

# IMPLEMENTATION OF LAND READJUSTMENT IN SERBIA – BASED ON EXPERIENCES IN THE CITY OF BOR

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#### **ABSTRACT**

The paper presents the process of implementing land readjustmentin the Republic of Serbia from the initial thinking, through the intensification of research and pilot projects to the first projects that are implemented in practice.

The work discussed the observed problems related to the selection of the area, the initiation of the procedure, legal regulations, the competences of the commission for land readjustment, the rights and obligations of the participants, the quality of urban plans and their implementation, the resolution of property legal relations, the correction of errors in the general plan and the detailed regulation plan, and final activities, with registration in the real estate cadastre of the new state.

The work is based on the acquired experiences of implementing land readjustment in the city of Bor in the Republic of Serbia.

Keywords: urban planning; land readjustment, urban plan, cadastral plot, building plot.

## 1. INTRODUCTION

Urban land readjustment (LR) is a mandatory, responsible and creative job for local self-government units in all countries of the world, including in the Republic of Serbia (RS). However, the current situation in the field of urban land management in the RS could be briefly described as insufficiently good for the following reasons:

- the inherited state of land ownership from the socialist era,
- the absence of applicable legal and by-law regulations in the existing conditions,
- the absence of prepared urban plans in urban areas,
- adopted plans are not consistently implemented or the conditions for their implementation have not been created,
- cadastre not being up-to-date and a large volume of unresolved property relations on land
- the existence of illegally built buildings, roads and infrastructure on a large scale,
- inadequate organization of urban entities, etc.

All of the listed characteristics require looking at the problem from all aspects, special mobility of all relevant entities and an adequate approach to finding solutions.

Land readjustment (LR) represents a certainly unused process of urban land development, which effectively reshapes plots that do not have a regular shape or access to a public road, and at the same time provides areas for public purposes in optimal shapes and areas. Although the LR, as seen in (Law on Planning and

Construction), was defined by law on the territory of Serbia before the Second World War and today it is not widely applied even if it is known that it is intensively applied in developed countries such as Germany, Japan, France, Israel, Holland, South Korea, Taiwan, etc (Larsson, 1997; Muñoz Gielen et al, 2019). Lately, efforts have been intensified for a more massive introduction of LR into legislation and practice in Serbia (Šoškić et al, 2022).

In the text that follows, the existing legal solutions are described and their application is discussed through a current example in the RS.

### 2. INITIATION OF THE PROCESS LAND READJUSTMENT IN THE REPUBLIC OF SERBIA

The first attempts to implement LR in the Republic of Serbia (RS) after the Second World War were launched in 2010 with the cooperation of the Ministry of Environment and Spatial Planning and the German Organization for International Cooperation GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit i AMBERO Consulatanig Beograd). when the joint project defined six pilot areas for the implementation of LR in Serbia (Niš, Užice, Despotovac, Kladovo, Majdanpek, and Novi Sad). Since at that time the legal regulations did not prescribe the procedure for LR, the project team implemented the process based on the advice of experts and experience in FR Germany. Simultaneously with the initiation of the pilot projects, the procedure of drafting a by-law was initiated, which would prescribe in a more detailed manner the process of implementing the LR in the RS, relying on the Law on Planning and Construction from 2009. In addition to those pilot projects, parallel researches were also launched with the aim of examining the possibility of applying LR in Serbia (Šoškić, 2016; Šoškić et al, 2016).

The initiated pilot projects and the drafting of the by-law were not completed until the end of the project and it can be said that they had only an educational character, within which problems were observed and the experiences of LR implementation in the world, and especially in FR Germany, were presented.

The city of Bor in the RS, respecting the possibility and obligation of the Law on Planning and Construction, was among the first local governments in Serbia to include in the General Regulation Plan of the urban settlement of Bor the possibility of arranging parts of the city through LR, and then in 2019, it contracted the implementation of the LR for three compacted areas in the city of Bor. The pioneering project is still going on and is coming to a successful end with all the difficulties.

## 2.1. Legislation related to the LR in the Republic of Serbia

Land readjustment was legally prescribed for the first time in the territory of today's RS by the Civil Code of the Kingdom of Yugoslavia in 1931, which included today's RS. The law was written in imitation of the legal solutions of the former Austro-Hungarian monarchy, but it was not applied to a significant extent until 1941, and it ceased to be valid in 1946.

