that despite yet another synchronization, the total area in the Existing state increased by only 0.0198 hectares, and the difference in the surface area before and after the synchronization decreased slightly, but is still present, and after this stage it amounts to 0.2658 ha.

Figure 12 illustrates the synchronization process which was carried out, demonstrating individual objects (cadastral parcels and record parcels) and the stages of their synchronization.

In these stages, the use of unauthorized, diversified naming of the documents presenting the changes in the cadastral data in various years, is significant. At the same time, schematically different value of the area of individual cadastral and record parcels, occurring at successive stages of the synchronization, is visualized. This demonstrates the need to undertake further steps aimed at the full synchronization of the objects regarding their surface area.

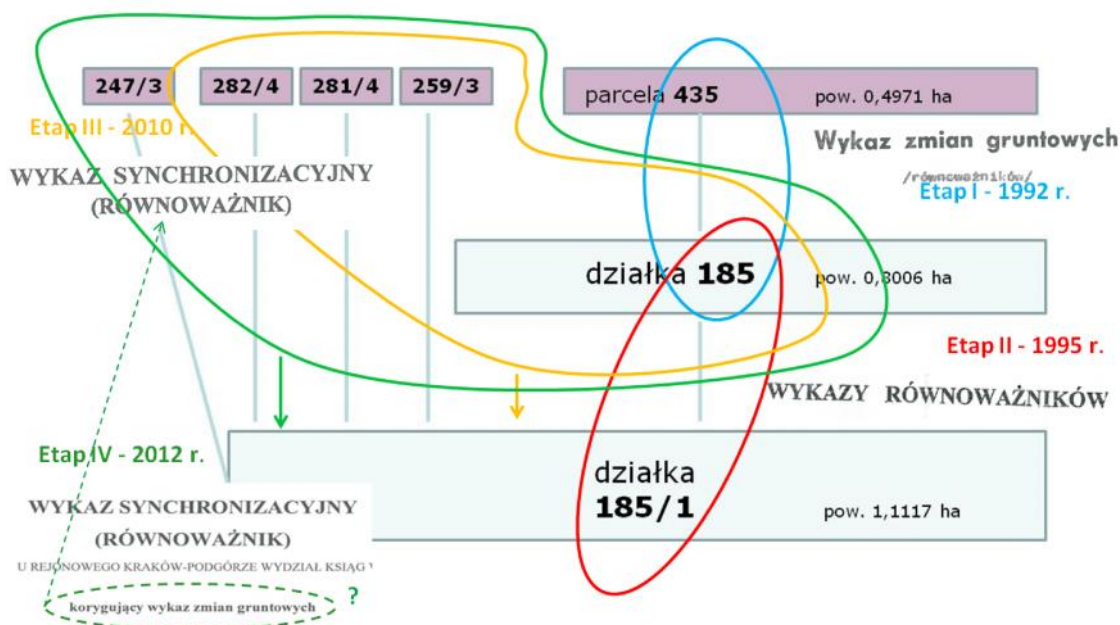


Fig. 12. Schematic diagram illustrating the synchronization stages for the record parcel 185/1.

Source: Own study.

To sum up the discussed case, attention should also be paid to the non-uniformity and inconsistency in terminology of the used documents, drawn up as part of the synchronization of one record parcel with cadastral parcels, at various stages of the work (Tab. 2). When analyzing the content and titles of the individual documents found in the archival surveys, their titles have been listed in Table 2, and the attempt was made to assign the appropriate name of the document, depending on its existing content.

Table 2. Comparison of the titles of the descriptive documents as part of the synchronization.

The year in which the document was drawn up	Name of the document existing in the surveys	Suggested name of the document	Reasons for the suggested name of the document
1992	List of Changes in Land Records (Equivalentents)	Synchronization List – Equivalent	Synchronization of cadastral parcels and record parcels
1995	List of Equivalentents	Record of Changes in Cadastral Data	Effect of the performed modernization of land records
2010	Synchronization List (Equivalent)	Synchronization List – Equivalent	Synchronization of cadastral parcels and record parcels
2012	Synchronization List (Equivalent)	Synchronization List – Equivalent	Synchronization of cadastral parcels and record parcels

Source: Own study.

Conclusions

1. Lack of uniformity in the naming of the documents which demonstrate the changes in the cadastral data in the existing legislation, results in a variety of names for these documents used by contractors.
2. Lack of definition of the content of the documents set forth in the legal acts results in the variety of contents in the documents drawn up to demonstrate changes in the cadastral data.
3. The need to prepare the Synchronization List, according to the literal understanding of the legal provisions, should emerge in the case of the inconsistencies between the designation of the real estate in the real estate cadastre and in the land and mortgage register. If, in the former Austrian cadastre, the synchronization also applies to the mutual relationships between the objects that no longer exist (cadastral parcels) and the record parcels existing nowadays, such Synchronization List should have an additional denotation – the Equivalent. Therefore, the term Equivalent used in southern Poland should be permitted only in the case of the synchronization of cadastral parcels with record parcels.

4. The fact that the Synchronization List was prepared pursuant to the literal understanding of its title should suggest the organization of the information on the objects in the Existing state and in the New state in the ratio of 1:1. The question which remains unexplained is: to what extent should the synchronization relate to the surface area? In the former Austrian cadastre, performing the synchronization of the cadastral parcels and record parcels in stages is sometimes a necessity, because frequently the requirement to fully regulate, e.g. the whole road due to the order for single plots, would create a domino effect to regulate an infinite number of parcels.
5. The Synchronization List should contain a reference to the surface area of cadastral parcels and record parcels, in every case. If there is no possibility to fully synchronize the value of the surface area of the synchronized objects, it is required to refer to the causes of this impossibility. Sometimes the discrepancy in the values of the areas will be justified. e.g. by the lack of any descriptive documentation (in the land and mortgage registers or in the archival cadastral descriptive documentation, where the only source of information on the area is a low accuracy cadastral map).
6. The lack of the definition of the form and content of the Synchronization List in the legal acts has two kinds of negative effects:
the contractors have no pattern to prepare such a document,
surveying administration can not specify the legal basis for the refusal to accept the improperly prepared documents in the situations which are not obvious.

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