

Ana PERIĆ*

INSTITUTIONAL COOPERATION IN THE BROWNFIELD REGENERATION PROCESS: EXPERIENCES FROM CENTRAL AND EASTERN EUROPEAN COUNTRIES

Abstract. The topic of brownfield regeneration has been the focus of planning debate for years. However, the aspect of institutional cooperation and strengthening the institutional capacity in order to cope with a complex task of brownfield regeneration is considered a challenge. This is particularly true for the post-socialist countries and, hence, the Czech Republic, Hungary and Serbia are chosen as the case studies of this research. By implementing a concise survey of both the institutions and policies related to the topic of brownfield regeneration in the selected countries, the research aims at determining the form, extent and nature of collaboration between different sectors, disciplines, and institutions. Based on such insights, it is finally possible to provide the recommendations for more effective institutional design within specific political and socio-economic context.

Key words: brownfield regeneration, institutions, cooperation, capacity-building, the Czech Republic, Hungary, Serbia

1. INTRODUCTION

The implementation of the sustainability principle in contemporary planning practice has resulted in a trend towards brownfield regeneration (Grimski and Ferber, 2001; Adams and Watkins, 2002; Dorsey, 2003; Dixon, Raco, Catney and Lerner, 2008). However, the regeneration of brownfield sites, i.e. “any land or premises which has previously been used or developed and is not currently fully in use, although it may be partially occupied or utilized, (...) and which may also be vacant, derelict or contaminated” (Alker, Joy, Roberts and Smith, 2000, p. 49) is complex in its very nature. In fact, the immediate reuse of brownfields is not possible without an intervention that involves a wide variety of instruments: planning, social, political, economic, environmental, etc., all of which raise the complexity of the brownfield redevelopment process

* Ana PERIĆ, Institute for Spatial and Landscape Development, Swiss Federal Institute of Technology (ETH) Zürich, Stefano-Franscini-Platz 5, 8093 Zürich, Switzerland, e-mail: aperic@ethz.ch

(CABERNET, 2007; Broos, Ertel, Gray, Schug and Vegter, 2007; Perić, 2013). In this paper, the complexity mainly refers to the demanding cooperation among sectors, disciplines, and institutions involved in the process of brownfield regeneration (Garb and Jackson, 2010).

The topic of growing coordination and strengthening the institutional capacity in order to effectively solve the problems of urban redevelopment is emphasised also in some of the key strategic European documents. Thus, in the *Leipzig Charter on Sustainable European Cities* (IMMUDTC, 2007), the integrated approach to sustainable urban development was institutionalised. More precisely, brownfield revitalisation can be successfully performed only by the means of integrated developmental policies formulated through the cooperation of different institutional levels. Also, as a response to the complexity of brownfield regeneration, various forms of collaboration among participants in a given process are proposed. According to the report of the Organization for Economic Co-operation and Development (OECD, 2006), there are several reasons for such a collaboration: the creation of synergy effects, as well as the risk sharing between the partners participating in the joint process, then finding the additional sources of financing, and finally, the reduction of open conflict and creating an atmosphere for a decision-making based on consensus. According to the *Action plan for the EU Strategy for the Danube Region* (EC, 2010), the institutional strengthening can be achieved through stepping up the institutional capacity and cooperation – there is no need for new laws and institutions, but the links between different policies and stakeholders should be coordinated in an effective way.

The research subject therefore focuses on the institutions, their cooperation with each other and the complexity of the institutional system dealing with brownfield regeneration. More precisely, the research is directed towards elucidating: 1) the roles, responsibilities and limitations of the public sector actors, as well as 2) the extent, form and nature of their cooperation. Keeping in mind that institutional reform – establishment of legal, policy and knowledge structures as well as a growing coordination among multiple actors is an important factor for the success of brownfield regeneration (Dixon *et al.*, 2008; Garb and Jackson, 2010), the research hypothesis is defined as follows: The problems of brownfield regeneration can be effectively solved only by the cooperation of the institutions belonging to different branches at various territorial/administrative levels. To be more precise, the central question is the locus of institutional support for brownfield regeneration – the point is not on the structure of institutions, but on their capacity to effectively address the brownfield regeneration problem. This is a particularly challenging task for the post-socialist countries, i.e. the states with the tradition of central planning and “top-down” decision-making. Hence, the research outcome is to identify

necessary measures for promoting the institutional cooperation as well as to highlight the lessons learnt in order for them to be further implemented in other post-socialist countries.

The general structure of the paper is divided into five parts. After introductory remarks, the institutional aspect of the brownfield regeneration process is elucidated both through theoretical and empirical overview. This refers to the conceptual understanding of institutional cooperation, on the one side, and to the specificities of the post-socialist planning systems and the challenges for brownfield regeneration on the other. The next part of the paper gives a brief information on the research methodology followed by a detailed overview of the institutional context of brownfield regeneration in the Czech Republic, Hungary and Serbia as the research case studies. The central section of the paper discusses the institutional cooperation in the mentioned countries observed through several parameters: extent, form, nature as well as the ways to mediate such cooperation. Finally, a critical summary of the current institutional capacities for dealing with the brownfield regeneration problem in the mentioned countries is drawn in the last part of the paper.

2. INSTITUTIONAL ASPECT OF BROWNFIELD REGENERATION: THEORETICAL AND PRACTICAL OVERVIEW

In order to better understand the topic of institutional cooperation in the brownfield regeneration process in Central and Eastern European (CEE) countries, it is useful to briefly provide a broader framework for examining this topic. Hence, the theoretical background on institutional arrangements based on cooperation will be explained. In the second part of this section, a short overview of the main social and planning conditions related to the topic of brownfield regeneration in the post-socialist states will be given.

