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The review is concerned with a multi-disciplinary approach to spatial, regional and urban planning and architecture, as well as with various aspects of land use, including housing, environment and related themes and topics. It attempts to contribute to better theoretical understanding of a new spatial development processes and to improve the practice in the field.

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REGULATING MARKET-LED URBAN EXPANSION IN THE NEW MASTER PLANS OF SOFIA AND BELGRADE

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Like most European cities, cities in South-east Europe (SEE) have been growing throughout the 20th century, however, since the end of the 1980s, the mechanisms of urban growth and expansion have changed radically: from development fully determined by central planning to market-led urban development. This paper examines how planning in large SEE cities is coping with the challenge to balance the action of the market and achieve planning goals relating to the form of urban growth and expansion. As case studies we analyse the master plans of Sofia and Belgrade and their implementation. We have two research questions: first, whether planning in the two cities has considered the role of the market when defining its objectives, measures and solutions regarding the forms of urban growth and the development of in suburban areas, and, second, whether planning has been able to influence the market or cooperate with it in order to achieve its objectives in suburban development.

Key words: Post-socialist development, suburbanisation, urban growth, market-led urban development, market-planning relationship.

INTRODUCTION

Urban growth, expansion and suburbanisation have been powerful development trends in Europe throughout the 20th century, particularly since WWII. Such trends have also been observed in South-east Europe (SEE), however, because most SEE countries were communist until the end of the 1980s, the mechanisms of urban growth and expansion have changed substantially in the transition period (Nedović-Budić *et al.*, 2012, Zeković *et al.*, 2015; Kovachev *et al.*, 2016). As researchers have found (Nedović-Budić and Tsenkova, 2006; Hirt, 2007; Zeković and Maričić, 2008; Maričić and Petrić, 2008; Vujošević *et al.*, 2012; Daskalova and Slaev, 2015), the new trends are in many aspects similar to suburbanisation in western countries. Western type suburbanisation is usually associated with urban sprawl, which is, generally, considered a negative trend. Researchers regard sprawl as a form of expansion generated by the market, but also determined by planning factors (e.g., Gong and Wheeler, 2002). While the market is, in principle, the leading force in suburbanisation, successful

planning can steer urban development towards sustainable forms of growth (EEA, 2006; Nedović-Budić *et al.*, 2016). For this purpose, planning should study the market processes, analyse their drivers and find mechanisms and tools to cooperate with the market, and then regulate and mitigate it. Unfortunately, as authors have pointed out (Bertaud, 2003; Holcombe, 2013; Anderson *et al.*, 2012; Slaev, 2016a, 2017, among others), planners often ignore the role of the market in urban development. In this respect, planners in post-communist SEE countries face even bigger problems because of the lack of experience with planning in a market environment.

The objective of this study is to examine how planning in SEE cities is coping with the challenge to balance the action of the market and achieve planning goals in a market environment. As case studies we analyse the master plans of Sofia and Belgrade and their implementation, since these plans have been adopted with a particular focus on suburban development. Sofia and Belgrade are suitable case studies for this research, because as typical SEE capital cities they have experienced high rates of growth throughout the 20th century (Kovachev *et al.*, 2017) and accelerated market-led development in the period of transition. In

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2011, the population of Sofia was 1,291,591 (NSI, 2012) and that of Belgrade was 1,659,440 (SORS, 2014). Both cities prepared new master plans at the beginning of the 2000s: the plan of Belgrade was adopted in 2003 (changed in 2006, 2014) and amended in 2016 and that of Sofia in 2007 (changed in 2009). In 2000, the urbanised area (UA) of the compact city of Belgrade was 18,880.56 ha and that of the suburban settlements in the city region was 18,198.91 ha; in comparison, the UA of the compact city of Sofia was 16,408.06 ha and the city's suburban UA was 7,806.31 (Krunić *et al.*, 2014; Slaev *et al.*, 2018). The two capital cities had already faced substantial problems relating to the processes of market-led suburbanisation, and the form of urban expansion was a topical issue that the master plans had to deal with.

Therefore, our research questions are:

1. Has planning in Sofia and Belgrade considered the role of the market when defining its objectives, measures and solutions regarding the forms of urban growth and the development of its suburban areas?
2. Has planning been able to influence the market or cooperate with it in order to achieve its objectives in suburban development?

