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Limitations Imposed on Land Properties Resulting from the Construction and Exploitation of Transmission Devices in Poland

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Abstract. Sustainable social and economic development of the country, as well as the need to ensure its energy safety requiresthe modernisation of the existing and construction of new transmission devices. The characteristic feature of technical infrastructure is its linear nature, i.e. its course through numerous real estates, resulting in limitations imposed on such properties. The limitations differ depending on the stage of the investment process. Such stages include the formal legal stage (designing and collecting appropriate permits and decisions), the investment implementation stage, and the stage of exploitation of transmission devices. Within the first stage, a limitation concerning land development may occur (location of investments in planning documents); limitations of the use of land properties always occur in this case (acquisition of a legal title to the land property disposal for building purposes). At the stage of construction, i.e. the investment implementation, limitations related to the deterioration of the use of the land property may appear. The third stage may involve limitations connected with the presence of transmission devices in the space of the land property, i.e. limitations which result from the actual use of the land property by the transmission company.

The objective of this paper is to identify limitations imposed on land properties resulting from the construction and exploitation of transmission infrastructure in Poland.

Keywords: transmission devices, limitations, investment process.

Conference topic: Technologies of geodesy and cadastre.

Introduction

Particular stages of the investment process in the scope of construction of transmission devices impose numerous limitations on land properties. Such limitations, depending on their type, restrict the freedom of activity of the owner of the land property in various ways. As a rule, however, they have an economic aspect, because they are related to loss of property. In the scope of the first formal legal stage of the investment, limitations can be distinguished related to:

- change of disposition or manner of management of land resulting from the introduction of the location of the investment project into planning documentation,
- -the establishment of transmission easement (limited property right) or issuing an administrative decision limiting the way of use of a land property, constituting two basic legal titles obtained by transmission companies for the purpose of construction and exploitation of transmission devices.

In the scope of the second stage of the "construction", limitations can be distinguished resulting from:

- -lack of possibility to use the land property in the construction belt,
- potential deterioration of conditions of use of the land property.

The third stage of "commissioning and exploitation" is accompanied by limitations related to:

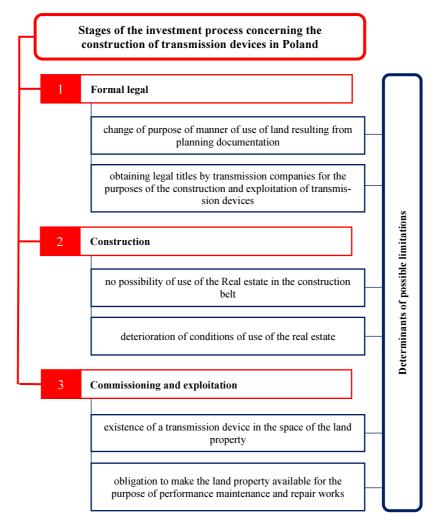
- the existence of a transmission device in the space of the land property, resulting from the actual use of the land property by the transmission company,
- the obligation of making the land property available for the purpose of performing maintenance and repair works.

The objective of the article is the identification of particular types of limitations and their economic assessment.

Analysis of land property limitations at particular stages of the investment process concerning the construction of transmission devices

The main stages of the investment process in the scope of construction of transmission devices and determinants of limitations possible to occur are presented in scheme 1.

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Scheme 1. Limitations for land properties at particular stages of the investment process concerning transmission devices (Source: own study)

Formal legal stage

The first limitation that can appear in the scope of the formal legal stage is the change of disposition or manner of land use resulting from the introduction of the location of the investment project into planning documentation (local spatial development plan or issuance of a decision on the conditions of land development and land management). The limitation is particularly associated with devices with a considerable environmental impact, and can be manifested in the regulation of the disposition of the land property, e.g. from construction to agricultural use. Notice, therefore, that the limitation will not always occur. Such a situation will occur in a case when e.g. given land already was under agricultural use, and the implemented investment project does not introduce changes in the scope.