2.1. Optimal Institutional Arrangements

The cooperation among various sectors and disciplines and, thus, the formulation of integrated policies is crucial for achieving effective urban transformation. In other words, it is not necessary to establish new institutions, but only to organise them efficiently in order to adequately approach the complex problems (Healey, 2007b). Namely, the cooperation between different institutional sectors makes the capacity for strategic action (Healey, 2007a). According to Innes and Booher (1999), the understanding of sustainable complex system as one which is adaptive

and self-organising is crucial. Only in this way is it possible for the system components to evolve, later to learn from the feedback and, finally, to experiment with new actions.

Building collaborative consensus requires using a “bottom-up” approach, which criticises the deductive model of determining the values and setting the goals. The establishment and preservation of a consensus among the different stakeholders cannot be independent of the ‘hard infrastructure’ – the socio-economic system and the key power holders (Healey, 1997, p. 287). Thus, the critical parameters that enable a collaborative planning process are (Healey, 1997, pp. 288–289):

- Recognising the abundance of and differences among stakeholders, as well as the complex relationships that may arise between them, as well as within them,
- Recognising the fact that many activities, usually exclusive to the domain of public administration, can also be performed outside of these institutions,
- Supporting the participation of all members of political organisations, while recognising their fundamental differences.

These parameters highlight the need for a clear determination of the jurisdiction of governmental organisations, experts, and other institutions, in addition to their mutual cooperation. More precisely, one of the basic forms of adaptation of an institutional organisation to a collaborative planning model is the decentralisation of decision-making, as well as in the implementation of planning policies (Healey, 1997, p. 98).

Therefore, it is important to strengthen vertical coordination to ensure the harmonisation of decisions made at different government levels (national, regional and local). Furthermore, compliance at the horizontal level of coordination, i.e. finding the agreement on the planning policies and decisions made among different sectors and disciplines, is considered a necessary prerequisite for an efficient collaborative planning process. Finally, in addition to cooperation among the same sectors at different government levels, much attention should be paid to cooperation between formal and informal institutions.

2.2. Brownfield Regeneration within Different Planning Systems

When it comes to the analysis of planning systems in Europe, the main differences occur as a result of the socio-political context in the past century. In this sense, we can talk about developed and developing European countries.¹ During the post-war period (the Second World War), which brought a wide

¹ The use of terms ‘developed’ and ‘developing’ countries is only one of many possible variations. The others that more deeply describe the political and economic context are: ‘capitalist’ vs. ‘post-socialist’ countries (Stanilov, 2007), or ‘capitalist’ countries vs. countries on the ‘periphery of advanced capitalism’ (Tasan Kok, 2004).

diversity of events and processes, Western European countries tended to establish sustainable procedures for resolving the conflicts between competitive land uses (Faludi, 2010; Healey and Williams, 1993; Janin Rivolin, 2008). On the other hand, in socialist countries of Central and Eastern Europe, the main task was to control the state organisation through centrally defined plans (Hirt, 2005; Maier, 1998; Nedović-Budić, 2001). Due to transformation of land ownership in recent two decades, most of the countries behind the so-called Iron Curtain suffered from inappropriate land use, especially in central city areas. The change of land ownership (in terms of replacing the state as the only land owner by the actors who were only land users in the past) caused various consequences in different countries (Stanilov, 2007; Begović, 2003).

The management of brownfields in Western and Eastern European countries was also different. Briefly put, competitiveness was the main characteristic of the developed countries' economic systems (Couch, Leontidou and Petschel-Held, 2007). In addition to this, the compact city development, awareness of environmental and public health protection and analogy between the lifestyles and the type of the settlement, contributed to the sustainable management of brownfield areas (Greenberg, Lowrie, Mayer, Miller and Solitare, 2001).

In contrast to this, central planning systems and unreasonable land management in Eastern Europe tended to retain industrial areas in the central city parts that, due to the privatisation process and the ownership change in the 1990s, became large misused city land. Nowadays, the consequence of planning institutions' inflexibility and irresponsibility for the built environment result in positioning the residential areas around the industrial zones, which, in turn, simply occupy central urban spots.² It is interesting to mention that a specific urban pattern appeared not only owing to the absence of the real estate or capital market, but it had also ideological origin. Namely, industrial production was the generator of social development, but it was used also to diminish the intellectual and religious character of the city (Garb and Jackson, 2010). Furthermore, the transformation of the central planning system was followed by a lack of expert knowledge and experience when tackling new urban problems, which were then pushed back due to the importance of macro-economic reforms (Stanilov, 2007). Finally, all the post-socialist countries were faced with the phenomenon of the privatisation and bankruptcy procedures, which were often used for the enrichment of a small number of people under the veil of a common interest for the city and state (Garb and Jackson, 2006).

² The absence of the real estate market led to the emergence of the so-called camelback within the diagram of urban zone activities (Zeković, 2007).

3. INSTITUTIONAL CONTEXT OF BROWNFIELD REGENERATION IN CEE COUNTRIES: DESCRIPTION

Before proceeding with the central parts of the paper (description and comparative analysis of the institutional framework of brownfield regeneration in CEE countries), the research methodology will be briefly explained. First, the reasons behind choosing the Czech Republic, Hungary and Serbia are given. Next, the methods for a description of the current institutional framework dealing with the topic of brownfield regeneration in the mentioned countries are provided. Finally, the appropriate parameters for the analysis of the institutional cooperation will be elucidated.