To answer the first question we examine what objectives are identified in the master plans regarding suburban areas and how planning aims to achieve them and, also in this regard, whether planning analyses the role of the market and the actions of the market forces. To answer the second research question we evaluate whether planning has been able to influence the market or cooperate with it on the way to achieving its objectives. We do that by examining the course of the implementation of the plans using statistical information and data about processes in suburban areas since the adoption of the two master plans.

THEORETICAL FRAMEWORK OF THE STUDY

Two theoretical issues are important to this study. The first issue is related to the factors determining the performance of planning – its ability to effectively direct urban development to the desired form of urban growth. Planning performance is assessed through performance-based and conformance-based criteria (Faludi, 1989). The former criterion evaluates a plan's outcomes and impacts, whereas the latter measures the conformance between the plan's goals and the actual outputs. Relevant to our study is the latter criterion. Slaev and Nedović-Budić (2017) argue that a plan's performance depends on the phase of the planning cycle. According to Taylor (1998), a cycle of planning (developing and implementing a plan) comprises five phases: 1) situation analysis, 2) target definition, 3) development of a tree system of objectives, sub-objectives and priorities, 4) application, and 5) monitoring and feedback. According to Slaev and Nedović-Budić, the performance of planning at the later stages is generally poorer than its performance at the earlier stages. This is because each subsequent phase in the planning cycle sets new requirements, but in each subsequent phase the number of errors grows as new errors multiply those of the previous phase. Therefore, plans are generally weaker in their later phases, but most urban planners do not account for this fact.

The second theoretical issue, which is important to this study, is whether planning is able to balance and “co-operate” with the market. Holcombe (2013) maintains that to properly cooperate with the market, local governments should not interfere much with the affairs of market participants, but should focus on planning their own activities – primarily, the development of the infrastructure (see also Slaev and Kovachev, 2014; Slaev, 2016b). Bertaud (2003) defined three main components of planning that define its relationship with the market: 1) the development of primary infrastructure, 2) zoning and planning regulations, and 3) local fiscal tools, e.g., taxes and fees. In this paper, when discussing issues of the performance and efficiency of planning, we focus on the elaboration and use of zoning regulations and the transport network patterns.

Under the influence of different contextual factors, like global economic discourse and political pressure, the existing rights have been replaced by the rules of new urban order. The urban order has a legal basis that arises from dynamism and contextual demands, and urban society phenomena. Banzhaf *et al.* (2017) state that land use is always under pressure due to the impact of different factors, and that urban planning has limited impact on land consumption. Urban development is under the strong impact of international companies, global financing and international institutions through city branding. The urban land market is imperfect and subject to government interventions (Begović, 1995; Knaap, 1998), while land use is determined by the market mechanism of supply and demand (Harvey and Jowsey, 2004).

REGULATING MARKET-LED SUBURBANISATION PROCESSES IN THE MASTER PLAN OF SOFIA

Preparation of the new General Urban Development Plan (GUDP) of Sofia started in 1998 and was completed in 2003. For two major reasons, the initial phases of the plan were developed along with preliminary socio-economic studies. One reason was the slowdown in socio-economic planning in Sofia in the 1990s, and the other reason was the urgent need to develop a new master plan, since the previous plan had been adopted 37 years previously. Thus, the Regional Development Plan of the Sofia Region 2000-2006 and the Development Strategy of Sofia, were prepared with the technical assistance of World Bank “Cities Alliance” experts in parallel with the first stage of the new master plan, i.e., the Forecasts for Socio-economic and Spatial Development in the period 1998-2001.

Accounting for the action of the market

Studying the market processes and market forces was an important goal for the GUDP. Indeed, the plan analysed the impact of market forces in the development of the city's economy, the land and property market, the investment trends, etc. An important observation regarding the balance between the development of central and suburban areas was that market trends maintained very high rates of development within the core city and in the southern suburban areas, whereas the rates in the northern territories were low (Metropolitan Municipality, 2003: 2).

Objectives of the new GUDP concerning the development of Sofia's suburban areas

The GUDP (Figure 1) defined its main objectives concerning Sofia's suburban areas based on two key factors. The first factor was the forecast for the growth of the city's population. The plan envisaged that the population would grow by 140,000, and that therefore, there would be a great need for new housing units (Metropolitan Municipality, 2003: 136), but the forecast was that only 25 percent of the new housing construction would be outside the compact city. The second factor was the perceived optimal balance between the development of the compact city and the suburban areas. One of the main objectives of the GUDP was to reallocate "urban functions to achieve a better balance of all urban activities" and remove "the overload" from the compact city". Initially, the GUDP did not aim to limit the high urbanisation trends in the southern territories, but emphasised the threat they presented to the large green areas (so-called green edges). However, the policy of containment of the development of the southern areas became dominant in the Amendment to the GUDP of 2009 (SOFPROEKT, 2009). Both the initial plan and the Amendment emphasised that the northern suburban areas were the main reserve for future development (Metropolitan Municipality, 2003: 136; SOFPROEKT, 2009: 36).

