

COMPENSATION FOR ESTABLISHING TRANSMISSION LINE EASEMENT: PARTS OF LAND AFFECTED AND PERSONS INVOLVED

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ARTICLE INFO	ABSTRACT
Keywords: transmission easement, usage/technological band, active/passive easement, procedure	The identification of the scope of the limited property law (that is transmission easement), as well as the taking of appropriate actions, has become difficult. The far from sufficient implementation of rules has led to numerous disputes, the resolution of which has been sought in court. Very generalized legal bases, interpretation of regulations and the acceptance of the rulings of common courts have made the development of operating procedures possible and have determined the persons participating in performing work related to transmission easement.
JEL Classification: K40, R52	The specifics and the multidimensionality of the subject requires cooperation from several experts. The methodological bases are limited, and the regulations unclear. The goal of the research is the standardization of designations of component parts and activities associated with transmission easement. The entire process is made easier by a set procedure proposed in the form of an outline. This study draws attention to individual activities and the order in which they are performed. This allows individual specialists to carry out the next stages of work, which in turn leads to sanctioning the rights of the grantee, while determining fair and satisfactory compensation for the grantor.
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1. Introduction

The need to regulate the legal status of the presence of transmission facilities in the land, as well as the need to streamline investment processes, have led to the creation of legal provisions relating to the possibility of installing transmission facilities on real estate owned by natural and legal persons. These regulations are based on civil law and administrative law.

After the amendment to the *Act of May 30, 2008 amending the Civil Code* (Journal of Laws No. 116, item 731), the concept of transmission line easement was introduced into the legal system. This amendment

included, among others, Article 305¹ [1] on the possibility of encumbering real estate with a transmission line easement. In the context of administrative law, the restriction of the manner of using the real estate is referred to in Art. 124 of the *Real Estate Management Act* of August 21, 1997. Both the provisions of the Civil Code and the content of Art. 124 of the *Real Estate Management Act* (although they

¹ Art. 305¹. Real estate may be encumbered in favor of an entrepreneur who intends to build or whose property is the equipment referred to in Art. 49 § 1, the right that the entrepreneur may use the encumbered property within a specified scope, in accordance with the intended use of these devices.

are not identical, regulating respectively: the establishment of easements and the location of equipment) enable legal regulation of transmission facilities lying on third-party properties. It was then, when the process of regulating transmission facilities located in areas belonging to a third party began. The authors of the work Chęciński and Marzec (2016), who also consider the issue of the constitutionality of issues related to transmission easement, write about the topic. The greatest doubts are caused by: the construction of a land easement with the content of transmission easement, the possibility of its usucaption, as well as including the course of the usucaption of a land easement with the content of transmission easement in the scope of the usucaption of transmission easement. The work contains an analysis of the development of legislation, completed with the amendment of the Civil Code introducing the institution of transmission easement.

On the other hand, the historical outline of the creation of easements, from Roman law to contemporary Polish legislation, can be found in the work Fermus-Bobowiec and Szpringer (2010), and in the work of Jachymska (2013), especially in relation to the Polish reality following World War II.

Determining the scope of *limited property rights* (a phrase mentioned in civil law) as well as limiting the use of real estate (administrative law), proved to be challenging, as highlighted by the authors of the study (Rakoczy et. al., 2017). The lack of implementing regulations has led to many disputes, the solution of which was sought in court. Very general legal bases, various interpretations of regulations and decisions of common courts forced the development of methods of operation and the selection of persons participating in the implementation of works related to the easement in question.

A separate issue is the estimation of the financial compensation for the transmission easement and the calculation of the value of this limited property right. This was dealt with by many authors, also outside of Poland. Colwell and Sanders (2017) studied the impact of high-voltage overhead transmission lines on the value of agricultural land in two US states, demonstrating the legitimacy of compensation. Similar studies were conducted by Rosiers (2002) in Canada. The topic of the impact of various types of utilities on the value of real estate has been raised in scientific publications for a long time. We can trace the evolution of the approach to the problem and the identification of recurring regularities, e.g. in the works

of Cowell (1990), Rosiers (2002) or Freybote and Fruits (2015).

Due to the large differences between the provisions of civil law and administrative law, this article will be limited only to issues related to the establishment of transmission easements, in accordance with Article 305¹ of the Civil Code, because it is this procedure that requires detail and a precise description of the issue of marking plots of land affected by transmission, indication of the powers of the grantee, and the adoption of a clear method of calculating financial compensation.