After the changes in the state organisation in the 1990s, both the Czech Republic and Hungary formulated many policies and strategies regarding brownfield regeneration (Vojvodiková, 2010; Barta, Beluszky, Czirfusz, Gyori and Kukely, 2006). Since the mentioned topic is the national priority (Stanilov, 2007; RESCUE, 2004; CABERNET, 2009), these states made a significant shift in planning and urban development practice. Although land-use management in Serbia in the past century was similar to that in the above-mentioned post-socialist countries, the socio-economic transition towards the market economy system in Serbia has lasted for years. The process of land privatisation started in 2009, and the restitution and denationalisation of the state property is still in its beginning phase.³ An inability to perform the land transactions was the main obstacle to any other reform process and the progress of society (Begović, 2002; Vujovic and Petrovic, 2007). All this, in addition to the absence of inner urban development policy, creates the main barriers for successful brownfield regeneration in Serbia (Perić and Maruna, 2012a, 2012b).⁴ Hence, based on the experiences from the Czech Republic and Hungary, one of the research goals is to define the guidelines for Serbia as a country with a lack of institutions and their fuzzy responsibilities.

The focus of the description (provided in Section 3 of this paper) is on the main public sector representatives responsible for the topic of brownfield regeneration. The most important actors in this research are in general defined as: national government (ministries and agencies), regional authorities and municipalities. The identification of the main actors is done through analysis of major

³ Until 2009, when the new Planning and Construction Law (Official Gazette, No. 72/09) was approved, land was completely public property, which implied absence of the real estate market. The Restitution and Denationalisation Law (Official Gazette, No. 72/11) was approved in 2011, however the practical guidelines for its effective implementation are still lacking.

⁴ The term brownfield has been recently defined. Actually, before the formulation of the *Spatial Development Strategy of the Republic of Serbia* (RASP, 2009) in the year 2009, where the brownfield site was defined as: "(...) the land, which was previously built and used, but in the meantime, due to financial or other economic reasons became abandoned", there was no clear definition regarding the mentioned sites.

documents, i.e. it was interesting to see which institutions are responsible for the formulation of the main legislative and regulatory acts related to the topic of brownfield regeneration. The analysis comprised both the primary (laws, spatial plans, spatial strategies) and secondary sources (studies and reports of the experts in the domain of brownfield regeneration in the Czech Republic, Hungary and Serbia). Thus, regarding the Czech case study the following primary sources were analysed: Planning and Construction Law (183/2006Sb), *The Strategic Framework for Sustainable Development in the Czech Republic* (GCSO, 2010a), *Spatial Development Policy of the Czech Republic* (GCSO, 2010b), and the *National Strategy for Brownfield Regeneration* (Ministry of Industry and Trade, 2008). For Hungary, the following documents were found relevant: Building Law (LXXVIII/1997), Law on Regional Development and Planning (LXXV/2004),⁵ *New Hungarian Development Plan* (NDA, 2007), *National Sustainable Development Strategy* (NDA & MoEW, 2007), *Budapest Urban Development Concept* (The Municipality of Budapest, 2003), and *Medium-Term Urban Development Programme of Budapest – The Podmaniczky Programme 2005–2013* (The Municipality of Budapest, 2005). In Serbia, the most relevant documents are: Planning and Construction Law (Official Gazette, No. 72/09, 24/11), Law on the Spatial Plan of the Republic of Serbia from 2010 to 2020 (Official Gazette, No. 88/10), *Spatial Development Strategy of the Republic of Serbia from 2009 to 2020* (RASP, 2009) and *Regional Development Strategy for Serbia from 2007 to 2012* (Official Gazette, No. 21/07). The main method used in analysis of the documents is content analysis, with the aim of identifying the main actors in public sector and describing their roles, limitations, and responsibilities (which is presented in Section 3 of this paper).

Based on the overview, it is possible to critically analyse the various aspects of institutional cooperation. This analysis is structured according to the following parameters:

- Extent of cooperation (which can be measured through the number of jointly prepared documents),
- Form of cooperation (horizontal, vertical – “top-down”, “bottom-up”),
- Nature of cooperation (cooperation prescribed by law or informal cooperation),
- Presence of the mediators in cooperation (i.e. specific expert body that facilitates the cooperation among other public sector actors).

The analysis is based on the personal interpretation of the author supported by other secondary sources in the domain of brownfield regeneration in the Czech Republic, Hungary and Serbia. The aim of the analysis is to present and understand the institutional dynamics related to complex urban transformations such as the brownfield regeneration process (presented in Section 4 of this paper).

⁵ As these two laws are in the Hungarian language, their analysis is based on the interpretation by Pallai (2008).

3.1. The Czech Republic

3.1.1. Brownfields in the Czech Republic

In the Czech Republic, with a heritage of a centralised governance and planning system followed by the transition process, brownfield regeneration has been recognised as a priority in a number of planning policies since the 2000s. According to the analysis on the number and area of brownfields conducted by the CzechInvest agency in 2007, there are more than 10,000 brownfield sites, with over 2,000 of these in the larger size category (over 2 ha or over 500 m² of built area), with many of them in prime urban locations (Garb and Jackson, 2010). Moreover, there are 600 ha of regenerated land, with a built-up volume of 6,000,000 m², which indicates that brownfields are an important part of the Czech urban planning policy (Vojvodíková, Bergatt Jackson and Hermann, 2006). This „visibility“ of brownfields in the main planning policies resulted from the international intervention of mainly UK and US expert agencies, in terms of local financing, followed by national research programmes organised by responsible ministries. The result of these activities can be seen in the formulation of various policy documents that, finally, led to legal changes, thus enabling the brownfields identification in the main planning documents (Vojvodíková, 2010). Vice versa, such an early awareness of the brownfield problem paved the way for the support of the brownfields reuse over the last decade (Garb and Jackson, 2010).