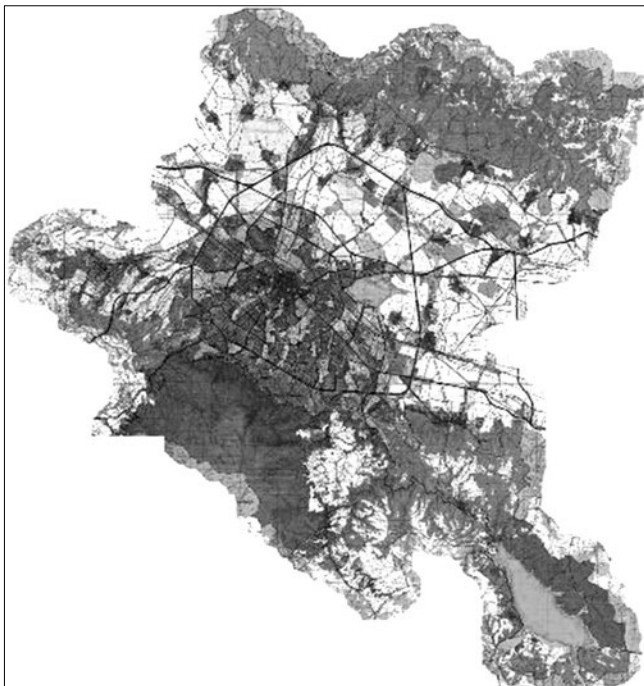


Figure 1. GUDP of Metropolitan Municipality, adopted 2007
(Source: Metropolitan Municipality of Sofia, 2003)

Measures in the new GUDP of Sofia concerning the development of the suburbs

One focus of our study of the relationship between planning and the market in this paper is the use of zoning regulations and another focus is the relevant design of transport networks. Regarding the zoning structure of the territories, the GUDP stipulated a reduction of agricultural lands from the then 49,340 ha down to 41,208 ha, and to 36,112 ha in the 2009 Amendment. This decrease was offset by an increase in urban areas (+8,580 ha) and in forest

and green lands (+8,170 ha). The biggest increase went to habitation (+1,900 ha) and to the zones for mixed-use developments – mainly residential and service functions (+4,920 ha). Vast areas of agricultural lands reserved for housing by the previous master plan (1,961) mainly in the southern outskirts remained with the same designation. Thus in practice, the biggest increase in residential areas was planned in the southern suburban areas. However, in serving the goal to direct urban development northwards, considerable portions of land in this direction were designated for "long term reserve", i.e. for urbanisation in the long term (e.g. in 20 years) or sooner, if considerable investment interests emerged.

Regarding the opportunities for developing service and commercial activities in suburban areas, the GUDP aimed to facilitate such developments through the promotion of mixed use zoning along the high class corridors and the junctions of the ring road with the main highways.

Concerning the forms of mass transit, the focus of the master plan was on the metro railway system. In just 5-6 years, the development of this system drastically improved the access to many peripheral areas of the compact city, but it did not influence the access to the suburban territories. In fact, the GUDP did not stipulate any significant improvement of the mass transit networks out of the compact city. Concerning the development of the road network in Sofia's suburban areas, the main effort is the ring road. Before 2000 the ring was a two-lane road with only a short four-lane section in its north-east part. With the GUDP the entire ring road had to be upgraded to a six-lane set.

Early results for the implementation of the 2007 GUDP of Sofia

Our study finds that so far the GUDP is failing to achieve its objectives in suburban areas – namely, to contain the development of the southern territories, preserve the green areas and promote the development of the northern territories. To assess the results of the implementation of the plan in the course of a decade, we used data from SOFPROEKT (the municipal company for planning) and the Cadastral Agency. We investigated the changes in three suburban districts: one southern – Vitosha, and two northern – Novi Iskar and Kremikovtsi. The data in Table 1 show that just like in the period before the adoption of the GUDP, the rates of development are highest in the southern suburbs. The expansion of the urbanised area in Vitosha in the period 2006-2013 was twice that of Kremikovtsi and more than five times greater than Novi Iskar. Hence, so far, development trends have not changed. Furthermore, the GUDP has failed to save the green edges in the southern areas. Neither are the northern suburban areas growing: data from NSI (2012) proves that between 2006 and 2011 the population of Novi Iskar and Kremikovtsi grew by only 650 residents.