2. Designation of a part of real estate affected by locating transmission facilities

It should be clearly emphasized that the effects of locating a transmission facility on real estate are significant. The encumbered property not only loses its full functional capacity, but also suffers legal damage. The owner loses the ability to fully use the land and is obliged to accept the activities of the transmission company on their property, as indicated by Gołba (2013). Moreover, part of the land is used by the transmission company for industry-related purposes, which may cause various restrictions for the property owner.

Therefore, the basic issue is to determine the scope of use of the encumbered property. The list of rights of the grantee constitutes the basis for determining the plot of land subject to encumbrance. The rights and obligations of the transmission company (as the owner of the network) should result from the catalog of activities consistent with the intended use of the transmission facility as mentioned in (Dadańska, 2012) (civil law provision). The obligations of the owner of the encumbered property therefore result from the needs of the company. Generally, the encumbered party has to accept all restrictions imposed by the network owner. Therefore, determining the rights of the grantee is essential for establishing the actual dimension of nuisance resulting from the imposed encumbrance.

In the authors' opinion, the scope of the rights of the grantee should be limited to the necessary minimum, and the geometry of the easement strip should be adopted in such a way that it enables the implementation of activities related to the content of the easement. The positions of individual parties to the proceedings cannot be uncritically accepted, as they are often dictated by the desire to obtain excessive benefits. This issue is described in detail in

the article (Bogdan et. al., 2022)

After completing a legal examination, examining the content of the application and the scope of the powers of the grantee, we can begin to geometrically mark the parts of the property closely related to the transmission easement. These are those areas of land where the property experiences measurable effects of the encumbrance, which will be used by the expert to calculate the financial compensation. The plural in the phrase "plots of land" is not accidental. The analysis of available court decisions, industry literature and methodological premises indicates the need to mark several areas closely related to the transmission easement.

Based on professional experience and industry literature, the following division of the scope of encumbrance resulting from the established easement has been developed:

- the zone of legal consequences of locating the facilities - results from the provisions of Zoning Ordinance and administrative decisions (e.g. decisions on land use conditions or decisions on the location of a public purpose) - for this area, we calculate the first part of the compensation, i.e. compensation for the legal consequences of locating the facilities (the

amount of compensation for this area is sought and determined on the basis of separate provisions of administrative law, but cannot be omitted in the calculation process, as discussed later in the article);

- the zone of influence - results from restrictions caused by placing the facilities on the property
- passive zone - in this area we calculate the second part of the compensation, i.e. compensation for the loss of value of the property as a result of the construction of the facility and the extended catalog of rights of the grantee;
- technological (operational) strip used by the company actively - here the transmission line easement is implemented along with the entire set of rights and obligations of both entities (land owner and company) - this strip is the basis for calculating the third part of the compensation, which is the remuneration;
- occupation zone – horizontal projection of the device within the outline of its external shapes.

The individual zones related to the encumbrance in question on an example of the actual situation of plot No. 606/15 are presented in the following Figures 1-4.