3.1.2. Institutional framework for brownfields

As the most important actors in the process of brownfield regeneration in the Czech Republic, the following institutions under the jurisdiction of public administration can be distinguished: the Ministry of Regional Development, the National Property Fund – a state agency responsible for the privatisation process that after the year 2005 was transformed into the Ministry of Finance, the Ministry of Environment, the CzechInvest – a government agency (funded by the Ministry of Trade and Industry) for promotion of investments in brownfield regeneration projects, and the Ministry of Finance. In addition to the national governance bodies, the roles of both the regional and local administrative levels will be briefly explained. The review of the institutional framework in charge of the brownfield issue is given in Table 1.

Table 1. Institutional Framework for Brownfields in the Czech Republic

Institution	Functions and Responsibilities
<p>Ministry of Regional Development</p>	<p>Its role is providing support to cities and regions in better understanding of the brownfield problem, as well as in greater cooperation with the stakeholders involved in the brownfield regeneration process.</p> <p>Although this ministry does not have all the necessary information concerning the mentioned problem, it can choose outside consultants, with the possibility of involving foreign experts as well.</p> <p>It is closely linked with the local government in terms of providing technical trainings and guidelines for participation of municipalities in the brownfield regeneration process.</p>
<p>Government Council for Sustainable Development</p>	<p>This expert body is responsible for the preparation of the main national documents on spatial development, such as <i>Strategic Framework for Sustainable Development in the Czech Republic</i> (prepared in coordination with the Ministry of Environment) and <i>Spatial Development Policy of the Czech Republic</i> (prepared in coordination with the Ministry of Regional Development).</p>
<p>National Property Fund</p>	<p>It was founded to provide guarantees to potential private investors during the regeneration of brownfields that carry not only financial, but also environmental risk.</p> <p>Its role was to provide the financial cover for the clean-up costs of the brownfields that were found to be contaminated during the regeneration process (regulated through the document <i>Environmental Clearance Contracts</i>).</p> <p>The key to the success of this organisation was in the accurate reallocation of money, as well as the exploitation of financial resources only for brownfield regeneration and not for other state projects.</p>
<p>Ministry of Finance</p>	<p>It is a key stakeholder for the issue of brownfield regeneration. Firstly, the budget for the process initiation must be approved by this Ministry. Secondly, many aspects of the brownfield programmes, as well as the legislative reforms directly fall under its jurisdiction.</p> <p>Its most important task is taking the strategic actions to cope with the long-term costs of existing brownfield sites.</p>
<p>Ministry of Environment</p>	<p>It acted as a technical consultant and a supervisor for the National Property Fund.</p> <p>This ministry is responsible for the formulation of the <i>National Environmental Policy</i>, which, among others, deals with the brownfields issue.</p>

Table 1. (cont.)

Institution	Functions and Responsibilities
	<p>As the orientation of the Ministry of Environment is primarily focused on meeting the environmental demands, a lack of economic pragmatism can make the rigorous standards for environmental protection counter-productive. Nevertheless, in recent years this ministry has been actively collaborating with other sectorial institutions in the field of spatial development.</p>
CzechInvest	<p>The success of this agency is primarily based on technical assistance from the European Union in terms of cooperation with European development agencies, and financial support as well.⁶</p> <p>In recent years, CzechInvest was on the way to become a national brownfield support agency, due to knowledge and skills of its members related to the brownfields issue.</p> <p>Its main task is not only to make an inventory of brownfields of industrial origin, but also to reconsider their use in a broader urban context, i.e. to offer back the brownfields to the market.</p>
Regional Development Agency	<p>It coordinates the regional information system.</p> <p>Its urban planning sector has a role in preparing the register of brownfield sites and its update.</p> <p>The experts represent the key stakeholders in charge of timely providing the brownfield-related data to all the stakeholders in the brownfield regeneration process.</p> <p>Regional authorities are responsible for preparing the development strategies, compiling the planning documents and policies, and, finally, using the brownfield priorities in structural funding.</p>
Local government	<p>According to the Planning and Construction Law, municipalities are in charge of coordinating and collecting the GIS layers' information (one of 120 layers is considered as 'land suitable for reuse', which in fact relates to the brownfields).</p> <p>The national Czech government has an active role in providing the mechanisms for a direct communication between the local governments and citizens.</p>

Source: Prepared by author on the basis of Garb and Jackson 2010, 2006, 2001; Vojvodíková, 2010; Vojvodíková, Begratt Jackson and Hermann, 2006; TIMBRE, 2012

⁶ The CzechInvest has been awarded with 3 million euros for three brownfield regeneration projects in the Czech Republic (Garb and Jackson, 2001).