The liberal policy of the GUDP that promoted service, commercial and industrial functions along the high-class transport corridors and the ring road resulted in the fast development of such functions in a number of locations (however, with some delay, compared to residential development). New, although small, industrial zones

emerged close to the transport junctions in the northern suburban territories, while service and commercial activities proliferated along the Southern Arch (see the next paragraph).

Table 1. Changes in the urbanised area in three suburban districts

Characteristic/ indicator	Vitosha	Novi Iskar	Kremikovtsi
Urbanised area in 2006 [ha]	2,514.43	2,751.44	3,405.68
Urbanised area in 2013 [ha]	3,131.27	2,806.42	3,707.55
Change in the urbanised area 2013/2006 [ha]	616.84	54.98	301.87
Change of urbanised area in percentage [%]	24.5%	2.00%	8.86%

Regarding suburban infrastructure, the construction of the ring road has already made substantial progress. The ring comprises four sectors – southern, western, northern, and eastern. The southern and the northern sectors have major importance for the development of the suburban areas. However, the northern sector comprises two routes: one called the Northern Arch that passes through the suburbs, and another one, the Northern Tangent, adjacent to the compact city (see Figure 2). The Northern Arch would have a major impact on suburban development while the Tangent would hardly have any. The construction of the southern sector of the ring road, called the Southern Arch, started in 2007 and was completed in 3 years. The Western Arch and the Northern Tangent were completed in 2016. When the Eastern Tangent is finished (planned for 2018) and the ring is closed, the building of the Northern Arch will not be urgently needed. In view of the shortage of funding it may be delayed until 2022-2025 or longer, and this will be crucial for the development of the northern suburban areas.

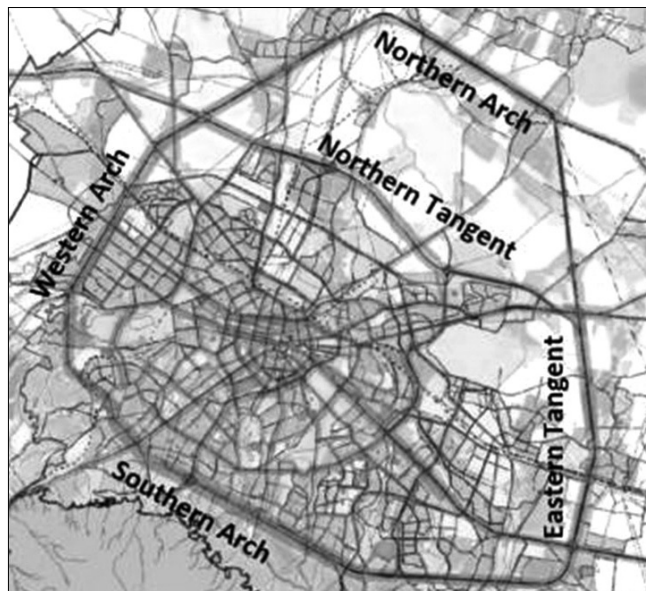


Figure 2. Traffic loads on the main street routes of Sofia (Source: Metropolitan Municipality of Sofia, 2003)

Summary of the findings concerning the 2007 GUDP of Sofia

Concerning the first research question, we find that the GUDP of Sofia paid special attention to the action of the market; however, the analysis of the market processes was not well

structured, and in some respects even confusing. When defining its objectives, the GUDP did not consider how they related to the interests of market participants – businesses and households. The plan stated that the city core had to be “unburdened” and that growth in the southern suburban areas had to be limited, while growth in the northern areas should be boosted, but it did not examine why residents wanted to move to the southern and not to the northern suburban areas. The plan also stipulated spatial solutions that were often irrelevant to its objectives. For instance, the growth of the northern suburbs required improvements in the mass transit networks, but no improvement was planned. The vast territories designated for urbanisation in the southern districts did not correspond to the objective to contain urban development in these districts. The “distant prospect” zoning in the northern districts proved to be an inefficient tool to boost urban growth. Thus far the GUDP has not been able to steer suburban development in the desired directions, because it has been unable to employ the most pertinent tool for cooperation with the market – the development of infrastructure. In reality, infrastructure development stimulated urban expansion to the south and not to the north, i.e., opposite to the plan’s objectives.