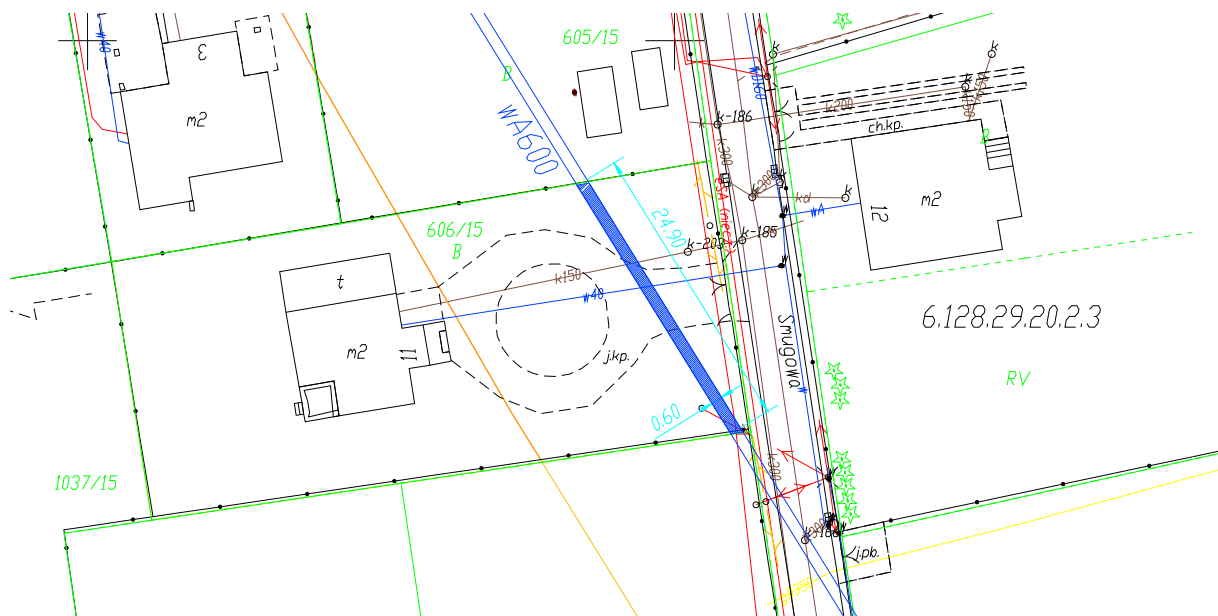


Fig. 1. Plot 606/15; blue - band of occupation of plot 606/15 by a fi600 water main (dimension 24.90 m × 0.60 m). Source: own study.

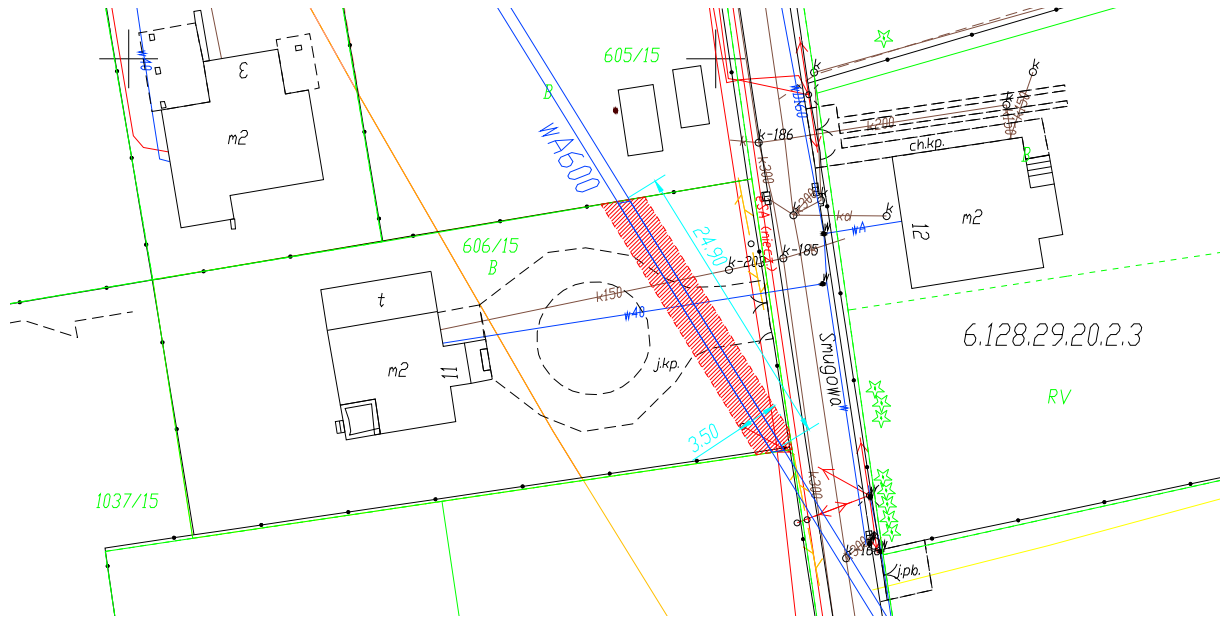


Fig. 2. Plot 606/15; red – band of transmission easement with width indicated by the transmission company (dimension 24.90 m × 3.50 m).
Source: own study.