The area disclosed in planning documentation in the scope of which a potential limitation will occur depends on the type of transmission device, its technical parameters, manner of occurrence in relation to the surface area, and environmental impact, including safety of property as well as human health and life.

The remaining limitations which should be associated with so-called planning damage result in entitlement to compensation corresponding to the decrease in the value of the real estate (act 2003). The payer of the compensation is the commune, whereas in the scope of the arrangement prepared earlier the transmission company usually undertakes to reimburse the costs incurred by the commune. The methodology of the estimation of the value of the planning damage was described among others by Konieczny and Kowalczyk (2014) and Sajnóg (2015a), pointing out that the estimation should be determined based on the state of the subject of the valuation as at the date of occurrence of the damage, and prices as of the date of determination of the compensation.

Figure 1 presents a fragment of the graphic part of the local development plan prepared for the purposes of implementation of the investment involving the construction of the double track overhead power line 400 kV. Pursuant to the provisions of the plan, agricultural use is introduced in the belt with a width of 70 m, i.e. 35 m on both sides of the axis of the planned technical infrastructure.

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Fig. 1. Example graphic part of a local development planintroducing agricultural use (8R) over a width of 70 m (red colour) in relation to the planned construction of double track overhead power line 400 kV Ełk-border of the Republic of Polandin the Oleckocommune

(Source: Resolution No. orn.0007.23.2013 of the Municipal Council in Olecko of 24 May 2013)

The second limitation that can be distinguished in the scope of the formal legal stage results from the necessity of obtaining by the transmission company of a legal title for management of the land property for the purpose of the construction and later exploitation of the transmission device. The limitation will currently always occur, because in Poland since 1975, the application for a building permit is obligatorily accompanied by such a document (act 1974). Two primary legal forms permitting the construction and then exploitation of transmission devices by transmission companies are currently preferred:

- transmission easement, i.e. limited property right which was introduced to the Polish legal system based on the act of 30 May 2008 on the amendment of the Civil Code act and certain other acts (act 2008).
- administrative decision limiting the manner of use of the real estate issued pursuant to art. 124 par. 1 of the act of 21 August 1997 on real estate management (act 1997).

The first legal title, i.e. transmission easement, involves encumbering the land property for the benefit of the transmission company which intends to construct or who owns the transmission devices, with a right involving the purpose of such devices. Therefore, the said property right can be applicable both to new investments (the construction will be implemented in the future) and to the regulation of the as-is state on the land property – regulation of circumstances (a transmission company constructed a transmission device in the space of another person's land property without holding the relevant legal title to the land in the scope).

The preferred form of establishment of transmission easement is a civil law agreement where the parties to the agreement arrange its content on their own (type and scope of limitations). The only condition is lack of variance with legal provisions. It is also possible to establish transmission easement based on a court decision (lack of consent to conclude an agreement by one of the parties), or through acquisitive prescription.

For the established transmission easement, the owner of the land property is entitled to remuneration payable on a one-off basis or cyclically, resulting from the provisions of the civil code act (1964). The remuneration results from the shared useby the transmission company of another person's land property defined as the existence of a device in the space of the land property and use of land for the purpose of performing exploitation and repair works. Notice, however, that the limitation itself occurs already at the moment of establishment of the legal title (transmission easement), and not actual construction and functioning of the device in the space of the land property.

The established legal title as a limited property right encumbers the entire land property, although it is executed in a specified scope. Therefore, it contributes to a reduction of the value of the real estate, eventually corresponding to the value of the established right (Konieczny 2012; Sajnóg 2015a).

The said remuneration is not accrued in the case of occurrence of transmission easement through acquisitive prescription.

The second legal title results from an administrative decision limiting the manner of use of the land property, issued by the starost in relation to the need of the construction of transmission devices in the space of the land property. Therefore, it only concerns new (planned) investments. All of the following conditions must be met for the decision to be issued:

- it must be a public purpose investment;
- the real estate limitation must result from the local spatial management planor decision on the establishment of the location of a public purpose investment;
- -the forecast conducted with the owner (or perpetual usufractor) of the real estate concerning obtaining permission for the construction of transmission devices based on an agreement had a negative result.