3.2. Hungary

3.2.1. Brownfields in Hungary

In Hungary, as in many other post-socialist countries, the origin and distribution of brownfield sites is conditioned by land use patterns inherited from the past. In a narrow sense, the state ownership of land and direct state (non-market) control over the spatial recourses of cities contributed to the fact that large industry zones are located in central urban areas. The growth of the cities was strictly determined by the city administration, so the anomaly in the density gradient, the so-called “camelback”, is seen in many Hungarian cities (Tosics, 2006). Another form of brownfields, which is typical of most of the Eastern and Central European countries, originates from the former Soviet military complexes (barracks, airports) (Madarasz, 2007). According to the survey conducted by the Centre for Environmental Studies in 2005, approximately 120 km² of brownfields were registered, mostly in industrial regional centres of the North and Transdanubian regions of Hungary, as well as in Budapest area, where brownfields occupy 68 km², or 13% of the metropolitan territory (MTA RKK KETI, 2007). Another study states that 51% of brownfields are abandoned industrial sites, whereby 54% of these completely lost their previous use; also, 23% of municipalities have no brownfield regeneration policy (Madarasz, 2007).

3.2.2. Institutional framework for brownfields

When it comes to the topic of brownfield regeneration, several important institutions at different levels can be outlined (Table 2). The Hungarian National Development Agency is the important actor at the national level. At the regional level, the Regional Development Agency plays a significant role and, regarding Budapest brownfields, the Metropolitan Government of Budapest is considered as relevant. The local administration and district government, latter only in Budapest due to a two-tier local administration whereas districts operate as individual cities, are the most important players in the brownfield regeneration process at the municipal level.

Table 2. Institutional Framework for Brownfields in Hungary

Institution	Functions and Responsibilities
Ministry of Environment and Water Management	<p>It is one of the first ministries that dealt with revitalisation of contaminated brownfield sites. Its revitalisation programme was presented in the document <i>Green Source</i>, published in 2004.</p> <p>This ministry has the main role in structuring the priorities and formulating the vision defined in the <i>National Sustainable Development Strategy</i>.</p>

Table 2. (cont.)

Institution	Functions and Responsibilities
National Development Agency	<p>It is a state agency responsible for preparation of crucial strategic documents.</p> <p>The agency is a supervisor of the <i>New Hungarian Development Plan</i> (NHDP) implementation.</p> <p>The considerable role of this agency is that of collaborating with a number of various representatives, such as: national authorities, regional development agencies, and expert institutions – mainly Hungarian Academy of Sciences and numerous scientific institutes.</p>
National Development Council ⁷	<p>It is a governmental body responsible for spatial development questions.</p> <p>It has an important role in monitoring and evaluation of implementing the objectives (defined in the <i>National Spatial Development Concept</i> (NSDC) and then <i>New Hungarian Development Plan</i>, as a document based on NSDC).</p> <p>It is in charge of preparation of proposals based on changes of developmental policies and their direct distribution to the national government.</p>
Ministry of Spatial Development	<p>It has an important role in formulating the Building Law and Law on Regional Development and Planning.</p>
Regional Development Council	<p>Its role is to monitor the calls for application for the action period of NHDP and then to evaluate the follow-up applications.</p> <p>The significance of this authority lies in its intermediary role. On the one hand, the council forwards information to the Hungarian National Development Agency and, on the other, it is the institution with decision-making competences towards the local government.</p>
Metropolitan Government of Budapest	<p>All urban regeneration programmes are under the jurisdiction of the chief architect's department within the mayor's office of the municipality of Budapest.</p> <p>It prepared two leading strategic documents for the Budapest metropolitan area: <i>Budapest Urban Development Concept</i> (BUDC) and <i>The Podmaniczky Programme 2005–2013</i>.</p>

Source: Prepared by author on the basis of Grisel and van de Waart, 2011; Ricz and Salamin, 2010; Pallai, 2008; Barta *et al.*, 2006; NDA, 2007

⁷ The National Development Council consists of the Prime Minister, representatives of the Regional Development Councils, delegates of the Economic and Social Council, as well experts and other ministers invited by the Prime Minister (NDA, 2007).

3.3. Serbia

3.3.1. Brownfields in Serbia

In the socio-economic transition to a market economy system, the issue of brownfields and their strategic regeneration has been unjustifiably neglected in Serbia. Moreover, the land ownership transformation offered the possibility for various malfeasances (Perić and Maruna, 2012a). Although the spatial planning and other experts were aware of the need to strategically deal with the brownfields, the monopolistic position of a small number of very rich private investors and their close relationship with the highest governmental levels blocked a proactive approach to brownfield regeneration.⁸ Today, sustainable management of brownfields is not possible due to cooperation between the national government and foreign investors, whereby all other stakeholders have no say.⁹ In addition to this, Serbian experts are not bold in their striving for sustainable brownfield regeneration.¹⁰ According to recent data provided by Serbian Investment and Export Promotion Agency – SIEPA, the brownfields in Serbia occupy more than 3,500 ha with 454 brownfield sites.¹¹ In addition to this, the Serbian Army made a survey on non-used barracks, complexes, and airports – there is around 22,000 ha of brownfield land with ex-military use (SKGO, 2011).

3.3.2. Institutional framework for brownfields

The Serbian institutional structure in charge of brownfield regeneration is not clearly defined. However, major participants in the public sector concerned with brownfields are: the Ministry of Regional Development (abolished in 2014), Privatisation Agency, Serbian Investment and Export Promotion Agency – SIEPA, the Ministry of Construction, Transport and Infrastructure, the Ministry of Agriculture and Environmental Protection, Republic Agency for Spatial Planning, and local authorities. A brief overview of their roles and responsibilities is shown in Table 3.

