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THE IMPLEMENTATION OF AN URBAN PLAN - MONITORING AND EVALUATION IN THE CASE STUDY OF THE DETAILED REGULATION PLAN FOR THE RECONSTRUCTION OF FOUR URBAN BLOCKS IN VRAČAR

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Regulation plans have been implemented in Serbia over the past twenty years as the main operational instrument of planning. However, a general, systemic investigation of the effects of their implementation has failed. Because the elements of regulation and the rules for development and construction applied significantly affect the character of an urban space, the intention is to point out the need to establish procedures and criteria for regular evaluation of the built environment and the need to continuously re-examine planning attitudes. The input data for redefining the scope and shape of regulation can be obtained by analyzing the planning process and evaluating its results. The chosen case study encompasses the plan for four urban blocks in Vračar and includes the 15-year period since its adoption. The extent to which the Plan has met the set objectives from the point of view of urban planning and conservation will be investigated through an analysis of the results obtained in practice, while failures and possible improvements will be pointed out.

***Key words*: urban renewal, heritage protection, context, monitoring, implementation.**

INTRODUCTION

The key elements of planning sustainable urban development (Dias *et al.*, 2018) include evaluating and monitoring the progress of planning and implementation. Through regular observation and comparison of the planned and achieved objectives, it is possible to identify problems and their causes (Greed and Roberts, 2014). This also contributes to noticing and understanding what benefits were achieved, what was done well, and in what way we can learn from good and bad practice (Marošek *et al.*, 2012). Evaluation of the results (Guyadeen and Seasons, 2016) in the field of urbanism should in no way be reduced to checking the efficiency of drawing up plans and issuing building permits over a certain time period, without quantitatively and qualitatively checking the results of their implementation. Starting from 1995 and with the adoption of the the Law on Planning and Arrangement of Space and Settlements, regulation plans have become the basic instrument of planning in Serbia. Hence, regulation plans, after plenty of professional debate and years of criticizing the previous way of planning, have replaced detailed urban plans, which were inflexible, too prescriptive, and not responsive to the market demands. With a change in the legal basis in 2003 (Hirt, 2009), *detailed regulation plans* and *general regulation plans,* were introduced instead of *regulation plans*, but this has not affected the essence of the methodology itself. Since introducing the new planning models, not many general professional debates dedicated to the results of the implementation of urban plans have been organized (Niković *et al.*, 2015). There are no analyses

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of the extent to which the expected results of the new way of planning have been achieved in practice and how the implementation of the new model has affected the quality of urban space (Niković and Manić, 2018). The purpose of this paper is to assess the extent to which objectives have been met and tasks completed through an analysis of the results achieved in the implementation of an urban plan, and to derive conclusions which could help to improve decision making in the future.

Methods used in the research

This paper is based on several methodological steps. The previous theoretical knowledge about the need to monitor and evaluate the implementation of urban plans is used as the basic background for the specific and local conditions. The authors start from the hypothesis that the particular urban plan considered here has obtained a high level of implementation since its adoption, and it can be used as a model for further analyses and practical recommendations. The first step, defining the research subject, is tailored to fit the case study of a particular local plan by analyzing the physical conditions *in situ* and the socio-political and economic changes that led to improvement in the urban planning process. The methodology of urban planning and heritage protection, as parallel and incorporated processes, is explained. The second step is based on time-distanced in field research and collecting discernible, empirical and measurable records using the methods of observation and comparison followed by final conclusions about deviations from the plan and the mostly external reasons for these deviations.

CHOOSING A CASE STUDY

The Detailed Regulation Plan for Four Urban Blocks between Streets: Krunska, Kursulina, Njegoševa and Kneginje Zorke – Vračar Municipality, from 2004, was chosen as the case study because it deals with space that has an inherited parcellation and the quality of the physical structure is different in terms of its cultural, historical, architectural and urban values. Its adoption was followed by fast and almost complete realization, making it possible to analyze and directly check


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DETALJNI URBANISTIČKI PLAN TRANSVERZALE OD BULEVARA JNA DO UL. 27. MARTA

Investitor: Direkcija za izgradnju i rekonstrukciju grada
Projektna organizacija: Urbanistički zavod grada Beograda
Projektanti: MATIČEVIĆ Vesna, dipl. ing. arh., IVKOVIĆ Vladislav, dipl. ing. arh., LJUBIČIĆ Predrag, dipl. ing. arh.
Za putni saobraćaj: JOKANOVIĆ Cela, dipl. ing.
Saradnici specijalisti:
Za saobraćaj: LUKIĆ Petar, dipl. ing.
Za vodovod i kanalizaciju: TASIĆ Nenad, dipl. ing.
Za energetiku: RADULOVIĆ Đorđe, dipl. ing.
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Tehničar ĐADIĆ Roksanda.

