

LAND CADASTRE PROCEDURES AS THE BASIS FOR THE ACQUISITION OF REAL ESTATE IN ROAD CONSTRUCTION AND MANAGEMENT

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Abstract

In the first part of the paper, the problems of the acquisition of land which in the past was used for the construction of roads are discussed. It is established that the legal-property status of this land is not well-ordered and that land-cadastral records are not in agreement with land-register records, and neither of them reflects the actual situation in the field. The second part presents a new method of work of the surveying service in the preparation of documentation and purchase of land. Digital cadastral maps for wider areas are set up and new cadastral surveys are performed for narrower road-corridor areas. Site documentation and other cadastral documentation for the purchase of land are prepared on this basis.

Keywords: *acquisition of real estates, land cadastre procedures, land purchases, legal standing of property, road construction, road management, road network*

LEGAL-PROPERTY STATUS OF THE PRESENT ROAD NETWORK

The construction and reconstruction of roads and other infrastructure objects were not always followed by appropriate procedures for the regulation of legal-property matters, so parcels near roads as recorded in the land register and the land cadastre mostly do not correspond to the actual situation, either in their shape or form. In many areas, data is still kept which was valid prior to the construction of roads. The legal-property status of parcels used for road construction is therefore uncertain for a few thousand kilometres of roads.

Investors in road construction have acquired land:

- on the basis of the Law on Expropriation and Compulsory Transfer of Rights to Use,
- pursuant to the Law on Development Land,
- through ordinary purchase contracts,
- through advance-payment purchase contracts,
- through statements and approvals of owners allowing the construction of roads on their land.

In cases in which entire parcels were acquired for road construction, final purchase contracts were concluded. These were entered into the land register and land cadastre under the condition that they contained detailed land-cadastre data on parcels and that a proposal for entry into the land register was enclosed. In most cases, advance-payment preliminary purchase contracts were concluded for parts of parcels with approximate estimates of the area to be purchased.

After the completion of road construction, final contracts were to be made on the basis of surveys and preparation of other cadastral documentation on expropriation. After the completion of road construction, surveys were performed for many roads, but final contracts were not concluded and therefore this data was not entered in the land register and land cadastre. The investor constructed the roads, but did not completely fulfil their obligations. Their general excuse was insufficient funds and personnel; in addition, they were not forced to conclude appropriate documents by legal regulations for the keeping of the land register.

Land for road construction was acquired by expropriation only in exceptional cases. This was partially a consequence of the desire to solve the problem of road construction through mutual agreements. In a greater number of cases, it resulted from poor and hastily prepared execution documentation which did not enable a legal demonstration of public interest which is the basis of expropriation. These procedures are time-consuming in their nature, and investors usually avoided them to speed up construction. However, accurate data on surveys, cadastral designations and transfer of ownership rights were available for land acquired through expropriation, and entries into the land register and land cadastre were actually performed. The statements of approval of the owners were acquired above all for local and regional roads. Some owners even ceded their land without compensation. The then-existent road and public utilities communities, communes and local communities undertook to ensure the execution of cadastral surveys and entries into the land register. However, in most cases this did not happen. Roads were constructed or reconstructed, but legal-property matters were not arranged.

According to data of branch offices of regional geodetic administrations for 1995, approximately 40 000 km of roads, above all municipal roads, were not surveyed. Approximately 500 road sections were surveyed and other cadastral documentation on expropriation were made, but they were not entered into the land cadastre and land register, because purchase contracts were not concluded with all affected owners at that time. Pursuant to the provisions of the new Law on the land register from 1995 (the law provides that the writing-off of land parcels which was used for road construction prior to the adoption of the Law on the land register shall

be permitted regardless of their value), the entry of already prepared other cadastral documentation into land register would now still be possible. The current situation regarding data in the land cadastre would first need to be harmonized with the land register, the cadastral surveys of already constructed roads would then have to be performed, and other cadastral documentation on expropriation would have to be prepared. Naturally, communes would have to provide the funds for this regulation of legal-property matters for municipal roads, and the state for state roads.