⁸ In 2005, the Law on Privatisation was approved in Serbia. According to that law, it was possible for a few tycoons to buy the bankrupt enterprises. As the land was still owned by the state, the tycoons became the owner of the buildings only. However, after 2009, due to the new Law on Planning and Construction, the building-ownership right was transformed into land-ownership right. This was the opportunity for the private investors to accomplish their private profit.

⁹ Brownfield regeneration in Serbia today is a tool for the national government to gain political points, by promoting cooperation with foreign investors instead of allowing domestic tycoons to get richer. The problem here is that there is no transparent debate with all other interested parties (experts, citizens) in order to define sustainable brownfield regeneration strategy.

¹⁰ There are only two handbooks for practitioners: *Brownfield Revitalisation in Serbia* (2007) resulting from the collaboration between Serbian and Czech experts and *Reactivation of the brownfields in Serbia – System approach or ad hoc solutions?* (2011), prepared within the project financed by the Swiss Agency for Development and Cooperation (Perić, 2014).

¹¹ Further data are available at <http://serbia-locations.rs/locations-srb/index.php>.

Table 3. Institutional Framework for Brownfields in Serbia

Institution	Functions and Responsibilities
Ministry of Regional Development	<p>Its role was the promotion of domestic production, export, and foreign direct investment.</p> <p>Facilitation in restructuring large business entities towards the international market requirements was always prepared by this institution.</p> <p>The ministry was responsible for the implementation of Integrated Pre-accession Assistance Programme (IPA), which includes specific measures aimed at brownfield redevelopment.</p> <p>Some of the most important activities of this ministry were: 1) the initiative for the preparation of a national brownfield strategy, and 2) the incentive for the creation of a unified database on brownfields.</p> <p>This ministry was responsible for the preparation of the <i>Regional Development Strategy for Serbia from 2007 to 2012</i>, which indirectly indicated the importance of brownfield regeneration through introducing „clean technologies” in devastated industrial clusters.</p>
Privatisation Agency	<p>It has the main role in regard to brownfields which result from former state-owned enterprises bankruptcy.</p> <p>It manages and sells shares and interests in accordance with the Law on Privatisation.</p> <p>It provides trainings to a number of bankruptcy trustees who will be then able to implement the desired procedures in a reasonable timeframe.</p>
Serbian Investment and Export Promotion Agency (SIEPA)	<p>It is a state agency responsible for promoting investment opportunities and helping foreign investors start business in Serbia.</p> <p>The agency provides the service of: finding the brownfield sites, assistance in administrative procedures, mediating communication with relevant national and local institutions, and updating the location database on brownfields.</p> <p>It also coordinates direct investment for brownfield projects in the manufacturing sector, international trade service sector and strategic projects in tourism, by a means of grants.¹²</p>
Ministry of Construction, Transport and Infrastructure	<p>There are two main sectors indirectly dealing with the topic of brownfield regeneration: 1) Department of spatial planning, which mainly collaborates with the Republic Agency for Spatial Planning, and 2) Department of urban development planning, which cooperates with other sectors at various levels (both national and local), as well as with international experts.</p>

¹² Grants are awarded in the amount of 4,000 to 10,000 euros per new job created, for a period of three years (SIEPA, 2011).

Table 3. (cont.)

Institution	Functions and Responsibilities
Ministry of Agriculture and Environmental Protection	<p>Its role is to identify, coordinate and develop the goals of environmental policy in order to achieve sustainable development.</p> <p>The important role within this ministry was assigned to the Environment Protection Agency, which formulated several reports related to the topic of soil contamination.</p>
Republic Agency for Spatial Planning	<p>It is a state agency responsible for preparing, coordinating and monitoring the development of all spatial plans in Serbia.</p> <p>This institution also provides technical assistance to local governments while preparing planning documents.</p> <p>The crucial role of the agency for brownfield regeneration is to bind state authorities with representatives of the scientific community (academy and research institutes).</p> <p>The agency also prepared the most important documents with regard to the topic of brownfield regeneration: <i>The Spatial Development Strategy of the Republic of Serbia from 2009 to 2020</i> (in 2009) and <i>The Spatial Plan of the Republic of Serbia from 2010 to 2020</i> (in 2010).</p>
Local authorities	<p>Local authorities have no proactive role in dealing with the brownfield problem.</p> <p>They often lack accurate information on the percentage of building land which can be identified as a brownfield site; they do not have a development vision, in terms of understanding brownfield regeneration as a process that brings long-term profits; they lack expertise in brownfield regeneration.</p> <p>Local government has limited jurisdiction and must be coordinated by higher government levels.</p>

Source: Prepared by author on the basis of Danilović and Damjanović, 2011; SKGO, 2011, Perić, 2014; Begović, 2002

4. INSTITUTIONAL CONTEXT OF BROWNFIELD REGENERATION IN CEE COUNTRIES: COMPARATIVE ANALYSIS

This section provides a comparative analysis of the institutional cooperation related to the brownfield regeneration topic in CEE countries. As previously described, the case studies of the Czech Republic, Hungary and Serbia are analysed according to the following parameters: the extent and form of cooperation, mediators in cooperation, and the nature of cooperation. Each parameter is elucidated in the following subsections.

4.1 Extent and Form of Institutional Cooperation

The extent of collaboration among the institutions responsible for brownfield regeneration in the Czech Republic varies depending on the institutional level. Horizontal collaboration is the most conspicuous at the national level, whereas the Ministry of Regional Development has the mediatory role among other sectorial institutions, i.e. ministries and agencies (Perić, 2014). In addition to this, the cooperation between the Ministry of Environment and the CzechInvest was established in order to make the standards for environmental protection less rigorous (Vojvodíková, 2010).