Položaj Transverzale utvrđen je Generalnim urbanističkim planom grada i regulacionim planovima odgovarajućih opština. Urbanistički zavod i stručnjaci van Zavoda u nekoliko navrata do 1967. godine, bavili su se detaljnim projektovanjem Transverzale i na bazi ovih projekata vršeno je rezervisanje teritorije i izdavanje lokacija za izgradnju.
Na zahtev Direkcije za izgradnju i rekonstrukciju grada, a u skladu s neophodnom i uobičajenom revizijom urbanističkih projekata, Urbanistički zavod pristupa 1967. godine izradi novog Detaljnog plana Transverzale. Projektanti su bili arh. Brana Jovin, arh. Predrag Ljubičić, i ing. Jovan Katanić, sa saradnicima.
Dalji rad na reviziji Generalnog plana dao je nove elemente saobraćajnom sistemu grada pa tim i nove programske zahteve za trasu Transverzale. Tako se 1968. godine, za istog investitora i u okviru istog zadatka, pristupa izradi Detaljnog plana Transverzale po novom programu.

Maketa kompozicionog rešenja

Trasa transverzale

Figure 1. Scale model of the Vračar transversal road with a delineated area of 4 blocks (Source: Urbanizam Beograda 2 (1969), p. 17. http://urbel.com/publikacije/casopis-urbanizam-beograda/page/6/)

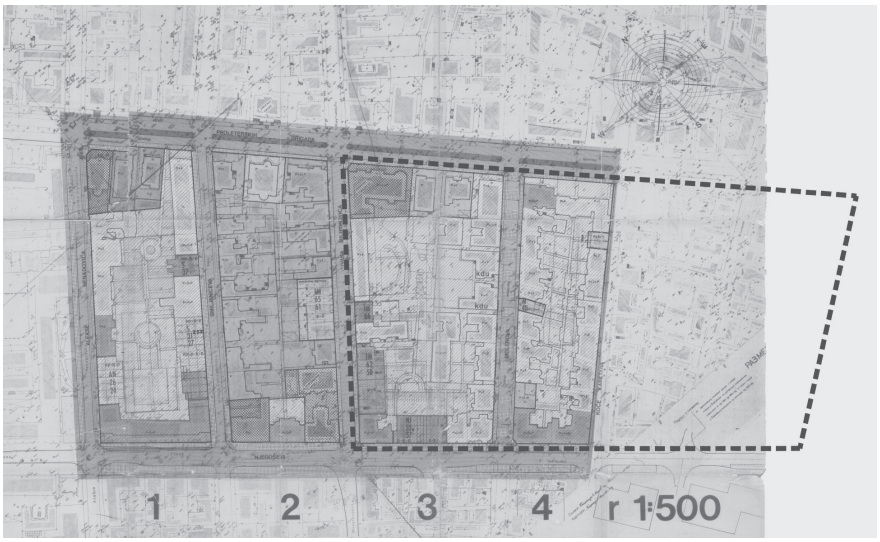

Figure 2. The 1988 Detailed Urban Plan for the Reconstruction of Four Blocks in the Territory of Vračar Municipality between Alekse Nenadovića, Proleterskih brigade, Koče Kapetana and Njegoševa streets, with a delineated area of 4 blocks

the planned solutions in terms of their morphology, the economy and the environment. In drawing up the Plan, intensive cooperation was achieved between experts from the Urban Planning Institute of Belgrade, Belgrade Land Development Agency and the Cultural Heritage Preservation Institute of Belgrade**.** According to the Master Plan of Belgrade 2021, the area belongs to the central zone and is earmarked for housing. The previously developed Spatial and Programmatic Concept of the Regulation Plan for the Central Zone – the Spatial Entity of Vračar Municipality, was used as a concept, so that urban planning parameters, rules of construction and the principle of garaging vehicles were taken from it, with some corrections.

The necessity for urban renewal and reconstruction

The purpose of drawing up a plan for this area (urban blocks 31, 37, 38 and 39) included the urban reconstruction of an attractive location along with defining public interest (Danilović Hristić and Stefanović, 2018), as well as re-examination of the construction capacity, solving the parking issue and protecting historical heritage (Zan *et al.*, 2016; Nummi, 2018).

Two previous plans: the 1970 Detailed Urban Plan (DUP) for a new road from 27. marta Street to the motorway and the 1988 DUP for the reconstruction of four blocks in the territory of Vračar Municipality between Alekse Nenadovića, Proleterskih brigade, Koče Kapetana and Njegoševa streets, generated a *status quo ante,* because what was planned was not implemented. Both plans were produced during the time of the socialist system, when building was in the sole competence of large state-owned companies. The plans disregarded the existing parcelling while garaging and greenery were planned in the space inside the urban blocks, under laws then in force which enabled the expropriation of land not only for public use, but also for the construction of new residential buildings (Dimitrijević Marković, 2017). The new road, with a planned width of 50m (a so-called transversal road), was routed through the city's urban fabric, crudely negating existing parcelling and requiring extensive demolition. Although construction of the road was given up in later amendments and supplements to the Master Plan of Belgrade 1985, it was neither replaced nor put out of force, due to which the infrastructure and building stock deteriorated without the possibility of being replaced or renewed. With the adoption of the Law on Expropriation in 1995, the possibility of expropriation in order to arrange the space between blocks or construct new residential buildings was abolished, thus making implementation of the planned solutions impossible (Danilović, 2003). At the same time, the legitimate beneficiaries of the parcels also acquired a right of pre-emption to build, and so the number of potential holders of the right to build considerably increased (Dimitrijević Marković, 2015). All these reasons, along with plenty of requests by citizens, led to a new plan which would put out of force the old DUPs and create the conditions for new construction in line with the new legal basis and market circumstances.