The limitation of the manner of use of the land property specified in the said decision should be possibly not burdensome to the owner of the land property. Moreover, legal regulations related to the decision (act 1997) oblige the investor to pay compensation for any potential damage caused in the land property during the construction of transmission devices, and for a potential reduction of the value of the land property. They are also obligatory for the investor in the scope of compensation for damages which may result in the future in relation to making the land propertyavailable for the purpose of performance of maintenance and repair works. "The value of the damage" should be determined based on the state of the object of valuation as at the date of its occurrence, and prices as of the date of determination of the compensation. The geodetic and legal aspects of the two discussed legal titles are discussed by among others Trembecka (2014, 2016) and Sajnóg (2015b).

Construction stage

In the scope of the construction stage, a limitation in the form of lack of possibility to use the land property in the construction belt will usually occur. The belt and related nuisances particularly accompany the construction of underground transmission devices. In such a situation, the construction belt is composed of a beltof earthworks, belt of ground deposition, and belt of transport (of materials and equipment) and assembly (Fig. 2).

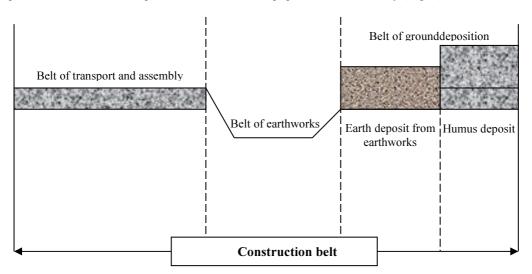


Fig. 2. Cross section through the construction belt of an underground transmission device (Source: Sajnóg 2014)

In the construction belt, damages will occur in component parts of the land property and in benefits from the land property for which compensation is due. The compensation, depending on the obtained legal title, will result from two different legal provisions. In the case of transmission easement, it will results from the Civil Code act (1964), and it should not be identified or considered in the estimation of the value of the compensation for common use of the real estate, and in the case of an administrative decisionlimiting the manner of use of the land property, from the real estate management act (1997).

In the scope of the construction stage, in relation to the implementation of the investment process in open earthworks, also temporary deterioration of the conditions of use of the land propertymay occur. The limitation will then result from a prolonged time of transportto the "separated" part of the land property (Fig. 3). The permanent character of such a limitation can in turn accompany earth-bound devices such as hot water pipes. In both of the cases, as a rule, such limitations can result in lack of profitability of conducting agricultural production on the separated land or at all. For potential damage resulting from the limitation, including a reduction of the value of the land property, the owner is entitled to compensation pursuant to two different acts (analogically as in the case of limitation related to the lack of possibility to use the land property the construction belt).

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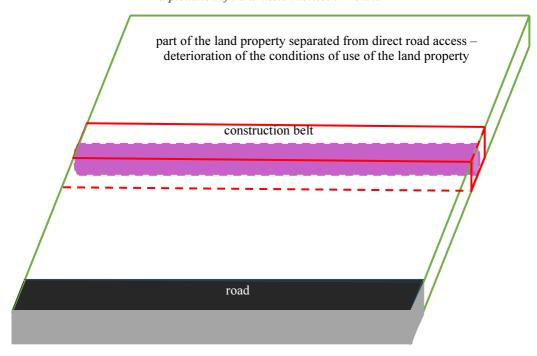


Fig. 3. Example visualisation of deterioration of the conditions of use of the land property at the stage of construction of an underground transmission device (Source: own study)

Stage of commissioning and exploitation

A limitation which will always occur in the scope of the third stage results from the actual use of nother person's land propertyby the transmission company, defined as permanent and physical existence of the device in its space. All property equivalents resulting from such a limitation are already considered at the formal legal stage, i.e. in the scope of the legal title obtained by the transmission company – transmission easement or administrative decision limiting the manner of use of the land property.