After the Second World War, the implementation of the LR in the territories of the Republic of Serbia was prescribed by the Law on Planning and Construction only in 2009, which was then amended in 2014 and today represents the basic legal framework for the implementation of the UK, which in Articles 107 to 108v prescribes the following:

- LR is implemented in the area where a plan of general or a plan of detailed regulation has been adopted, which determine the areas for LR,
- LR represents the public interest for the Republic of Serbia and is implemented based on the decision of the municipality or city,
- All property-legal relations in the collective area are resolved through the LR.
- The LR procedure is carried out in an administrative procedure by the first-instance commission for the LR (Commission) established by the municipal or city assembly, while the second-instance commission for the LR is established by the Government of the RS.
- A note related to all immovable properties is entered in the real estate cadastre that the LR process has begun,
- All changes in the real estate cadastre are carried out with the notification, agreement and decision
  of the Commission while the implementation of the LR is ongoing,
- After the decision of the competent authority on LR, the authority responsible for urban planning issues a public call for registration and determination of the necessary data on immovable properties and their right holders for the implementation of LR,

- The application deadline is 30 days, during which the committee is obliged to conduct a public presentation and familiarize interested persons with the principles of LR and the principles of redistribution of construction land, on which the report is drawn up.
- The LR project is made in accordance with the rules of subdivision and pre-parcellation contained in the valid planning document and LR rules, with the existing and newly planned state clearly shown,
- Based on the measure of the land area, each owner is entitled to construction land in the area of the parcels that were included in the LR mass, less the share of the area that will be used for public purposes and determined by the Commission.
- Based on the yardstick of land value, each owner is entitled to one or more construction plots, the market value of which after the LR (post-LR value) corresponds to the smallest value of the construction land included in the LR mass (pre-LR value).
- In the event that there is a difference in the area between the allocated and the entered area, and after deducting part of the area for public purposes (according to the criteria of the entered area and the entered value of the land), that difference is compensated in money,
- After preparation, the LR project is submitted to the Commission, the authority of the local selfgovernment unit responsible for urban planning and the Republic Geodetic Institute for confirmation,
- After entering into legal force, the LR project is submitted to the body of the local self-government unit responsible for property legal affairs, which, after the procedure has been carried out, issues a decision on LR, which can be appealed to the ministry responsible for urban planning within 15 days.
- A legally binding decision on LR, with proof of the fees paid in the LR procedure, is the basis for the registration of newly formed building (cadastral) plots in the real estate cadastre,
- The costs of the preparation of the LR procedure (drafting of the LR project, geodetic works, etc.) are borne by the local self-government unit,
- The Government of the RS prescribes in more detail the composition, scope and responsibility of the republican commission for LR, the procedure for implementing LR, the content of the decision on LR, the content, conditions and method of issuing a decision on LR, the procedure for developing and the content of the LR project, the method of assessing the value of land in the process of LR, costs and those liable for the payment of costs, as well as the request for exclusion from the collective mass, of all holders of real rights on the cadastral plot. According to these legal provisions, the corresponding by-law was not adopted by the Government of the RS, so LR is carried out only on the basis of legal provisions.

Surveying works in the LR are carried out on the basis of the Law on surveying and cadastre and the Law on the procedure of registration in the cadastre of immovable property in lines and corresponding by-laws.

The assessment of the value of real estate is also carried out on the basis of the valid legal regulations in the Republic of Serbia.

## 3. LAND READJUSTMENT IN THE CITY OF BOR

For the purpose of implementing the General Regulation Plan of the urban settlement of Bor ("Official journal of the Municipality of Bor", No. 1/18 and 3/18), in accordance with the provisions of the Law on Planning and Construction ("Official journal of the RS", No. 72/09, 81 /09, 64/2010, 24/2011, 121/2012, 42/2013, 50/2013, 98/2013, 132/2014 and 145/2014), Decisions on implementing LR in compacted areas within the scope of the General Regulation Plan of the urban settlement of Bor for:

- 1. The zone of family housing with larger gardens in spatial unit 6-Zone 1
- 2. Industrial zone along the state road Selište Bor Zaječar 1B-37 in spatial unit 5 Zone 2
- 3. A mixed residential and commercial zone that stretches east and west of the state road IB-37 Zone 3, all in the cadastral municipality of Bor 1.

The total orientation area of all three LR areas is 71,1485 ha.

# 3.1. Description of the implemented process of land readjustment in the city of Bor

After the contracting of the works, the city administration of the city of Bor and the executor of the works held meetings with the participants of the LR, where the principles and concept of parcellation were

presented and the objective of the LR was clearly stated. The LR participants accepted the implementation of the LR with pleasure, and then the implementation started.