Characteristics of the space in the case study

The Plan covers a spatial entity of 4.95 ha, situated on the edge of the central city zone. The area is characterized by clearly defined blocks of a closed type with a prevailing edge construction. The blocks are an elongated quadrilateral shape and are surrounded by streets of between 7 and 18m in width. The lots are of different width and depth, and in some cases the depth is up to two times greater than the width. The existing diversity of the building stock is evident – from high-rise buildings to ground floor houses from various periods and of different morphological and stylistic characteristics and quality. The parts of the street characterized by a uniform height regulation contain buildings with different numbers of floors, which is a direct result of different floor heights applied in different time periods (Dimitrijević Marković, 2012, 2017). The lack of green areas and parking space is noticeable.

METHODOLOGICAL APPROACH TO DEFINING THE MEASURES AND REQUIREMENTS FOR PROTECTION

Most of the area covered by the Plan has the status of prior protection, meaning that the Cultural Heritage Preservation Institute as a relevant institution has set out the Study "Requirements for the Protection, Maintenance and Use of Cultural Properties and Properties under Prior Protection". The purpose of these requirements is to draw conclusions through a historical analysis of the emergence and valorization of individual buildings and the area as a whole, and to determine the general conservation measures which would serve urban planners. In addition, the aim of the requirements is to single out a certain number of buildings which have particularly marked the development in this area in order to put them under adequate urban protection. These buildings stand out by their cultural and historical and/or architectural and urban characteristics which give character and identity to the area, but which have not been determined as individual cultural properties. For this reason, the entire building stock was valorized and divided into five groups:

- Cultural monuments;
- Significant architectural achievements;
- Buildings of ambience value;
- Buildings of a wider interest for preservation; and
- Buildings without cultural and historical, architectural and ambience values.

The division was made on the basis of the following valorization criteria:

- Cultural monuments: building entered into the Registry of Cultural Monuments;
- Significant architectural achievements: buildings of cultural and historical value and/or architectural and urban value, with at least one of the following characteristics:

  a) antiquity;

  b) a significant work of a famous author(s);

  c) a representative of a style or type; and

  d) an important function and/or event is linked to the building or a famous figure has stayed in it.
- Ambience values:

  a) a work of famous author(s);

  b) the architecture is typical for the time;

  c) well-executed craftwork;

  d) a striking angular building; and

  e) part of a larger spatial entity (stretch of the street, square);
- Buildings of wider interest: that more or less fit into the ambience, but have no outstanding value, or they do not fit, but have good value; and
- Buildings without any architectural value: having neither cultural and historical nor architectural value and replacing them is desirable.