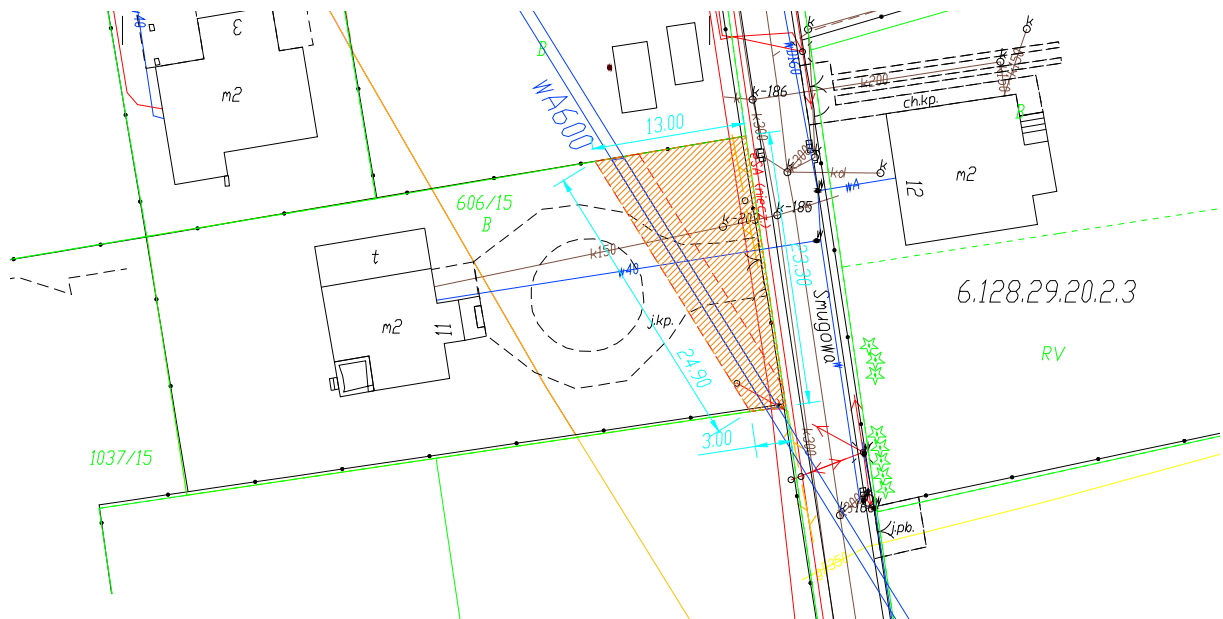


Fig. 3. Plot 606/15; orange - area of influence of the constructed facility on the encumbered property (trapezoid with dimensions 24.90 m, 13.00 m, 23.30 m, 3.00 m). *Source: own study.*