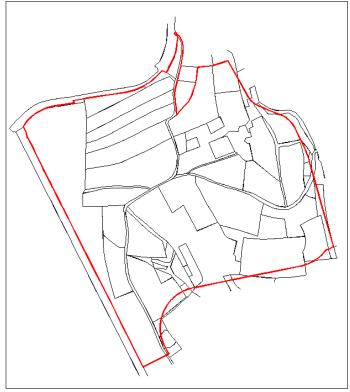
After downloading the data from the Republic Geodetic Institute, it was established that the registered rights on immovable property in the real estate cadastre (REC) were not up-to-date in relation to the factual situation. Namely, the LR commission, with the support of the contractor, invited each participant of LR to register their immovable properties in the LR area, identified all non-updated rights registered in the National Register of Land Registry and through the process of determining the factual situation, updated all entries in the National Register of Land Registry. During that time, the contractor carried out all previous works related to the creation of a topographical and cadastral-topographical plan on a scale of 1:1000 and a plan of infrastructure lines as geodetic bases for designing. The boundaries of the LR areas, which are marked on the ground with temporary markings, have been precisely determined. As part of these activities, an assessment of the market value of the land before LR was also carried out.

The Commission made the decision that the pre-parcellation project should be done on the basis of land area measurements, because it was seen that this is a more efficient and acceptable procedure for the participants of the LR.

The executor of the works, with the verification of the commission, prepared proposals for the distribution of land, which were then exposed to public inspection for a period of 30 days. The family housing zone was accepted by the participants of the LR after the presentation without objection, while for the other two locations the process was not completed until the writing of this paper was completed.

Figure 1 shows the old state of the cadastral parcels, while Figure 2 shows the newly accepted state of parcellation for Zone 1, which includes an area of 24.0476 hectares with 34 participants in the LR, of which the smallest property is  $1306m^2$ , and the largest property is  $60893m^2$ . The minimum area of a new construction plot defined by the general regulation plan (GRP) is  $1000m^2$ . Thus, appropriate construction plots were designed for all participants, and based on the defined traffic routes and land use defined by the GRP.

The following activities that need to be implemented are: acceptance of the LR project by the competent authority for urban planning of the city of Bor and the Republic Geodetic Institute, geodetic marking of the boundaries of new parcels on the ground, introduction of LR participants to the new property, adoption of legally binding decisions on the distribution of land, preparation of a geodetic study for implementation of changes in the real estate cadastre and finally registration of new plots in the real estate cadastre.



Picture 1 - Pre-combination state of land parcels



Figure 2 - The newly designed state of construction (cadastral) plots

## 3.2. Experiences gained and suggestions for solving problems

Selection of the LR message and definition of the purpose of the GRP space

The areas for the LR are defined by the GRP of the urban settlement of Bor and as such have been accepted for implementation. Considering the actual state of roads and streets and constructed facilities and the lack of experience in the implementation of LR borders in all zones, there are problems at the borders that need to be solved, starting with the analytical definition of traffic routes, the cutting of cadastral plots, built streets and buildings, erected fences, etc. The definition of the LR area in the Industrial Zone makes it impossible to implement the reduction coefficient for common areas in the entire area by reducing new areas, but must resort to payment in money according to the debt-credit principle, or the reduction coefficient calculated for two or three areas independently. The advice for urban planners could be that with great care the urban plan should determine the LR area so that LR could be realized.

Take care of the found built-up plots in the communal area

Within the communal areas, errors were discovered in defining the boundaries of previously formed and built construction plots up to 30 cm in size, as well as a number of buildings that were built without a construction permit, and then legalized without the formation of construction parcels. It was necessary to incorporate such plots of land into the new parcelization project with buildings, fences and actual surfaces, without or with minimal possibilities of changing the borders of the existing plots.

Analytical definition of roads and urban planning criteria for construction parcels

The analytical definition of roads was taken from the GRP and in Zone 1 only one shorter approach road with a turnpike at its end was designed because the existing situation dictated it. The projected roads caused a reduction coefficient for public areas of 12%, dictating the shape of the new plots. When designing the roads of the future LR areas, one should take into account the possibilities of optimal design of construction plots and harmonize the spacing of parallel roads with the optimal shape, surface and dimensions of new construction plots. In the residential area, there was a discussion from certain participants of the joint venture that the plots of 1000m <sup>2</sup> are large areas, so the largest number were designed with a minimum area in a rectangular-trapezoidal shape, it seems that the streets should have been closer to each other in order for the plots to have a more favorable shape. It would be ideal to prescribe that roads of minor character are designed together

with the subdivision project or to allow minor corrections of their position in the process of implementing the LR.

## Structure of property and plots

Within the residential area, the largest area of land is in private ownership, while the city of Bor owned part of the land that was used for green and recreational areas, and the remaining part was allocated to new construction plots intended for the construction of family facilities. Certain parts of the parcels included in the LR did not have the conditions for shaping and forming construction plots, so it was proposed that such cases be resolved by exchanging the land of LR participants whose parts of the plots remain outside the LR areas, i.e. by correcting the borders of the parcels based on the geodetic study in accordance with the Law on Planning and construction.