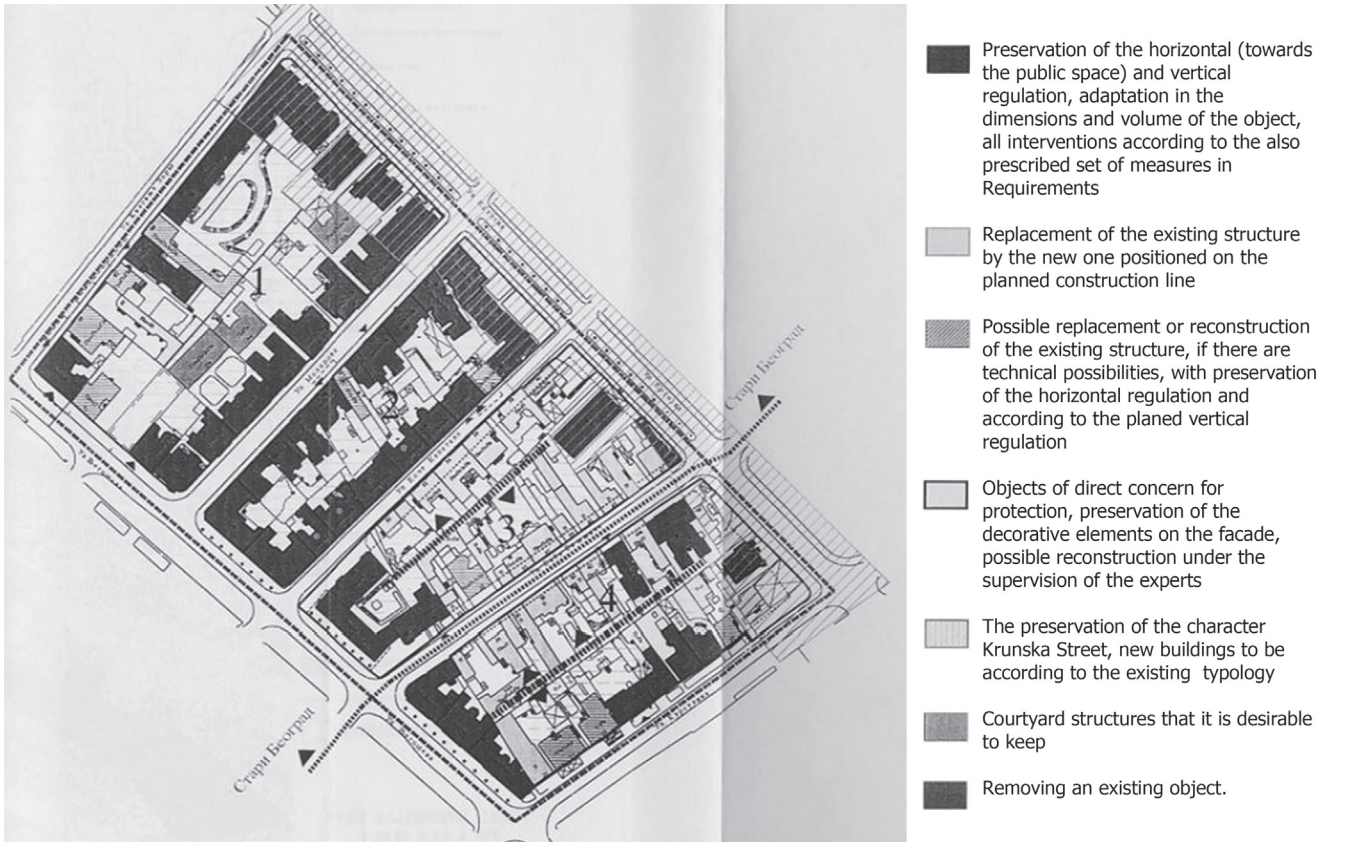

Figure 3. Four blocks in Vračar – the Map of Requirements. Source: The Requirements for the Protection, Preservation and Use of Cultural Properties and Properties under the Prior Protection, Cultural Heritage Preservation Institute of Belgrade

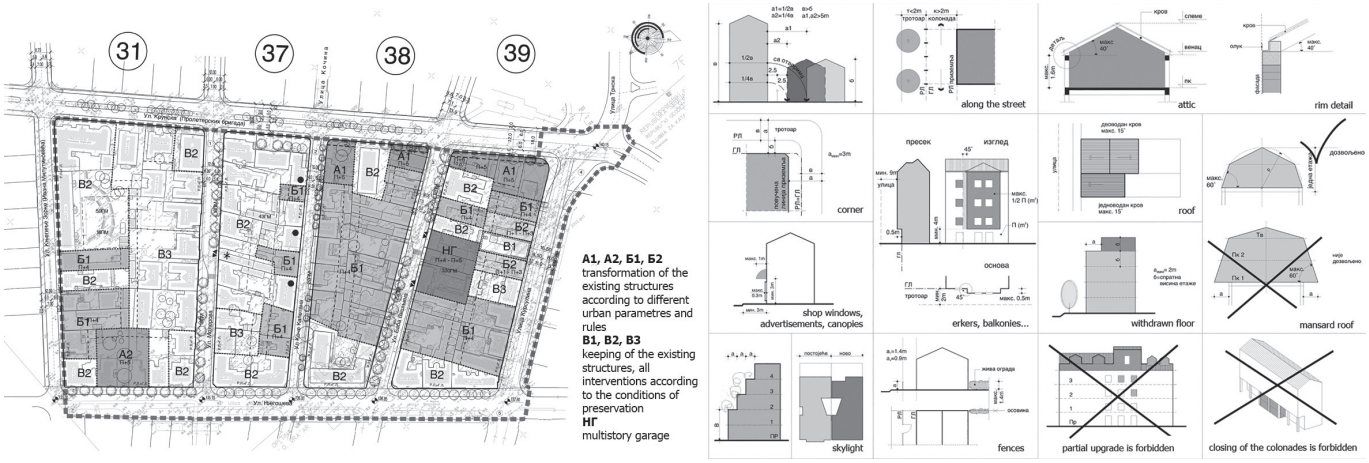

Figure 4. An excerpt from the Detailed Regulation Plan, a graphical representation of the solutions for the street regulation and levelling and the illustration of rules of construction and shaping

The requirements also prescribe a set of measures for each group separately. For cultural monuments, as well as for significant architectural achievements, preserving the building in its current condition is prescribed with the possibility of minor interventions in the courtyard area, or on a lot, if there is a planning possibility for that. For a cultural monument, it is required that the lot be preserved in its unchanged shape. For buildings of ambience value, the study gives a series of the protection measures, from preservation in its current condition to the possibility of adding extra floors, with precisely specified rules for any interventions. The possibility of erecting a new building is given for buildings of a wider interest and buildings without any architectural value. In the graphical representation – "Map of the Conservation Requirements", measures have been concretized for each building individually:

- Preservation of the horizontal (towards the public space) and vertical regulation, adaptation in the dimensions and volume of the object, all according to the measures prescribed in the Requirements;
- Replacement of the existing structure with a new one positioned on the planned construction line;
- Possible replacement or reconstruction of the existing structure, if there are technical possibilities, with the preservation of the horizontal regulation and according to the planed vertical regulation;
- Objects of direct concern for protection, preservation of the decorative elements on the façade, possible reconstruction under the supervision of experts;
- Preservation of the character of Krunska Street, new buildings to be constructed according to the existing typology;
- Keeping desirable courtyard structures; and
- Removing an existing object.

For adding floors, building height benchmarks are also specified. The study gives recommendations for the architectural shaping of new buildings and interventions on existing ones. In accordance with the conservation requirements, new buildings should have a modern architectural expression along with use of contemporary building materials. In order to harmonize the simultaneous design and construction at a larger number of locations by different investors, it was recommended that urban planners prescribe a certain number of common elements, such as: the level of ground floors and eaves, the relationship between the curtain wall and openings in the façade, the proportions of openings and a single colour which would be represented on each building. An analysis of the materials, colours and other details present in the area, which would assist the urban planner when defining the requirements for new construction in context, was missing. The requirements also prescribe the entrances of underground garages to be provided via service roads in the space inside blocks to avoid the frequent perforation of the ground floor from the street side, which could be used for shops.

CHARACTERISTICS OF THE PLAN AND NOVELTIES IN THE APPROACH

In accordance with the determinants of the 2003 Law on Planning and Construction, the area covered by the Plan is divided into typical zones with the same urban planning parameters and rules of construction and shaping (marked as A1, A2, B1, B2, B3, V1, V2 and NG). These zones are based on the possibility of replacing existing buildings with new ones, as well as of interpolation into existing tissue, reconstruction and adding floors or on the obligation to protect heritage. The form of a compact block is preserved. The rules are given both textually and illustratively through sketches. Zone A comprises parts of blocks along Krunska and Njegoševa streets. Although the urban planning parameters are the same, an additional division is made into sub-zone A1, along Krunska, characterized by a specific street profile and building line moved in line with the regulation on mandatory sub-gardens. Sub-zone A2 along Njegoševa Street is characterized by shops, cafés and offices. Zone B comprises parts of blocks along other streets, with calm pedestrian movement and mixed-use buildings. Zone V comprises the remaining part of the area in which conservation of the ambience is prescribed with limited interventions.

A particularly interesting rule in the Plan is laid down for shaping the top floor and fifth façade which could be in the form of a floor, setback floor or attic, with a maximum eave height of 15m and a maximum ridge height of 18m, adjusted in line with the neighbouring buildings with a tolerable deviation only in cases when this provides a higher-quality of architectural expression. Thus the conservation requirements are upgraded with the corresponding rules of urban planning, at the same time giving architects a certain freedom. Elements such as bay windows, canopies, balconies and terraces may appear on an angular section, at one end or in the middle section of a building. For new buildings in front of which the pavement is less than 2m it is obligatory for the ground floor to be set back a minimum of 2m, forming a colonnade. For buildings on which previous interventions have greatly devastated their form, the Plan prescribes the possibility of remodelling with the aim of finding a more appropriate architectural solution, which can be considered as another innovation and contribution. In order to assess the economic viability of the planned construction, each individual lot was analyzed in order to harmonize the parameters (number of floors, lot coverage and floor area ratio). The result was a ratio of 1:4 between the existing planned buildings. The Plan also provides parameters to stimulate certain lots and exemptions from the rules to stimulate future development or to improve the visual identity of certain parts.

In Baba Višnjina Street, with the highest level of interventions to replace existing ground-floor houses, the regulation was symmetrically widened from 10 to 14m to enable the construction of the buildings with GF+4F/5F and to satisfy the distance between opposite buildings, traffic elements and the distance between corridors of infrastructure lines. In addition to a roadway of 5m, the planned regulation also includes 2m wide pavements on both sides, with a line of trees and a group of parking spaces that are alternatively organized on the left and right sides, thus achieving the effect of traffic calming. The novelty in the Plan lies in the possibility of widening the regulation through phases in its implementation, after completion of the buildings on the planned setback regulation and building lines. Due to the same depths of the lots, the urban planner insisted on equal treatment of the owners and widening both sides of the street. Such an approach is more complicated because the process of expropriation involves many more individuals, and the competent **agency** must firstly specify the street

