doi.org/10.62683/SINARG2025.185

## Research paper

# EXPLORING MANAGEMENT MODELS OF PUBLIC OPEN SPACE IN RESIDENTIAL NEIGHBOURHOODS: IMPLICATIONS FOR SERBIA'S REGULATORY FRAMEWORK

Milica Ljubenović<sup>1</sup>, Jelena Đekić<sup>2</sup>, Milena Dinić Branković<sup>3</sup>, Milica Igić<sup>4</sup>

#### **Abstract**

Public open spaces (POS) in residential areas are vital components of urban environments, contributing to quality of life, environmental sustainability, and social inclusion. Effective management models are crucial for ensuring POS are well-maintained, accessible, and responsive to community needs. This paper examines three prominent organisational models for POS management — state-centred, market-centred, and community-centred. While the state-centred approach has traditionally dominated, emerging market and community-led strategies offer enhanced flexibility, cost efficiency, and stakeholder engagement. The research provides a comprehensive review of these models' strengths and limitations in coordinating, regulating, maintaining, and investing in POS. Drawing upon this review, the paper explores the possibilities and challenges of their application within the Serbian legal and policy framework. Contributing to the understanding of diverse approaches to POS management in residential areas, this paper concludes with policy recommendations aimed at integrating these management models into Serbia's existing regulatory framework, emphasizing inclusiveness, transparency, and long-term commitment as crucial for successful POS management.

Key words: public open space, management, residential neighbourhoods, Serbia

<sup>&</sup>lt;sup>1</sup> PhD, Assistant professor, University of Niš, Faculty of Civil Engineering and Architecture, Serbia, milica.ljubenovic@qaf.ni.ac.rs, ORCID 0009-0000-0115-9222

<sup>&</sup>lt;sup>2</sup> PhD, Assistant professor, University of Niš, Faculty of Civil Engineering and Architecture, Serbia, jelena.djekic@gaf.ni.ac.rs, ORCID 0009-0007-8408-4297

<sup>&</sup>lt;sup>3</sup> PhD, Associate professor, University of Niš, Faculty of Civil Engineering and Architecture, Serbia, milena.dinic@gaf.ni.ac.rs, ORCID 0000-0002-5919-3121

<sup>&</sup>lt;sup>4</sup> PhD, Teaching assistant, University of Niš, Faculty of Civil Engineering and Architecture, Serbia, milica.igic@gaf.ni.ac.rs, ORCID 0009-0005-5640-739X

## 1. INTRODUCTION

Enhancing the management of public open space (POS) is gaining increasing importance in contemporary urban development. However, POS management has not been sufficiently addressed in both practice and academic debate [1], even though it is seen as an approach that can secure long-term provision of POS and its benefits [2]. POS management is defined as a strategic, inclusive, and long-sighted process of planning, re-design, construction, maintenance and place-keeping activities aimed at securing its social, environmental, and economic quality [3-5].

Considering the significance of POS for the quality of urban life, and the threats posed by intensive urbanization, developing innovative organizational and management models for residential POS has become a key concern in contemporary urban planning and design. These emerging models reshape how POSs are funded, governed, and maintained, with the tendency to form public-private-people partnerships, promoting community involvement in decision-making, design, and upkeep. Achieving such an inclusive approach requires collaboration among all stakeholders to address shared challenges.

In Serbian cities, POS management in residential areas faces twofold issues. On one hand, POS within inherited large housing estates (LHEs) as the dominant housing form from socialism generally suffer from chronic mismanagement and neglect. On the other hand, new multi-family residential developments are marked by the near disappearance of POS due to market-driven restructuring and limited public investment in the housing sector. The issue of POS management in inherited LHEs is particularly complex and stems from changes in housing ownership, lack of regulations, neglect of community significance, and contemporary urban planning practices [6, 7]. As a result, these spaces are often exposed to degradation, fragmentation, insufficient maintenance, and appropriation for private purposes.

This study aims to synthesize different management solutions for reclaiming POS in residential areas. Based on an analysis of current knowledge and Serbia's legal and institutional framework governing residential POS, the paper investigates the potential pathways to apply these models the Serbia.