The second limitation in the scope of the third stage results from the obligation to make the land propertyavailable for the purpose of performance of maintenance and repair works. Such a limitation is a consequence of legal titles obtained by the transmission company in the scope of the formal legal stage. In the described situation, compensation is due for any damage related to making the land propertyavailable for the aforementioned purposes, and a potential reduction of the value of the land property. Such compensation is estimated and determined after its actual occurrence. The obligation of payment of the cash equivalent results from two different acts, analogically to the case of the damage described earlier. In the case of lack of consent of the owner or perpetual usufructor of the land property to perform maintenance and repair works and remove failures, with the previously determined legal title – transmission easement, thestarost can issue an administrative decision obliging for making it available pursuant to the act on real estate management (art. 124b of the act of 1997). Then, the estimation and payment of compensation also result from the cited legal provision (act of 1997).

Synthetic presentation of the analysed limitations with their economic assessment

The results of the conducted analysis in the scope of limitations occurring on the land property at particular stages of the investment process concerning the construction of transmission devices are presented in Table 1. The synthetic presentation covers the legal and economic characteristics of particular limitations.

Table 1. Synthetic presentation of the analysed limitations. (Source: Own study)

	Stages of the investment process					
	I. Formal legal		II. Construction		III. Commissioning and exploitation	
Type/determinants of limitation	Introduction of the location of the investment project into planning docu- mentation re- sulting in a change in the purpose and manner of use of the land	Obligation by the transmission company to obtain a legal title for use of the land propertyfor the purpose of construction and exploitation of a transmission device: 1. transmission easement 2. administrative decision limiting the manner of use of the land property	Lack of possibility to use the land property in the construction belt	Deterioration of the conditions of use of the land property resulting from prolonged time of transport to the "separated" part of the land property	Permanent and physical existence of the transmis- sion device on another per- son's land property	Necessity to make the land property availa- ble for the pur- pose of perfor- mance of maintenance and repair works and re- moving failures
Temporal character of limitation	Permanent	Ad. 1. Generally permanent, but with acceptable establishment of temporary transmission easement Ad. 2. Ultimately permanent	Temporary	Temporary or permanent* (*earth-bound devices)	Permanent	The limitation is of permanent character, whereas its actual occurrence is temporary
Type of com- pensation	Compensation	Remuneration Compensation	Compensation in the case of occurrence of damage	Compensation in the case of occurrence of damage	None	Compensation in the case of occurrence of damage
Legal basis for the determination of compensation	Act on spatial planning and management (act of 2003)	Ad.1. Civil code act (act of 1964) Ad.2. Real estate management act (act of 1997)	Ad.1.Civil code act (act of 1964) Ad.2. Real estate manage- ment act (act of 1997)	Ad.1. Civil Code act (act of 1964) Ad.2. Real estate manage- ment act (act of 1997)	Not applicable	Ad.1. Civil code act (act of 1964), alternatively act of 1997 Ad.2. Real estate manage- ment act (act of 1997)
Payer of com-	Commune	Transmission company on easement; Ad. 2 –	Transmission company	Transmission company	-	Transmission company

Conclusions

According to the article, at each of the three stages of the investment process involving the construction of transmission devices, the owner of the land property in the space of which the investment is implemented is subject to limitations. Such limitations have different character (permanent, temporary), and different economic aspect. Compensation accrued in relation to the occurrence of planning damage results from the act on spatial planning and management (act of 2003). Remuneration for the established transmission easement (i.e. common use of the land propertyby the transmission company and owner of the land property) results from the civil code act (act of 1964). Compensations for damage resulting from the occurrence of the remaining limitations depend on the legal title obtained by the transmission company already at the formal legal stage. The established titles are therefore determined by legal pro-

visions constituting the basis of the estimation of compensations payable to the owner of the land property. In the case of establishment of transmission easement, it is generally the civil code act (act of 1964), and in reference to the administrative decision limiting the manner of use of the land property, it is the act on real estate management (act of 1997).

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