Table 1. An excerpt from the tabular presentation of the level of implementation

	Address	Realized / unrealized buildings	Plan	Respect of the terms of plan	Deviation from the Plan	Consent of Belgrade City Institute for the Protection of Cultural Monuments	Notes
1/31	Knjeginje Zorke 58, parcel 533 Vračar	Yes	Zone B1	No	Realized G+4+A (with semi-circular roof as attic), permitted by plan G+4	+	Established visual connection with the object in Knjeginje Zorke 60, Design by "A2", architect V. Nikolić
2/31	Knjeginje Zorke 60, parcel 534 Vračar	Yes	Zone B1	No	Realized G+4+A, permitted by plan G+4	+	Established visual connection with the object in Knjeginje Zorke 58. Extreme depth of the structure toward the inner court. Design by "A2", architect V. Nikolić.
3/31	Knjeginje Zorke 62	No	Zone B1	No			
4/31	Knjeginje Zorke 66	Yes	Zone B1	No	Realized G+4+A, permitted by plan G+4		
5/31	Njegoševa 55	Yes	Zone A2	No	Realized G+6+2A, permitted by plan G+5		
6/31	Njegoševa 57	Yes	Zone A2	No	Realized G+5+A, permitted by plan G+5	+	A setback floor has a sloped cover, the height of the cornish and the balcony fence according to the plan is 18m, but on site it is 20.6m, the permittedheight of the top of the roof is 21m, on site it is. 24m.

Table 2. Summarized results of the implementation of the Plan

Urban block	The number of implemented structures/ interventions	Unrealized building sites	Respected the terms of plan	Did not respect the terms of plan	Deviations noticed
31	5	1	0	5	All deviations in the completed buildings relate to having a setback floor or attic higher than planned
37	2	2	2	0	The completed structures comply with the terms of the plan
38	11	7	1	10	Deviations from the plan are mainly in the formation of setback floors or a semi-circular roof with an attic above the permitted height. Three buildings were completed without collaboration with Belgrade City Institute for the Protection of Cultural Monuments, and one exceeded the construction line given by the plan
39	10	3	3	7	In this urban block there are deviations in terms of the height regulation, and buildings have mainly one floor higher than the legal limit, and one structure even has two floors above the maximum
Summ	**68.3%**	**31.7%**	**21.43%**	**78.7%**	

regulation. Therefore, the Plan makes implementation in stages possible, whereby the first stage includes the positioning of new buildings on the planned building line. The utility infrastructure lines are already in the existing regulation, which enables their reconstruction. The second stage is to be carried out only after building is completed and it includes reconstruction of the roadway with all of its planned elements and replacement of the utility infrastructure lines, as well as equalization of the regulation line with the building line.

The other novelty lies in planning the above-ground parking garages on other land, the capacity of which would solve the problem of a lack of parking in a wider area, taking into consideration the nearby Kalenić Green Market and Vračar Municipality. The garage was planned to be built on three lots with inadequate conditions, where it was very narrow, and there was uncertainty as to when the lots would be consolidated, or one of them could remain without the possibility of agreement or realization.

IMPLEMENTATION AND ANALYSIS OF THE RESULTS

The level of implementation is directly connected with how the plan was drawn up, as well as with the determination of the plan, its clarity and the decision to make implementation simple and unambiguous (Graovac *et al.*, 2017). It is interesting that the assumption to have so-called "soft" and "hard" locations has been proven correct in practice. Namely, soft locations are those which can be completed more quickly and easily than other locations that have certain limitations (e.g. the mandatory consolidation of sub-standard lots, good value of existing buildings, etc.). This paper analyses the implementation of the Plan according to whether the given possibilities were implemented, whether the requirements were met, and whether there were noticeable deviations from the rules. The elements of the urban plan were compared with the requirements of preservation in combination with work in the field in May 2018. The result is a tabular presentation with comments and conclusions, showing the summarized results.

The planned construction of new buildings and addition of floors to existing ones was carried out on 28 out of 41 lots, or on 68.3% of them. Given that two buildings are currently under construction, this percentage will soon increase to 73.2%. A significant characteristic of the newly constructed buildings is use of the maximum allowed parameters, particularly in lot coverage. Almost all of the buildings were constructed on the existing cadastral lots and extended to the inner building lines prescribed at 5m from the boundary of the lot. The new construction is also characterized by ground floors often perforated by entrances for residents and vehicles. Also, the average width of the lots of approximately 12m in the subject area means that building depth is considerably greater than the front façade. Another characteristic is that lot coverage in the zone of underground floors for garages is 100% for almost all new buildings.

The lots were consolidated for the purpose of a new construction in block 38, without taking into account the mandatory consolidation of cadastral lots for building above-ground parking garages in block 39, as specified by the Plan. On the other hand, a new construction which was supposed to be formed by combining two cadastral lots was not built, although stimulative parameters were given. Namely, the lot along Krunska Street did not have adequate conditions for construction, and the principle of setting the front building line back 3m from the regulation line in order to form a continuous front garden along the street as a motif, made it completely "useless". The proposal by the urban planner for this to be a public green space was

not supported by the Land Development Agency, so the lot was added to an adjacent one which would otherwise be suitable for construction. This made implementation difficult because interest in reaching an agreement was obviously not strong enough. On the other hand, the urban planner was not supported in making the parcellation, in order to obtain a better solution, so this was left to market mechanisms. Thus, the space between two buildings in Koče Kapetana Street, an existing and a newly constructed building, remains undefined and unarranged, as a result of the shape of the cadastral lot and the fact that the building was not built on a sloping boundary, because the unsuitable triangle section remained "trapped".