REGULATING MARKET-LED SUBURBANISATION PROCESSES IN THE MASTER PLAN OF BELGRADE

Accounting for the action of the market

In 2016 the new Master Urban Plan (MUP) of Belgrade 2021 was adopted (Figure 3) based on the MUP Belgrade 2021 (2003) (City of Belgrade, 2003), with a few changes (the last one in 2014). The MUP was based also on the Regional Spatial Plan of the Administrative Area of the City of Belgrade and the City of Belgrade Development Strategy (2008). In 2017 Belgrade adopted the City of Belgrade Development Strategy (RAREI, PALGO). The main aims and tasks of the MUP are: urban renewal and intensive use of the existing urban structures by increasing their quality, compactness and density, and by transforming industrial and other water front areas (brownfields); urban zones of mix use; the rational spread of urban construction land and the preservation of undeveloped high quality land. The aim of introducing zones of mixed use includes accepting already existing, planned or spontaneous complex urban structures of different purposes and contexts in the urban tissue. The aims in the area of housing include the transformation and replacement of worn-out housing stock, remediation of unplanned construction, construction of new housing settlements, development of social and accessible housing, improvement of infrastructure equipment, optimum land use, etc.

With the previously defined planning solutions for commercial zones, the backbone of Belgrade’s planned development determines the potential locations for large urban projects, the development of the urban waterfront, and the rehabilitation and transformation of previous industrial and military complexes (brownfields). The MUP foresees a large increase in transportation zones, economic areas and commercial zones, especially the structural transformation of the river waterfronts, with their important market dimension. The direct impact of market and investor

interests is, for example, present in the urban re-zoning of Belgrade Port proposed by the MUP Amendment (2006), “Belgrade Waterfront” project (2014), a new settlement “Makiš” and other large urban projects. In the competition for European cities and regions of the future, organised by the Financial Times in 2006, Belgrade was announced as the “City of the future of South Europe”.

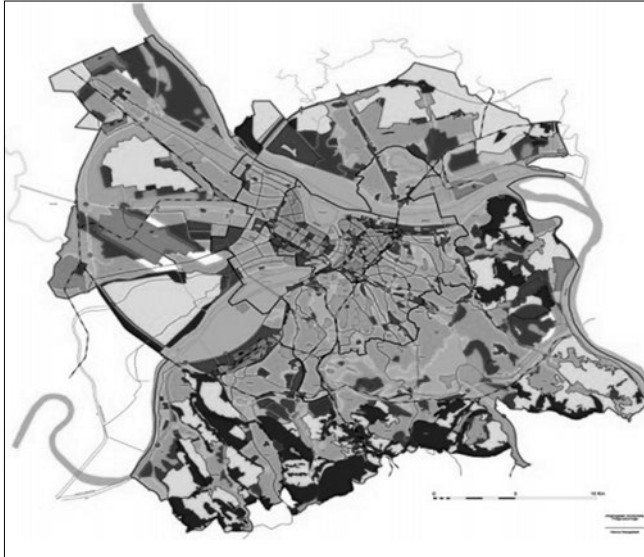


Figure 3. Land-use in MUP Belgrade
(Source: Master Urban Plan of Belgrade, 2016)

The urban land policy and communal economy have not been transformed yet, although the following are evident: the strong influence of market mechanisms; insufficient approaches and methods for land evaluation; no taxation of added urban land values; “investor urbanism”; different subsidies to investors for construction land; a “fast-lane” approach to cheap and attractive locations; the introduction of *lex specialis* for some large urban projects (Zeković and Vujošević, 2018); and intensive development of the “grey” market.

Objectives of the new MUP of Belgrade concerning development of the suburbs

The Belgrade MUP (2016), as strategic planning document, defined general planning solutions for urban development at a significantly lower level of detail compared to the previous Belgrade MUP (2003).

Specific strategic aims referring to the development of suburban areas were not defined. These include the aims of optimisation and rationality in land use (bigger offers and the flexibility of purposes for space to prevent uncontrolled construction and the irrational engagement of undeveloped construction and other land in peripheral zones, the sustainable planning of transportation and communal infrastructure, public transport, etc.), speeding up the process of rehabilitation and the inner transformation of the urban tissue, and creating attractive and economically sustainable urban areas as generators of development and transformation of a wider area. Table 2 contains the key urban development indicators of the Belgrade Metropolitan Area (level NUTS 1). The data indicate a very high degree of urban sprawl and extremely inefficient urban land-use policy.