However, it is interesting to elucidate major conflicts among the national bodies. The conflicts between the CzechInvest and other ministries, especially the Ministry of Finance, led to the failure of the *Czech Brownfield Regeneration Strategy* formulation. In 2005, the national government of the Czech Republic decided to start the preparation of the brownfield regeneration strategy, and for this purpose several ministries were invited – the Ministry of Environment, the Ministry of Regional Development, and the Ministry of Industry and Trade. Nevertheless, the CzechInvest cultivated the mentioned document for a long time (Garb and Jackson, 2006; Garb and Jackson, 2010). More precisely, experts from the CzechInvest had specific skills and knowledge needed in the process of brownfield regeneration (built on the cooperation with international experts). However, they considered only their own resources, i.e. there was no cooperation with other institutions, particularly with the Ministry of Regional Development. These conflicts in authority slowed down the process of the strategy approval by the government (Garb and Jackson, 2010). Nevertheless, according to the Czech planning experts, the failure of such a strategy adoption turned out to be good. More precisely, what is needed is the integration among the institutions with urban knowledge, which falls within the responsibility of the Ministry of Regional Development, while the CzechInvest poses brownfield know-how, but without any spatial remit (Vojvodíková, 2010). Therefore in 2008, the document titled the *National Strategy for Brownfield Regeneration* (prepared by the Ministry of Industry and Trade) was adopted.¹³

The regional level of governance and planning in the Czech Republic was re-established at the beginning of the new millennium, with the general employment structure formed mainly of urban and spatial planners, as well as experts with various professional backgrounds (Vojvodíková, 2010). At the regional level, cooperation among regional development agencies, as well as their collaboration with other stakeholders is particularly significant (Perić, 2014). On the other

¹³ In addition to this strategy, there are also a few documents which indirectly deal with the issue of brownfield regeneration, such as: *Economic Growth Strategy of the Czech Republic*, *Regional Development Strategy of the Czech Republic* and *State Environment Policy of the Czech Republic* (TIMBRE, 2012).

hand, the process of brownfield regeneration at the local level is often influenced by politics (TIMBRE, 2012). Namely, the greatest decision-making power in the brownfield regeneration process at the local level lies in the hands of the mayor.¹⁴ However, it should be stressed that the most successful brownfield regeneration projects resulted from the collaboration of municipalities with regional authorities, on the one hand, as well as with international expert agencies in the field of spatial development on the other (Perić, 2014).

Vertical coordination in the Czech Republic is mainly “top-down” – the role of a mediator is again assigned to the Ministry of Regional Development, which provides support to regions and municipalities. This ministry offers the technical expertise for facilitating the communication between local government and local communities in the brownfield regeneration process, by providing appropriate qualifications among local government employees (Vojvodíková, Bergatt Jackson and Hermann, 2006). In terms of supranational cooperation, a particularly important role is assigned to the CzechInvest, which closely cooperated with the European Union (EU) development agencies (Perić, 2014).

Although some Hungarian experts agree that there is no guiding national strategy for the brownfield problem (Foldi, 2006; Kauko, 2010), institutional cooperation is to a great extent achieved at the national level, where the main role of a coordinator is assigned to the National Development Agency (Ricz and Salamin, 2010). The institutions at the regional level have weak competence when it comes to sustainable brownfield regeneration, which is in accordance with their general competence. Hence, there is a need to define a linkage to other regions and sectorial policies. At the level of municipalities and districts, the great obstacle to a better cooperation lies in the fact that many of them are led by different political parties, which is then followed by incompatible development policies (Kauko, 2010). Also, at the level of municipality, brownfield regeneration projects are realised through collaboration between municipality experts and the private sector, on the one side, and international partners on the other. The latter seems to be more successful owing to the fulfilment of the requests for public interest (Grisel and Van den Waart, 2011).

Vertical cooperation in Hungary, i.e. collaboration between different planning levels responsible for sustainable brownfield regeneration, can be achieved just by fostering the regional government bodies. A good example is Regional Development Agency, which still needs the improvement of specific mechanisms for the efficient implementation of the national planning policies at the local level.

¹⁴ According to the same source, based on the analysis of brownfield regeneration practice at local level in the Czech Republic, there are several roles assigned to the local government: a) the role of an initiator, b) the marketing role, c) the information gathering role, g) the negotiating role, d) the role in decision-making, as well as other roles that have importance in facilitating the brownfield regeneration process (Klusáček, Krejčí, Kunc, Martinat and Novakova, 2011, p. 26).

In the practice of brownfield regeneration in Serbia, the extent of institutional collaboration varies. At the national level, cooperation between several sectors in order to create the developmental documents is not effective, which stems from their unclear responsibilities in a given process. However, the national body tending to achieve a higher degree of horizontal collaboration with other institutions is the Republic Agency for Spatial Planning. On the other hand, there is no effective cooperation and exchange of experience among the local authorities. Hence, there is a distinct need for the municipalities, which already developed brownfield regeneration policies (e.g. Niš, Subotica), to share their experience with other municipalities with low levels of understanding the brownfield regeneration effects (SKGO, 2011). The networking of activities, as well as the promotion of brownfield revitalisation contributes to the improvement of abilities, skills, and motivation of employees in the public sector (Perić, 2014).