The methodological framework is conceptualized on the description, analysis and synthesis of findings. By reviewing up-to-date academic research, the benefits and shortcomings of existing POS management practices are identified. Subsequently, Serbian legal documents and current POS management practices are examined. The synthesis of findings is then used to discuss the challenges and opportunities in POS management, as well as pathways towards sustainable POS management models in Serbia.

### 2. POS MANAGEMENT ORGANISATIONAL MODELS

In many Western countries, POS became a public service during the twentieth century, managed by local governments and funded through local taxation [5]. Recent trends in the management of POS have emerged from the process of replacing government with governance and reshaping institutional arrangements, where new stakeholders and organisations have gained a role in management. In addition, new demands have been set to POS use, planning and management due to transformed societal needs related to global megatrends such as loss of biodiversity, socioeconomic and environmental issues and lack of space as a result of urbanization, globalization and climate change [3]. Public sector and

local government reforms, along with introduction of New Public Management (NPM) in the 1980s and early 1990s have created new roles for public sector, market and users [2, 5] This led to multiplication of agencies performing the delivery of public services. However, there are differences between the countries, and outsourcing is not spread everywhere to the same extent and it depends on countries' tax system and budgetary constraints [8]. POS management has thus become a market issue with contractors and private enterprises as central actors, but also the significance of involving urban residents on the community level has been emphasized as a way of encouraging democracy and transparency of management [2].

Carmona et al. [5] identify three organisational models of public space management, that is three models of addressing the issues of coordination, regulation, maintenance and investment that are also relevant for residential POS management:

- State-centred
- Market-centred
- 3. Community-centred or user-centred

State-centred model was the dominant form of POS management in most countries during the twentieth century, and it is still the dominant management model throughout the world. In this model planning and delivery of POS management services is provided by public-sector institutions, with minimum use of external input from private contractors or the voluntary sector. It includes hierarchical structures of planning and delivery with clear separation between service and use. The main disadvantages of state-centred model include potential cost increasement due to a lack of market competition, rigid bureaucratic procedures, lack of flexibility and responsiveness to evolving community needs [9].

The other two devolved models include transfer of responsibilities for provision and management of POS from the public sector towards other social agents. However, it should be noted that this does not include necessarily the transfer of ownership of public space.

The market-centred model includes transfer management responsibilities over POS, whether publicly or privately owned, to private entities [5]. This involves the transfer of rights and obligations for POS management, and in some cases the power to define management objectives. This can be done through straightforward service delivery contracts, or as part of a development agreement in private property development. For the public sector, these contracts represent a way to fund public services by means other than public budget. The collaboration interest for private sector is profit seeking, either directly from a management/maintenance contract, or indirectly from the performance of the whole development of which the POS is a part. The main purpose of market-centred model is to reduce operational costs, but also to bring new skills and expertise [9]. However, transactional cost may occur and due to different contracts for different operations or areas operations there is a risk of fragmentation of operation. Contracting-out to the lowest bidder can also negative impacts on POS management and it is suggested that this approach should not be considered as cost-cutting, but as outcome-based [8]. Private management of POS is more established in the US, but it is rapidly being established in other countries, especially in Europe [5].

Public-private partnerships (PPPs) are increasingly widespread in POS management, however, there are also critiques, mainly related to the interest of stakeholders and the duration of the partnership [8].

The community-centred model also includes the devolution of responsibilities for provision and management of POS but to community organisation, which can be associations of POS users, POS interest groups and others [5]. This model is the least developed and the main difference from the market-centred model is that the organisations to which management is devolved are not market and profit based and their interest is directly concerned with the quality of POS.

Community-centred approach can be related and explained by the trend towards coproduction of public services with their users. User engagement in the provision of public services has been seen as the most effective way to respond to diverse and complex demands of modern society. This is clearly evident in the trend of the transferring of social housing estate management to housing associations. In the context of the UK, user-centre approach is connected with a strong policy shift towards giving local and community organizations a greater role in local decision-making [10].