Table 2. Population, economic growth and urban construction land in the Belgrade Metropolitan Area (1991-2011)

Indicators	1991	2002	2011	Index 2011/1991
1. Population	1,602,226	1,576,124	1,659,440	103.6
2. GDP total (in billion €)	8.5	5.76	12.78	150.4
3. Urban construction land (ha)	37,3311	-	111,2602	298.0

Source: ¹ Corine Land Cover (EEA, 2013) and ² RGZ (2013)

Implementation of the MUP is based on its more detailed elaboration via plans of general regulation, with guidelines for the compilation of detailed regulation plans. The minimum scope of a plan of general regulation for a construction area is an urban area, with guidelines to include several areas inside the border of each plan for more efficient implementation. This process is initiated by the responsible organisation (*Belgrade land development public agency*), covering 80% of the total construction plans. The only detailed plan has been adopted for the remediation of illegal construction (the settlement of Jajinci), and another one is under deliberation (*Smederevski put*), both of which are designated as priority areas for the remediation of suburban areas.

Measures in the MUP concerning the development of the suburbs

The MUP of Belgrade planned for substantial changes in the structuring and zoning of the territory of the city. According to the plan the biggest decrease in the period 2001-2021 will be of agricultural land, from its share of 51.1% to 18.4%, mostly because of conversion to economic zones and industrial parks along the key transport routes, followed by a sharp increase in green surfaces. In the period 2010-2021 the largest changes go to transport zones (7,352 ha), economic zones (3,326 ha), housing zones (2,349 ha) and commercial zones and centres (2,129 ha). The decrease in agricultural land from 38,352 ha to 14,344 ha (from 2010 to 2021) and an increase in built urban land illustrate extremely inefficient and unsustainable urban land use. In terms of spatial distribution and organisation, the MUP defined three broad areas (Figure 4), out of a total of 77,851 ha, viz.: 1) central zone (3,236 ha); 2) intermediate zone (11,538 ha); and 3) peripheral zone (63,077 ha), all divided into 20 urban areas (57 in the previous period).²

The market pressure and growth of the “real-estate bubble” are manifested by mass illegally constructed buildings in Serbia. According to data from the Ministry of Building, Transportation and Infrastructure, there are 266,655 illegally constructed buildings in Belgrade, or 13.0%

² In the central zone there are three historic urban core areas: old Belgrade, Zemun and the core area of New Belgrade. The *Middle zone* includes a continuously built urban area and it is characterised by organised complexes of housing construction, concentration of urban functions along the main city roads and less compact urban structures. The *Peripheral zone* is characterised by mainly family housing construction, unplanned and unorganised construction with inadequate levels of communal equipment and lesser degree of availability and coverage of public functions and contents.

of the total illegal buildings in Serbia. The structure of illegally constructed buildings in Belgrade is dominated by residential buildings (76.2%), auxiliary buildings (6.7%), residential-business buildings (6.4%), and commercial buildings (5.4%).

Among the priority suburban areas for the rehabilitation of spontaneously formed tissue, the previous MUP designated the settlements Altina, Padina, Mirijevo, Jajinci, and settlements on the Banat side of Belgrade. The largest numbers of pressures for new development since 2000 have been in the Mirijevo and Altina suburbs. In the new MUP there are no specific measures stipulated for regulating the settlement conditions in illegal and informal settlements.

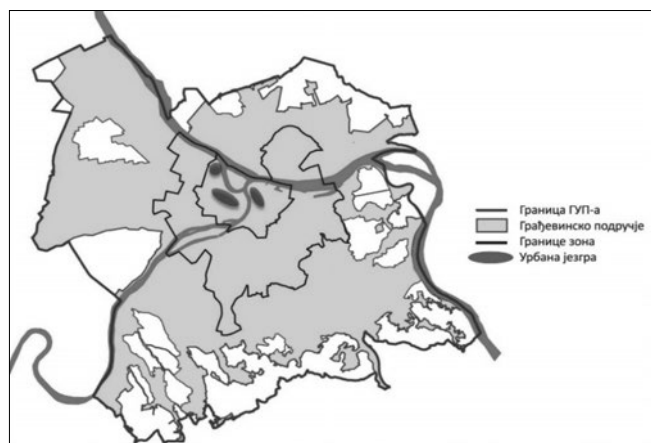


Figure 4. Spatial zones and Belgrade urban cores
(Source: MUP Belgrade, 2016)

Concerning the primary transportation network the MUP of Belgrade plans the development of the tangential and ring traffic routes aimed at connecting the continuous built-up area in the periphery with the central area (Figure 5). A key element is the outer route – *the bypass highway, which is connected with the E-70 international road*, and which should be finished by 2021 (Figure 5).