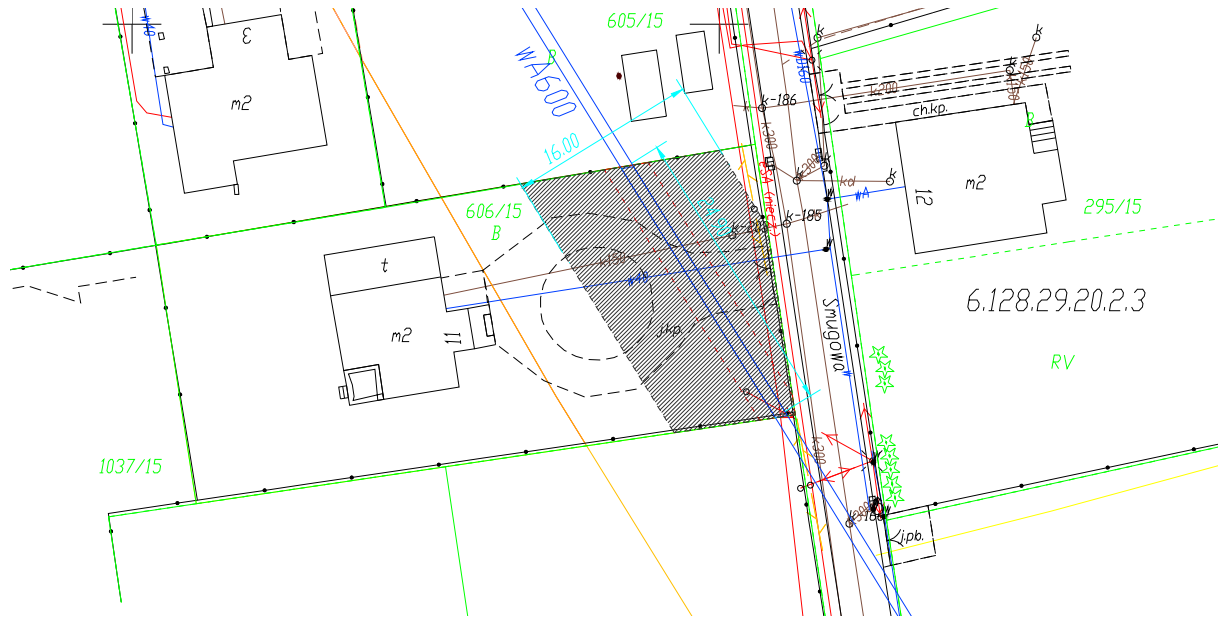


Fig. 4. Plot 606/15; grey color - area of legal effects of the constructed facility on the encumbered property (zone marked in the Local Development Plan as a 16.00 m wide band). Source: own study.

As written earlier, the above division of plots results from the analyses of industry literature as well as specific cases encountered in professional practice. There is no legal basis enabling the clear marking of strips of land subject to encumbrance.

The easiest one to define is the occupancy strip, understood as a projection onto the horizontal plane of the extreme infrastructure elements or the outline of a facility. The surveyor, as the person professionally involved in conducting measurements on the ground, is entirely responsible for marking this projection.

The marking of the occupancy strip is the basis for defining the next area, i.e. the service (operation) strip. The nomenclature in this respect varies, but it should be assumed that this area constitutes the actual transmission easement strip. It is this strip that is presented on the maps that constitute the basis for disclosing the easement in the land and mortgage register and that suffers the greatest damage as a result of the imposed encumbrance. Therefore, it can be said that the transmission easement strip (service strip) is the area in which the transmission company carries out its activities: it transmits utilities, uses real estate to a specific extent and performs activities related to the maintenance and operation of the network. In the industry literature (Fermus-Bobowiec & Szpringer, 2010), this area is also called the active easement strip, which is related to the transmission company's permanent use of the encumbered property. This area will have an extremely large impact on the method of calculating financial compensation

for the establishment of an easement. In relation to this strip, the remuneration paid by the transmission company and related to the continuous use of the land is calculated.

The graphic route of the active easement strip must be presented on a map prepared by an authorized surveyor. The surveyor is obliged to undertake a number of activities, as a result of which cartographic documentation is created, enabling the disclosure of the easement in the third section of the encumbered land and mortgage register, according to the Regulation (2020).

An accurately prepared map involves more than just introducing the markings required by law. The key issue is to adopt appropriate widths of strips connected with the easement to be established. It is therefore necessary to involve additional authorized specialists in the construction and operation of transmission facilities and a property appraiser. A comprehensive approach to this issue allows for taking into account all factors affecting the final size of the easement, as well as the calculated financial compensation. Ignoring the opinions of competent experts at this stage may lead to the omission of key factors affecting the final result.

Failing to involve a property appraiser when creating a map may result in not taking into account another key area of the property affected by the encumbrance, i.e. the impact strip resulting from the construction (founding) of a facility on the property in question, as indicated by Dąbek et al. (2015). It should

be remembered that this is an area in which the free use of the property by its owner is restricted. The fact that the facility remains on the land limits the full use of the property's potential. The very establishment of a limited property right and its entry in section III of the land and mortgage register also generates such an encumbrance. This strip is therefore directly related to the compensation for building a facility on the property. This is not about the co-use of the land, but about the encumbrance that the facility itself on the property has on its value. We call this passive influence. In this case, we encounter a potential loss of value for which a different type of compensation is due.

The width of the active easement strip and the passive impact strip of the facility on the value of the property is the scope of rights assigned to the grantee. The Supreme Court ruled on this subject in its resolution of December 11, 2015 (reference number III CZP 88/15), in which it presented the rights of the transmission company related to the transmission line easement. The Supreme Court indicated that an industrial enterprise is authorized to enter land in order to undertake activities necessary for the maintenance, repair, modernization, supervision or removal of failures of transmission facilities.