Contracts of POS management in this model can be well defined with voluntary organisation, for example the transfer of management of social housing estates and its POSs to housing association [5]. Arrangement can be also less formal and depend more on government funding, including agreements with ad-hoc residents' groups such as the neighbourhood management schemes, funded by government neighbourhood renewal initiatives, in which communities in deprived areas are encouraged to manage their own public spaces. In Sweden, large public housing companies often played a key role in the initiation and establishment of tenant involvement process, which has proved efficient in revitalizing declining communities [11]. Levels of control in tenant involvement process range from the lowest, when tenants are *invited to get involved* with tasks already defined by the proprietor to autonomous work of tenants, without proprietor's interaction. More organised forms of resident involvement fall under self-management.

The comparative overview of these three models are given in Table 1. In practice, these three organisation models are usually combined. State-centred model often includes outsourcing of some parts of the maintenance operations while also engaging with local community users in some areas [9]. The importance of actively involving people in PPPs scheme is increasingly recognized [12]. The process framework incorporates bottom-up participatory strategies at every stage of the PPP process.

It is claimed that partnership approach to POS management can bring many benefits, since it can give access to additional resources such as funding, skills, knowledge, land or ideas. However, involving many partners can be difficult for coordination, and partnership implies long-term commitment form partners and can be resource intensive [13].

Table 1. Comparative overview of POS management models					
Model	Core Mechanism	Key	Ma		

Model	Core Mechanism	Key Advantages	Main Constraints
State	Centralised public sector management	Equity, clear governance	Budget cuts, bureaucratic rigidity, inflexible responsiveness
Market	Private/PPP service contracts	Expertise, efficiency	Fragmented operations, low-bid risks
Community	User-led stewardship and co-governance	Local buy-in, flexibility	Capacity and financial limits, informal procedures

### 3. POS MANAGEMENT IN SERBIA

The large portion of multi-family housing in Serbian cities was built in the socialist period. These LHEs with generously dimensioned POS were built on state owned land. During the 1990s, public housing was massively privatized, which was not followed by clear regulations about management and maintenance. Unclear responsibilities regarding POS, lack of finance due to economic problems since the 1990s and decreasing willingness of residents have made these spaces obsolete and underused [6]. On the other hand, underutilization and maintenance issues were the main arguments for city authorities to justify the selling of "undeveloped" urban land for new construction [7]. In new development, due to the reduction of minimal standards and private developers' interest, POSs have been reduced to a mandatory minimum, and often remain unprovided.

# 3.1. Legal and institutional context

The management of POS in multi-family residential areas in Serbia is conditioned by its ownership, although in some cases responsibilities are unclearly defined. The Law on Communal Activities mandates local self-governments (LSGs) to provide communal activities, including the maintenance of publicly owned POS (*public green spaces*), funded through municipal budgets or communal fees [14]. The LSG may decide to entrust communal activities to external entities, in form of public-private partnerships and concession. LSGs adopt their decisions on communal order that typically distinguish the arrangement of POS as areas around buildings, areas of public use (publicly owned areas), and areas in public use.

The maintenance of area around the building, as the remaining part of the building plot, is the responsibilities of the owners or the users of the building. Planning documents define areas of public use for POS, and their maintenance is assigned to legal entities or individuals by special city regulations. Areas in public use, not designated by the planning document but available to many citizens, such as green areas within or between blocks of buildings, are maintained by their owners or users.

Based on the Law on Housing and Building Maintenance, owners must maintain spaces outside the building that belong to the land for regular building use [15]. Previous legislation, however, did not specify owners' or tenants' obligations to care for the land around multifamily buildings, leading to widespread lack of interest and neglect [16].

By acquiring ownership rights of a specific part of the building, one also acquires coownership rights to the underlying land in proportion to the special part's size. In practice, though, very few cases in Serbia register all building part's owners as co-owners of the land on which their building is located [16].

Reflecting on all this, the responsibility for maintenance is clear if the land rights and ownership are clear, whether public or private. In contrast, mixed rights and mixed ownership make difficult to define responsibilities. This is especially the case for POS in inherited LHEs, where the building-plot and the surrounding land lie on the separate cadastral plots under the different ownership.