The public works did not keep up with the completion of the blocks, and the planned reconstruction of the streets has not yet been completed. The possibility of implementation in stages led to the speedy completion of new buildings on the majority of lots, but not to the completion of public works, regardless of fact that the Plan did not forbid public space being developed prior to construction of all buildings on the setback building line.

Defining the zoning in accordance with conservation requirements, and the height regulations for new buildings in accordance with the proposed building height benchmarks enabled the interpolated buildings to fit into the existing rows of buildings, resulting in a visual harmony. However, even though the buildings were mostly built using contemporary materials and had a contemporary appearance (Cousins, 2009) in accordance with requirements for architectural shaping, a visual connection between the buildings is very rare. Visual harmonization was achieved (CABE, 2000a, 2000b) in cases in which the construction of several buildings in a row was carried out by the same investor, or when the requirements for architectural shaping were compulsory for all lots, such as the mandatory formation of a colonnade along the even side of Koče Kapetana Street.

The summarized results of the implementation of the Plan show that the majority of deviations in relation it relate to the non-observance of vertical regulations, i.e. adding an additional setback floor or attic. The horizontal regulation was only disregarded in the building at 29 Baba Višnjina Street, which exceeded the specified regulation line by approximately 25cm, which is now visible, in addition to which the balconies on the upper floors were glazed, which particularly spoiled the appearance of the building and made it look disharmonious. It is particularly noticeable that several buildings within the area under prior protection were built without anyone finding out the requirements from the Preservation Institute**,** in spite of the mandatory cooperation prescribed during the procedure for issuance of a building permit. Also, some of the more recently constructed buildings have, according to the authors' criteria, applied eclectic elements and elements of kitsch instead of the contemporary architectural expression stated in the rules in the Plan. Violation of the requirements specified by the Plan already occurred in a number of cases during the procedure for issuance of conditions for construction at the location, when certain requirements for construction were omitted, while other violations occurred during construction, because of which investors had to follow the legalization procedure later.

To summarize this discussion, it can be underlined that the plan really made an effort to facilitate the implementation phase, even to "guess" which limitations and obstacles should be eased and possibly eliminated or stimulated, for example building parameters, public utilities, parking,

Figure 5. Photo documentation from the field

etc. The shortcoming of the plan is the absence of an even more detailed set of rules that would provide a unique, harmonious and well-matched ambience. The result of the excessive depth of the buildings and the over-built blocks is unsatisfactory ecological residential conditions, indicating the necessity for reviewing the existing elements in the regulation. Namely, instead of the degree and index calculated on the plot unit, it is better to define the internal building line, parallel to the street regulation line, and if necessary, it should be established for each parcel separately. The position of the internal building line, instead of the usual 5m, should be a result of a detailed check of the existing land division, but also take into account daylighting and insolation in terms of the space inside the building, as well as the space inside the urban block. In addition, an innovative and experimental approach needs to be shown by the professionals involved in the planning process in order to evaluate, over a period of time, the level of implementation, and also to measure any deviations and discuss difficulty in putting theory into practice, from what is planned to what actually happens. The goal of this paper is to point out the weakest link in the whole process and give some recommendations for improvements and advancement.

CONCLUSIONS

The subject of this research includes a case study, with a planning history over several decades, followed by an analysis of the level of implementation of the last adopted regulation plan for that case study, which enabled urban reconstruction within a contemporary regulatory and planning framework. By choosing this plan, which was mostly executed on site, it was possible to check not only the quantitative efficiency, but also the qualitative results and all deviations from the plan rules. The plan represents an innovative and recent shift in planning with regard to economic aspects, public works, garaging, rules regarding zones, specific locations and the design of façades and elements such as the ground and top floor, etc. The impression is that the plan could have been even more precise and detailed in its rules, measures and recommendations, although it was made with the goal of not being too prescriptive, but rather to allow some creativity in the design phase. Even more importantly, a plan should be concise and transparently represent a planned vision of space, with an additional handbook that would suggest what is desirable and what is not, so as to be explicit for all users, especially investors, citizens and those who have to implement the plan later. Only in this way is it possible to prevent abuse. The difficulties that this plan has faced during its implementation have often come from spheres other than planning, mostly regarding chasing profits, and omissions in issuing permits such as the lack of consent, as well as a lack of supervision by the inspectorate in the case of illegally overstepping the rules of the plan. It seems that the premises, borrowed from the theory of management, that "even a bad plan is better than no plan" and "even the best plan can do no good until it is effectively executed" are true.