Such an extensive scope of rights of the grantee becomes the basis for determining the width of the transmission line easement and the strip of influence of the facility on the value of the property. We deal with the following variants of adopting the width of easement strips and the strip of passive impact of the facility on the value of the property:

- for networks for which legal ordinances were issued that contain unequivocal definitions of technological, controlled, etc. bands – the easement band ought to be assessed directly from the contents of the ordinance (e.g. gas and oil pipelines), according to the Regulation (2013);
- for networks for which legal regulations have been issued, but which not contain clear size markings - the easement strip can be taken from the content of the regulation, adopting its selected interpretation (e.g. telecommunications networks), according to the Regulation (2005);
- for networks for which no legal regulations have been issued and the company has internal guidelines or technical standards - the width of active easement strip and passive impact strip can be taken from such a study as the value

recommended for use;

- networks for which no legal regulations have been issued and the company does not have internal guidelines or indicates an unreasonable size of the easement strip - the easement route may be designated on the basis of consistent statements of both parties or on the basis of the opinion of an industry expert.

Additionally, it should be emphasized that when determining the width of the passive impact strip of the constructed facility on the value of the property, the following conditions are taken into account:

- possible inability to construct buildings and permanent structures consistent with the intended use of the land;
- inability to develop narrow fragments of land located between the easement strip and the property boundary;
- inability to conduct agricultural or forestry production;
- lowering the value of the real estate;
- guidelines resulting from occupational health and safety regulations regarding the conduction of construction works and storage of materials in the immediate vicinity of the transmission facility;
- inability to carry out earthworks near the transmission facility;
- other substantial limitations affecting the market value of the real estate.

If it is not possible to prove the need to extend the transmission line easement strip by an additional area of the impact strip, the best solution is to assume that both strips overlap each other. In such a case, the amounts of compensation and remuneration for the use of real estate will be calculated for the same area of the encumbered strip, and the map for legal purposes will include an appropriate entry in the descriptive part.

The last (the least common as noted in (Dąbek et al., 2015)) zone included in the analysis is the area of legal consequences of the location of the facility. Designating this zone affects the final result and stems from planning clauses. On that account, the range of this limitation is determined based on the following documents:

- Local Land Use Plan;
- the decision on land use and development conditions;
- the decision on the location of a housing investment;

- the decision on the location of a public purpose investment.

The above-mentioned planning documents and administrative decisions are prepared in a descriptive and graphic form. The descriptions contained therein and the maps indicating the lines separating the various land uses constitute the basis for accepting the areas in which the property is subject to restrictions due to the legal consequences of the location of the infrastructure.

The effects of the existence of this strip on the encumbrance on the property may be significant. However, it should be emphasized that compensation in this respect may only be claimed on the basis of separate provisions. However, this impact is not without significance when calculating the financial compensation for the established transmission easement. This will be discussed in a separate publication devoted to the methodology of calculating compensation and remuneration in this respect.

3. Persons authorized to prepare documents relating to the establishment of transmission easement

Various specialists should be involved in the process of preparing documentation constituting the basis for establishing a transmission line easement. Unfortunately, not everything in this respect has been indicated in the legal provisions. Some court decisions specify the scope of activities performed by appropriate persons. The analysis of numerous practical cases leads to the formulation of stages for the optimal separation of operational scopes:

1. Appointment of an expert with specialist knowledge for a given type of facility, whose opinion on the width of the occupation strip, easement and impact strip will be binding; however, they cannot make any binding decisions regarding the area to be encumbered.
2. Using the services of a surveyor who will determine the area of individual strips, calculating it in relation to the property boundaries and the existing situation on the land. The entire study prepared by a certified surveyor must meet the requirements of a document intended for making entries in the land and mortgage register (as mentioned above).
3. At the end of the entire process, it is advisable to engage a property appraiser who will

calculate the amount of the so-called appropriate remuneration for the established transmission line easement, based on data prepared by an industry expert and an authorized surveyor.

In practice, we can encounter the procedure described above in proceedings before common courts. However, this happens very rarely due to the high costs and time-consuming nature of expert opinions. More often than not, these institutions direct the order only to an expert who determines the scope of the planned easement. As a result of this work, maps are created in which the linear parameters (length, width) of the land to be encumbered are marked by the surveyor, along with its area. Unfortunately, the surveyor in these studies does not comment on the strip of passive impact of a given facility that affects the loss of property value. This is a serious problem because, as a result, the property appraiser (entering at the last stage of work) also often ignores this aspect or marks such a strip in an approximate manner. In both cases, this is verified by the parties to the proceedings and becomes the basis for rejecting or requesting a supplement to the opinion. All the documentation then returns to the initial phase and the problem still remains unresolved.