Other key elements are the outer main tangents (SMT) and inner roads (UMP) planned within the continuous urban fabric around the central zone, as well as the Belgrade metro. The construction and reconstruction of 33% of the total planned length of road network (942 km) is envisaged by 2021. In suburban areas the MUP envisages an increase in the surfaces under the transport infrastructure by 39% (from the existing 2,319.7 ha to 3,216.65 ha).

The mass public transport system accounts for 52.85% of the total number of trips in Belgrade. The connections between the suburban municipalities and the city rely exclusively on bus transport, with 18% of the total number of buses (2008)³. The suburban rail Beovoz, with a total length of tracks of 100 km and 42 urban and suburban railway stations, accounts for 2.5% of all passengers (Bugarinović and Ristić, 2009). Since 2011 a new suburban rail BG:VOZ started between Pančevo Bridge and Batajnica (34,000 passengers daily). The MUP envisages the introduction of a light rail transit system, the improvement of the urban and suburban railway and three basic metro lines (26.84km).

³ These data differ from those available on site of the Belgrade Transportation Public Enterprise (<http://www.gsp.co.rs/statistika1.htm>).

The MUP has not proposed any substantial improvement in the access to suburbs by public transportation.

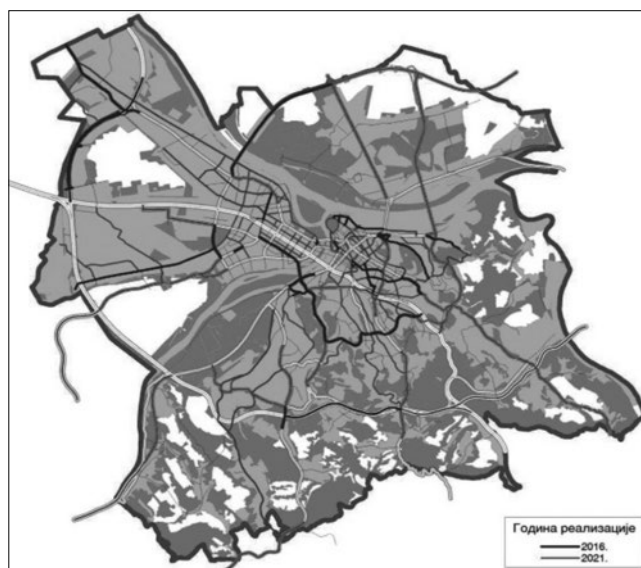


Figure 5. Expected dynamics for implementing the primary road and street network in the MUP area
(Source: MUP Belgrade, 2016)

Early results of the implementation of the MUP of Belgrade 2021

In the absence of adequate systemic mechanisms and indicators for monitoring and evaluating the implementation of the MUP, we applied the method of preliminary expert evaluation in combination with available partial data, limited primary sources (statistics, cadastre), and data on projects.

The MUP is mostly implemented according to short term priorities. Implementation strategy depends largely on the adoption of a five-year development program for the city's capital infrastructure and the annual program for the development of construction land.

Measures of the city's jurisdiction support the policy of encouraging the development of propulsive business sectors, securing favourable locations and financial conditions for the development of entrepreneurship and new SMEs (as green-field investments along highways and main roads; see Zeković and Maričić, 2008). The MUP envisages further sprawl and the enlargement of existing and creation of new economic zones along highways in the peripheral zone: Upper Zemun and Batajnica, Surčin-Dobanovci, Surčin RTC/Robno- Transportni Centar, Vrčin, the route to Mokri Lug, Pančevački rit, along Ibar road and Smederevo road, the industrial zones of Železnik, Rakovica, Kumodraž economic zone, Stojčino Brdo, Vrčin and Boleč.

Due to the global economic and financial crisis, the implementation rate of strategic directions and projects defined by the former MUP has slowed down. Nevertheless, the highest level of MUP implementation was in the field of capital infrastructure: e.g. the bridge at Ada Ciganlija on the river Sava, the bridge on the river Sava near Ostružnica with the bypass, and Pupin Bridge over the Danube, connecting Zemun and Borča. The basic idea was to improve the

accessibility of the suburbs in Posavina, Zemun, Banat, etc. Concerning the response of the market, the interests of investors were not targeted to greater use of brown-field locations in the urban tissue, mainly due to the lower land prices and arrangement in the peripheral, still undeveloped (green-field) areas on the urban fringe. As long as investors find it more appropriate to further invest in the existing green-fields in the peripheral zones (mainly for considerably lower costs), they will refrain from redirecting the key course of investment into brown-fields.