However, to fully understand the purpose and reasons for developing the Plan, it is necessary to understand the social context in which the decision had to be made for drawing up the new plan. This has contributed to fact that the cadastral lot has become the basic unit of planning, around which everything has to be solved: the urban reconstruction of attractive locations along with defining the public interest, re-examining the construction capacity, solving parking issues and protecting historical heritage. The investigation of previous planning solutions showed that they were not carried out, primarily because of the obligation to acquire land through the expropriation procedure and then to carry out complex undertakings resulting in the high financial cost of displacing residents, demolishing and constructing both primary transport infrastructure and the blocks themselves, with free space and an area for garaging inside the urban blocks. Due to changes that occurred in wider social spheres, which affected both the method of managing urban land and the urban planning system, the solutions became inadequate, inadaptable to the new social and economic circumstances and practically non-implementable, which resulted in an absurd situation in which plans became an obstacle and not a support to urban development for many years. In this sense, establishing regular monitoring and evaluation would contribute to avoiding such situations in the future.

The implementation of the new regulation plan oriented towards market mechanisms has been fast and successful from the aspect of completing planned housing and commercial contents. In this sense, the planning solution has satisfied the requirement to be economically stimulative for private investors. Maximizing profit has led to the maximum planned capacities being utilized, which was expected, given that this is a zone in the inner town centre where the demand for real estate is great. What could be the subject of further intensive investigation is the issue of the potential diversification of demand and the development of mechanisms which would lead to different interpretations of the maximum use of the Plan. However, the infrastructure was not completed to the same extent as the plan and this raises the issue of setting a time period for the planned development of public land, the dynamics of which could also be monitored.

The solutions which have not been implemented primarily include the harmonization of several interests – private interests in the case of consolidating the lots of different owners and public/private interests in the case of land for public and other uses. In both cases, it has been concluded that it is necessary to develop new instruments which would stimulate realization, but also expand the number of possible solutions for "hard" locations, which is, in given frameworks, reduced to the dilemma between expropriation and mandatory parcellation (along with a capacity increase). On the other hand, a specific theme which actually calls into question the successfulness of the implementation itself includes certain requirements and the disregard of planning solutions. Given that excess mostly refers to an increase in the construction capacity, it can be concluded that the main reason lies in an increase in profit. However, further research which could also be carried out on a wider sample could answer the question of which factors cause the non-observance of a plan's requirements, such as incompetency, corruption or legalization procedures. The

Plan's requirements associated with architecture and the construction of buildings, as well as the visual integration of buildings has occurred only in cases when buildings were built by the same investor. This fact leads to the conclusion that rules in the domain of architectural shaping should be even more precisely defined and in more detail, and it also opens the very significant issue of establishing and controlling standards.

Good cooperation amongst the experts in drawing up the Plan and a persistent search for compromise in which different interests would be satisfied, as well as the preservation of ambience values and monumental values and at the same time commercial effect and market conditions, have resulted in the plan being a successful compromise of harmonized requirements. However, the priority of economic viability, leading to its secure implementation, has enabled construction to take place with high urban parameters. All new buildings were built using the maximum capacities allowed, which reflected unfavourably on the functional, environmental, the social and aesthetic aspects of space – the organization of apartments, exposure of rooms to sunlight, traffic flow, and the lack of free and green space inside the blocks, thus decreasing the attractiveness and value of the ground floors of buildings and public space on the street. Can, and should, a city be developed if left only to market forces, with the cadastral lot as a basic unit of undertaking? The approach to urban planning, which has experienced changing from an extremely centralized to a considerably liberal one, was analyzed using the case study of the Vračar blocks. The change has led to their completion, but the question of how to achieve results of higher quality arises, as well as what the actual price of the successful implementation of the plan is.

A set of recommendations for the improvement of the urban planning process and later implementation could be:

- An integrated approach, inter alia to define the needs, potentials and values of the site and establish cooperation between experts regarding topics of designed matrix and the planned appearance of the space, protection of heritage, organization and distribution of public land, etc.;
- More participation and involvement of all stakeholders in order to recognize their intentions;
- Modeling and calculating the economic effects and benefits, but setting a limit that cannot be exceeded, especially taking in account the density and proportions;
- Giving clear rules about building space, accompanied by additional descriptive sketches and a proposed lists of materials, colors, shapes of elements, etc. For the areas of urban renewal, use of urban codes in the form of a handbook or manual would probably be the best solution;
- Enabling completion in phases, but defining correlations and conditionality between them (if, then, when);
- In order to obtain higher quality space the share of public investment in the implementation phase should be re-examined, as well as commitment to the plot unit as the only measure; and
- And the most important, but probably in local conditions the most difficult factor, to treat an urban plan as inviolable, to follow its set of rules, to strictly monitor implementation and sanction all deviations.

The analysis justifies the starting premise that it is necessary to establish a regular evaluation of the implementation of plans in order to improve the overall process of urban planning.

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