The optimal solution would be to entrust these activities to specialist units (companies, law firms) that employ a lawyer or surveyor and a property appraiser. Such units already exist on the Polish market and effectively solve these complex problems. Another solution would be to officially develop a formal procedure that would indicate the activities expected to be performed by each of the appointed experts.

4. Technical activities when establishing an easement – proposed procedure

The process of establishing transmission line easements requires combining the work of many industry specialists. Each of them carries out the assigned scope of activities in accordance with their knowledge and the letter of the law. However, it is important that these tasks synchronize with each other and, most importantly, the implementation of each step serves as a useful basis for the next one. The proposal of a prepared outline facilitates the cooperation of the professionals involved and coordinates their activities.

4.1. Introductory meeting – familiarization with the subject of the opinion, establishing initial plans and division of work

Organizing a meeting with the participation of: the owner of the property to be encumbered, a representative of the industry entrepreneur, lawyers representing both parties to the proceedings and experts, is aimed at:

- designation of the property to be encumbered: determination of EGİB (Land and Building Register) data and examination of the land and mortgage register;
- determining whether the parties to the proceedings, i.e. the property owner and the transmission company, are able to reach an agreement regarding: the area to be encumbered, the set of rights of the grantor and grantee and the amount of financial compensation;
- checking the information contained on the master map regarding the marking of the transmission device in the GESUT (Geodetic Register of Utility Networks) database;
- sending an inquiry to an expert on network construction and operation to obtain information whether it is possible to indicate the required width of the transmission line easement strip dedicated to the network in question.

4.2. Determining the catalog of needs and rights of the grantee along with obtaining additional information regarding the network in question

Directing an official inquiry to the transmission entrepreneur in order to:

- prepare a list of activities related to the established transmission easement (e.g. the right to transmit the medium, maintenance, modernization, supervision, removal of failures);
- obtain full information about the device in question, including: the date of the construction, technical parameters (diameter, material), manufacturing technology, type of transmitted medium;
- obtain information about the possible technology for carrying out possible work by the transmission company related to the marked catalog of activities related to the easement being established;
- determine the frequency and manner of entry of network maintenance services into the

encumbered property;

- obtain information on the possibility of connecting to the network in question.

Importantly, dealing with the above issues in the form of a statement by the transmission company has a key impact on taking further actions related to the establishment of an easement, both in terms of marking the width of the easement strip, calculating the amount of financial compensation, as well as making appropriate entries in section III of the land and mortgage register of the property to be encumbered.

4.3. Indication of the required width of the easement strip

When determining the width of the easement strip, the statement of the transmission company described in point 4.2 of the outline should be taken into account as well as information resulting from:

- applicable legal provisions (e.g. Regulation of the Minister of Economy of April 26, 2013 on the technical conditions to be met by gas networks and their location);
- possibly an expert opinion on network operation;
- declared rights of the grantee;
- description done by the transmission company of the technology for carrying out possible renovation and construction works;
- existing legal acts that ambiguously define transmission line easement strips (e.g. Regulation of the Minister of Infrastructure of October 26, 2005 on the technical conditions to be met by telecommunications buildings and their location);
- technical guidelines of industry enterprises (e.g. 'Guidelines for determining the area of transmission line easement necessary for the proper use of facilities' developed by the Polish Electricity Transmission and Distribution Association);
- declarations of the transmission company submitted by selected technical services.

It is important to note that, if it is found that it is impossible to carry out the declared renovation and construction works or that the grantee has no rights within the indicated width of the easement strip, it is necessary to inform the parties about the consequences of this state of affairs.

The solution in such a situation may be: attempting to amicably determine the width of the easement

strip, and then introducing appropriate entries in section III of the land and mortgage register, clearly defining the scope of the rights of the grantee in the area of the declared easement and the manner of regulating and carrying out work beyond the adopted width of the strip - so that the legal successors of the encumbered property are aware of the rights and obligations related to the established encumbrance.

4.4. Preparation of a map for legal purposes as a basic document for establishing a transmission easement

To establish a transmission line easement, the development of a map for legal purposes was necessary. Both due to the content of the regulation on technical standards for performing geodetic situational and height measurements and the development and transfer of the results of these measurements to the state geodetic and cartographic resource, as well as the substantive premises that require the determination of the area intended for encumbrance.