# 3.2. POS management in practice

In practice, the management of POS within inherited residential areas from socialist past, which can be in different forms of ownership, is based on state-centred model, where

planning and delivery of POS management services is provided by public-sector institutions. LSGs entrust their maintenance to public utility companies. Yet, limited budgets of LSGs pose persistent financial challenges in performing communal activities, while their duties grow in proportion to population increases [16]. This financial strain often prevents LSGs from investing in new initiatives or even meeting current obligations. Outdated equipment and staff shortages further exacerbate maintenance problems. All these factors contribute to the absence of a reliable funding source for state-cantered POS management.

Despite these issues, outsourcing of POS maintenance operations is not implementing in Serbia. Although the Law on Communal Activities enables PPP for POS maintenance, it was carried out in only one city in Serbia (Bečej) so far. The development of PPP at the local level in Serbia has shown several shortcomings, including a lack of contract transparency, failure to fulfil obligations, and inadequate protection against corruption [17]. These issues complicate the implementation of market-centred management model.

The poor condition of POS in inherited LHEs have triggered spontaneous initiatives of local communities and placemaking, activating some previously neglected places in certain blocks, across different cities in Serbia. Some initiatives include small spatial interventions [18, 19], cleaning actions, cooperation with public institutions to encourage the participation of citizens in the planning of open spaces [20, 21], but also organizing protests in order to defend POSs from new construction [22, 23], as well as planting trees and crowdfunding as a local civic financing mechanism for collecting financial resources [24]. All these initiatives are usually implemented by means of citizen association, which often act as a mediator between residents and public institution. After the establishment of legal framework for the development of civil society, since 2010, there was an expansion in the number of established citizens' associations, some of which focus on social, environmental, economic and other issues of importance to their local community [25]. Citizens' initiatives can trigger a chain effect between residents and other local stakeholders, willing to contribute to the overall quality of POS. However, the absence of formal channels leaves these initiatives sporadic.





Figure 1. a – Cleaning action in Block 70 and 70a, Belgrade, source https://www.zdruzeno.org/zajednicka-akcija-blok-70-i-70a/; b - Sport filed for "foot-tennis", Delijski Vis, Niš, source https://jugmedia.rs/clanoviradne-akcije-napravili-teren-za-nogotenis-na-delijskom-visu/

## 4. CONCLUSION

Effective management of POS in multi-family residential neighbourhoods is crucial for urban quality of life, yet presents significant challenges, particularly within the Serbian context.

The analysis reveals that while the state-centred model remains dominant in Serbia, it faces substantial financial and operational limitations. The legacy of socialist housing development, coupled with unclear ownership structures resulting from mass privatization and ambiguous regulations, exacerbates these challenges, often leading to neglect and degradation of valuable POS. The Serbian regulatory framework currently lacks clarity in defining ownership and responsibility, particularly in the context of inherited LHEs. Market-centred approaches, such as PPPs, though legally possible, have seen minimal implementation, hindered by issues of transparency and trust.

Emerging community-centred initiatives in POS governance and management, demonstrate the potential for community-led management solutions. However, these bottom-up actions often lack formal recognition, resources, and institutional support, limiting their sustainability and impact.

Relying solely on the traditional state-centred model appears insufficient for addressing Serbia's complex POS management needs. A transition towards more hybrid approaches, integrating elements of market and community models is necessary. This could involve developing transparent and well-regulated PPP frameworks, potentially exploring and institutionalizing Public-Private-People Partnerships (4P) to enhance inclusiveness, transparency and interactiveness. Crucially, fostering community-centred management requires establishing clear regulations and providing appropriate support (financial, technical, and administrative) for citizen associations and local initiatives. Before that, it is necessary to address the fundamental issues of unclear land ownership and management responsibilities, especially in inherited LHEs, through regulatory reform. Finally, achieving sustainable and well-maintained POS in Serbian residential areas requires a shift towards more inclusive, transparent, and collaborative governance frameworks, supported by a long-term commitment from all stakeholders – public authorities, private actors, and local communities.

#### ACKNOWLEDGMENTS

This research was supported by the Science Fund of the Republic of Serbia, GRANT No 7572, Reclaiming Public Open in Residential Areas: Shifting Planning Paradigms and Design Perspectives for a Resilient Urban Future - RePOS.

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