## Legal regulations

The legal and by-law regulations required for the LR have not been completed, so the works are carried out based on the provisions of the Law on Planning and Construction, professional rules and expert proposals.

### The LR program

For the implementation of the LR, a LR program was previously drawn up, which defined activities divided into three phases. The program relied on the experiences of rural LR and the legally prescribed process of the LR, which due to inexperience and the absence of a more detailed sub-legal act, was not adequately reviewed, terminologically defined and adequately written. It is not even foreseen by the law, and it was done with very modest previous works and analyses. The program should be thought about when drafting the legal act related to the implementation of the LR.

### Appraisal of land and buildings

The market value of the land assessment was carried out using a comparative method and aimed to satisfy the legal requirements that the LR participant does not receive land of less value than he contributed to the LR mass, while for the distribution and reduction coefficient, a method based on the surface area and not on the scale was used value, because it was estimated that the value measure would cause problems due to the insufficient coverage of this part by legal and by-law regulations and the very understanding of the participants of the LR of the value measure principle.

## Fixing observed DRP errors

During the detailed elaboration of the LR project, certain errors of the GRP were discovered. On the northern side of the Residential Zone, a street with parking lots and a sidewalk was built, the position of which is not in accordance with the DRP, so part of the sidewalk and parking lot belonged to the Garđević plots. Within the LR area, there is a defined archaeological site in the north, which then conditioned the change of the border of the LR area during the implementation.

Formed construction plots on CP are not in accordance with the regulation line of the access road. This error caused the correction of the position of the access road by about 30 cm.

## Determining the factual situation (DFS) and resolving property-legal relations

Unsettled property-legal relations were found in the collective area, such as estates not being implemented after the death of the owner, real rights not being determined but only the holders of individual plots, sales not being implemented and there being co-ownership relationships on the plots. In the DFS procedure, the Commission invited each participant of the LR to make a statement and gave instructions for the procedures for implementing the procedures for resolving property relations at the court, at the notary, in the real estate cadastre. This procedure lasted more than a year. After the final resolution of all cases, the preparation of the pre-parcellation project was started.

## Settlement of small plots and parts of plots cut by the border of LR

By defining the boundary of the LR area that goes along the external roads and parcels, several cadastral parcels were divided into parts inside the LR and the rest outside the LR. Thus, areas were formed that do not have the conditions to be converted into a construction plot. Such cases were resolved by applying procedures

for correcting the borders of cadastral parcels by creating a geodetic study in accordance with the Law on Planning and Construction.

## Elaborate of the cadastral survey

After the adoption of the LR project, it is planned to create a geodetic study of the cadastral survey and mark the new plots on the ground. The elaboration of the cadastral survey together with the legally binding decision is the basis for the registration of new plots in the real estate cadastre.

#### Distribution decisions

On the basis of the Project of the LR Geodetic Elaboration of the Survey, the competent authority for property and legal affairs of the city of Bor (local self-government unit) makes decisions on the redistribution of land from communalization.

## Jurisdiction of the LR commission for land readjustment

The experience of this project shows that the law should prescribe to the commission for LR, among other things: competences related to the resolution of property-legal relations, verification of the correction of certain errors of the DRP or GRP of a smaller scale, evaluation of the exchange of land inside and outside the area for areas that do not have the conditions to grow into Graševin plots, corrections of plot boundaries, etc. The commission should even make decisions on the distribution of land from LR, analogous to the commission for rural land consolidation of.

## Obligations of LR participants

The law should provide for the obligations of LR participants when it comes to permanent buildings and perennial plantings, fences and communal infrastructure, as well as facilities built without a construction permit, especially when solving property-legal relations and participating in the process of LR and urban development of Graševići land in accordance with urban plans.

## Obligations of other LR participants

There are no time periods for the realization of the activities of the RGA with all the activities that are their responsibility

Compliance of urban planning criteria and street network

## **CONCLUSION**

Through the LR example presented in this paper, the effectiveness of the LR application can be seen, which simultaneously arranges urban land on a larger area with resolved property relations, which is necessary for the construction of buildings, streets and infrastructure. The implementation of the LR in Serbia is necessary in all cities and would represent one of the necessary conditions for the elimination of illegal building construction. On the other hand, the LR is able to solve the problems of unresolved property relations on land and the provision of land for public needs in areas where facilities have been illegally built. Case of cadastre not being up-to-date and solving property-legal relations are also overcome by the application of the LR. In order to implement the LR in the RS more massively and efficiently, the work related to legal solutions and the drafting of by-laws must be completed, taking into account all the perceived problems that still hinder its implementation.

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