The implementation of works related to the preparation of a map for legal purposes requires:

- reporting geodetic work to the appropriate geodetic and cartographic documentation center;
- organizing a meeting on the land with the participation of the grantor, the grantee and experts involved in the process of establishing the easement, i.e. an authorized surveyor, an expert in the operation of the network in question and a property appraiser;
- updating the content of the master map in terms of data from EGiB (Register of Land and Buildings), BDOT (Database of Topographic Objects) and GESUT (Geodetic Record of Utility Networks) with a particular focus on measuring the presence of the facility in/on/above the ground (possibly preceded by activities related to network routing or uncovering);
- measurement, drawing and dimensioning of the designed transmission easement strip in accordance with the established widths (red color);
- placing descriptive information about the planned transmission easement area on the map (red color);
- preparation of a list of coordinates of the bending points of the designed easement strip;
- examination of the encumbrances of section III

of the land and mortgage register together with the possible drawing of existing land easement strips (brown color scheme);

- analysis of the MPZP (Zoning Ordinance), DOWZiZT (Decision on the Conditions of Development and Land Development) and other decisions on the location of public purpose investments and a possible compilation of cartographic materials illustrating planning provisions with the current fragment of the basic map of the encumbered property;
- consultation with a property appraiser to determine the scope of areas in which the facility in question affects the value of the property;
- calculating and placing on the map the resulting descriptive information about the area of encumbrance of the constructed facility on the value of the property - the area of encumbrance may equal the designed easement strip or extend beyond this area;
- calculating and placing on the map the resulting descriptive information about the possible area of coverage of the legal effects of the facility's location;
- completing the technical report and submitting it to the appropriate ODGiK (Geodetic and Cartographic Documentation Center);
- certification of the resulting maps after accepting the appraisal report to PZGiK (State Geodetic and Cartographic Resource).

4.5. Possible calculation of financial compensation for the established easement

The calculation of financial compensation for the established easement requires the adoption of the principles applicable to the preparation of an appraisal report.

Additionally, it is necessary to:

- determine the date and manner of taking over the rights to the real estate by the current owner (action required to calculate the compensation part);
- application of the methodology proposed in industry publications with the division of the calculated amount of compensation into the compensation part and the remuneration part.

4.6. Completion of work and transfer of documentation to the client

The activities completing the process of preparing documentation for establishing a transmission easement are:

- providing the client with certified maps for legal purposes with the route of the planned easement drawn;
- providing the client with an appraisal report with the calculated amounts of financial compensation, divided into compensation and remuneration;
- preparing legal summaries for the parties to the proceedings and their representatives, including:
 - technical characteristics of the transmission facility located within the boundaries of the property in question;
 - the declared set of rights of the grantee along with the indicated frequency of entry into the encumbered property;
 - results of examining area development plans and possible decisions on the location of public purpose investments;
 - the size of the areas to be encumbered and affecting the final amount of financial compensation;
 - the amount of compensation for the loss of value of the property caused by the transmission facilities remaining on the property in question;
 - the amount of remuneration for the use of real estate in the area of the established transmission line easement;
 - the recommended content of the entry in section III of the land and mortgage register of the encumbered property.

5. Summary

When establishing a transmission easement, we deal with many aspects of the issue. The specificity and multi-faceted nature of the topic requires the combined work of several specialists. The methodological foundations are known, but the legal provisions remain quite imprecise. All this means that the problem has become the basis for research, the aim of which is, among other things, to unify the markings of components and activities undertaken when establishing transmission easements. The entire process is made easier by a set procedure proposed in the form of an outline. This study indicates how to

objectively carry out work leading to the establishment of an easement. The developed outline was based on conclusions drawn directly from real field cases.

In the proceedings for the establishment of a transmission line easement, it is formally possible to calculate the so-called appropriate remuneration, constituting full compensation for the nuisance resulting from the imposed list of demands of the industry enterprise. Carrying out the work in accordance with the proposed outline would largely contribute to achieving this goal. This study draws attention to individual activities and the order in which they are performed. This allows individual specialists to carry out the next stages of work, which in turn leads to sanctioning the rights of the grantee while determining fair and satisfactory compensation for the grantor.

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