Thus, peripheral urban and suburban areas along Pan-European corridor X have attracted some major new housing and industrial developments, as well as the development of new transport, logistic and commercial zones.

Summary of the findings concerning the MUP of Belgrade (2016)

Some goals of the MUP have contradicted each other: 1) urban renewal was strongly stipulated, as well as the revitalisation of brownfields; 2) there has been no stipulation explicitly forbidding urban sprawl, but the decrease of agricultural land from 38,352 ha to 14,344 ha (from 2010 to 2021) has been planned, in addition to an increase in built urban land at the same time. Massive illegal construction is the dominant form of urban sprawl (Zeković *et al.*, 2015).

Concerning suburbanisation and sprawl, the MUP has not identified them as specific issues and has not explicitly stipulated any respective measures. There has been no official document presenting the implementation of MUP provisions, especially for suburbs.

Zoning was the main instrument of the master plan to regulate the development of suburban areas, but apparently with insufficient success. One factor is that MUP zoning is not the basis for determining development fees or any fiscal instruments. The implementation of the MUP is made by elaborating planning documentation (Detailed Regulation Plans/DRPs). Approximately $\frac{1}{4}$ of the DRPs were finished by 2017, while the elaboration of $\frac{1}{4}$ of the DRPs for suburban and peripheral areas can be expected by 2025-2030. Urban zoning is not correlated to zoning for determining land development fees and property tax. Low development fees along road corridors (or free of charge for industry in the territories of 10 city municipalities since 2016) and in suburbs directly support urban sprawl and limit financing the new infrastructure. The development of infrastructure was not employed to solve the issues of suburban growth. The planned development of a transit system for mass transport communications in Belgrade was largely underestimated by the MUP.

As a result of the role of planning and its interaction with the market explained here, there are two prevailing processes on the main urban development axes: the spread of constructed tissue to the periphery and the suppressing of production and housing by services. In conditions of unconsolidated democracy, privatisation and a weak market, insufficiently developed civil society and limited public insight in procedures for planning decisions (including suburbs), the majority of actors behave in accord with the dominating norms that favour individual rather than public

interest. Despite some weaknesses of this approach in the MUP (weak public control, insufficient protection of public goods), and a lack of coordination between planning and market elements, it is estimated that the role of free market discourse has prevailed in relation to planning. Planning has not sufficiently acknowledged the key market interests, mechanisms and arrangements.

CONCLUSIONS

After a transition of more than two decades, markets play a key role in the development of cities in SEE (Nedović-Budić, Z., 2001, Kovachev 2003a, 2003b; Zeković and Maričić, 2011; Nedović-Budić *et al.*, 2011, Slaev and Nikiforov, 2013; Slaev and Kovachev, 2014; Zeković *et al.*, 2015; Zeković and Vujošević, 2018). The current processes of growth and suburbanisation in the cities of Belgrade and Sofia are generated mainly by market forces, thus it is critical for planning to consider the action of market forces.

Answering the first research question, this paper observes that planning in the two SEE capitals has made efforts to account for the role of the market, but this is done in a very unsystematic way. As a rule, markets are examined at the phase of analysis, but market analysis is not properly/sufficiently utilised to define planning measures and policies. In answering the second research question, this research concludes that planning in Sofia and Belgrade is still far from being able to effectively cooperate with the market in order to regulate suburban development. For this purpose, planning must fulfil three major requirements. First, planning should consider how market trends and the interests of all market participants correlate with the objectives and the stipulations of the plan. Second, planning should be based on clear and relevant objectives and should develop a concise and coherent structure of measures and instruments to achieve those objectives. This paper has observed serious discrepancies between many objectives, measures, spatial solutions and instruments of implementation of the master plans of Sofia and Belgrade. Third, to cooperate efficiently with the market, planning should employ instruments of cooperation, such as zoning regulations, fees and taxes and relevant patterns of development of the primary infrastructure (Bertaud, 2003). Also, it is necessary to develop relevant forms of urban governance providing for effective public participation. The poor use of these instruments so far has been the basis of all failures of planning in Sofia and Belgrade. Therefore, the paper's findings confirm the conclusion that it is essential for planning to account for the action of the market. This is a lesson of key importance to the planners in Sofia and Belgrade.

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