The expropriation of roads and preparation of other cadastral documentation involve professional-technical field work (marking-out of roadways in the presence of owners, surveys) and preparation of other cadastral documentation and information sheets in which the areas of parts of parcels used for the road are presented. The investor should submit the information sheets together with other documents (purchase contracts and land-cadastre proposals) to the land register for entry. The following two problems appear during the execution of this work and preparation of other cadastral documentation:

- roads mainly run through areas which are covered by plane table survey maps in which boundaries must be established according to their course in nature, in the presence of owners. However, boundary markers between individual parcels have been destroyed due to road construction, and the location of property boundaries is in doubt due to the inaccuracy of cadastral maps at the 1:2 880 scale. Disputes arose which were often solved in court procedures.
- In cases when marking-out is performed, other cadastral documentation on expropriation is prepared, the areas of parts of parcels used for roads are calculated and public inspection of cadastral documents by the owners is performed in accordance with cadastral regulations, individual owners often filed complaints regarding the area of parcels used for roads. These disputes have to be solved prior to entry into the land register and land cadastre.

The procedure proved in practice to be time-consuming, since a complaint by one of the parcel owners prevented the entry of all other used parcels of other owners within one cadastral commune. For this reason, the method for the preparation of other cadastral documentation on expropriation was changed in 1992 such that each part of parcels which was used for the road would be considered separately and decisions on them would be prepared in the same manner as for ordinary division into parcels.

GEODETTIC LEGAL-PROPERTY PROCEDURES IN THE CONSTRUCTION OF NEW HIGHWAYS

For new infrastructure objects, especially highways, different solutions were prepared in the surveying service. These have enabled the complexity and correctness of preparation of other cadastral documentation on expropriation, or a higher accuracy of determining land-cadastre parcels which will be used for roads. In the first phase, digital cadastral maps (DCMs) will be set up for all planned road routes on the basis of cadastral maps valid at present. The setting up of DCMs comprises the analogue conversion of existing data, control of their harmonization with the attribute part, topological control and transformation in the state coordinate

system. DCMs are set up for a wider road corridor, i.e. they comprise all cadastral communes in the road corridor to make up for the use of poorly maintained and outdated index diagrams of cadastral maps. DCMs enable optimal unification of data and simple use in all GIS tools, which makes the harmonization of land-cadastré and topological data easier. With this new approach, the surveying service has assumed the responsibility for the completeness and correctness of land-cadastré data and has begun replacing cadastral maps with DCMs.

In the second phase of preparatory work for the acquisition of real estate, new surveys of land are performed in road corridors in areas which are covered by plane table survey maps. It was established in the first part of this paper that existing cadastral maps are not reliable in terms of location, that the land cadastre records are not harmonized with the land register records, that different coordinate systems of maps are used and that areas of parcels are inaccurate, and that other legal procedures have not been performed (forming of subdivisions, etc.). With such insufficient and inaccurate data it is not possible to conduct procedures for the acquisition of land for road construction. With the new survey which is being performed in accordance with land-cadastré regulations, the actual situation regarding parcels in the corridor is being established (the course of the boundaries between properties, the area, actual type of use, etc.). Data which was established in the procedure of performing the new survey will be entered into the land cadastre and land register records and will become legally valid.

The new survey apparently prolongs the time needed for preparations and makes them slightly more expensive, but other procedures for land acquisition will be considerably quicker in the later phases, since accurate data on land parcels which are subject to acquisition will be available. An essential advantage of the new survey is in the harmonization of all geodetic bases which are the condition for the preparation of site plans and maps of construction parcels. In the phase of preparation of site plans, the maps from the new survey will enable an accurate definition of building lines of roads and preparation of a list of parcels in the road corridor, and the calculation and presentation of accurate areas of parts of parcels which will be used for roads. The harmonization of geodetic bases on the basis of which site plans are made also enables the building line to be transferred in digital or analogue form onto any other base. In the final phase, prior to the beginning of road construction, the building line and boundaries of the future road will be transferred to the field on the basis of accurate data with the obligatory presence of landowners. The division into parcels, decisions issued or contracts concluded on this basis will be accurate with regard to position, shape, area and ownership; consequently, there will be much fewer complaints by owners and, if any, they will be unsuccessful.

CONCLUSION

New land cadastre procedures for the acquisition of real estate for the construction of highways proved to be better than those which were used in practice prior to that, and should be introduced also in other, more complex legal-property matters. The arrangement of the ownership of a few tens of thousands of kilometers of existing roads still remains the obligation of the state. Procedures

have been determined and contracts are available; only the programme will need to be prepared and funds provided.

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