A vertical institutional collaboration in Serbia is not developed to its full potential due to the absence of the regional administrative level. Therefore, in Serbia, despite the Local Self-Government Law (Official Gazette RS 129/07), local authorities or their associations do not participate in the preparation of the regulation related to sustainable land use as one of the priorities of the municipal development. All the brownfield regeneration initiatives are driven by the national government.

4.2. Mediators in Institutional Cooperation

The greatest advantage of the Czech system is seen in the institution that brings together both the representatives of ministries and experts. Namely, the Ministry of Regional Development is mostly made up of experts in the field of spatial planning and development (Perić, 2014). This is a proof of a fast institutional transition from the late 1990s. In this period, the brownfield issue was within the responsibility of the institutions in the financial sector, i.e. the CzechInvest and the Ministry of Finance (Garb and Jackson, 2006). However, during a short period of time, the topic of brownfield regeneration gained national importance and became a theme that integrates almost all other relevant institutional bodies. Although the Ministry of Regional Development has a national responsibility, this ministry recognises the importance of the regions and provides guidelines for their activities in terms of brownfield regeneration.¹⁵

Similarly to the previous case study, the most important documents in the domain of spatial development in Hungary (*New Hungarian Development Plan* and the *National Sustainable Development Strategy*) are coordinated by national expert

¹⁵ One of the most significant projects in recent years was CENTROPE, within which the Czech regions actively participated in order to achieve sustainable spatial development in Central Europe (Perić, 2014).

institutions (National Development Council, National Development Agency). More precisely, the mentioned national bodies act like supervisors for placing emphasis on the brownfield issue among other relevant sustainable development topics (Riciz and Salamin, 2010). However, in Hungary there is a strong influence of non-governmental expert agencies (e.g. VATI) as a support in defining the brownfield regeneration policies (Pallai, 2008). Also, similarly to the Czech experience, the key documents on brownfield regeneration at both the regional (Operative programmes for regional development) and the local level (local initiatives for sustainable development) result from collaboration with international expert agencies (Grisel and Van de Waart, 2011).

When it comes to the position of the Serbian expert agencies in the process of brownfield regeneration, the Republic Agency for Spatial Planning deals with the preparation of strategies and spatial development plans in accordance with the policies of sustainable land use. The agency is a crucial coordinator among several institutions, i.e. various ministries, numerous governmental agencies and researchers – from both the academia and scientific institutes. The role of an intermediary is also appointed to the Agency for Foreign Investments and Export Promotion (SIEPA). It provides an assistance in the administrative procedures at all the levels, as well as in the mediation with relevant institutions, both national and local. However, spatial plans and strategies are general in their nature, so Serbia lacks professional expertise in the field of brownfield regeneration. This is seen primarily in the absence of the national body responsible exclusively for brownfield regeneration, as well as in a lack of cooperation with international expert agencies (Perić, 2014). This is a remarkable difference from the previous case studies that approached effectively the brownfields issue through various foreign funding programmes.

4.3. The Nature of Institutional Cooperation

Collaboration and joint decision-making in the field of spatial development is stipulated by the Czech Planning and Construction Law. More precisely, institutional collaboration is needed between the local and regional planning levels. Also, the law prescribes cooperation between various parties (primarily the public and the private sector) at the local planning level (PLUREL, 2010). Therefore, it is considered that appropriate legal background for the cooperation exists, but the mechanisms for improving the cooperation among different sectors are required. This would contribute to effective brownfield regeneration (Perić, 2014).

The cooperation of institutions responsible for physical development in Hungary is regulated by two laws. The Building Law prescribes cooperation of different sectors at the local level, but local government is responsible also for the involvement of local stakeholders in a joint formulation of urban development

policies. The Law on Regional Development and Planning prescribes cooperation between regional and local authorities (Pallai, 2008). Also, one of the priorities in the document *Medium-Term Urban Development Programme of Budapest – The Podmaniczky Programme 2005–2013* is cooperation of private and public sector at the local level (The Municipality of Budapest, 2005). However, what is missing in this document are the instruments for effective cooperation. Thus, success in brownfield regeneration at the local level strongly depends on the proactive and innovative approach of local, particularly district authorities (Perić, 2015).

Finally, the Law on the Spatial Plan of the Republic of Serbia from 2010 to 2020 (Official Gazette RS 88/10) clearly stipulates not only cooperation between different institutions responsible for spatial development, but it also supports cooperation between various sectors, primarily the public and private. However, the practice of brownfield regeneration shows two inconsistencies. On the one hand, only a few local authorities see public-private partnership as a form of cooperation that contributes to the brownfield regeneration effectiveness. On the other hand, in case that public-private partnership is recognised as a mechanism for brownfield regeneration, there is often unequal cooperation between the private sector, which has great financial power, and the public sector, which is characterised by inadequate professional power, thus resulting in its inability to control the brownfield regeneration process (Perić, 2014). Along with the institutional collaboration, the Law on the Spatial Plan of the Republic of Serbia from 2010 to 2020 (Official Gazette RS 88/10) prescribes the improvement of informal cooperation in the decision-making process, particularly emphasising the collaboration with the civil sector. However, non-institutional instruments for stimulating public participation do not exist. This indicates a non-transparent way of policy formulation in the domain of spatial planning and development.

5. CONCLUDING REMARKS

The topic of institutional cooperation in the brownfield regeneration process – its nature, extent and form – is particularly relevant for countries without the tradition of decentralised planning and decision-making. Depending on the stage of the socio-economic transition, we can observe critically the success of institutional reforms and their consequences in the domain of spatial development. In addition to the final summary, the following lines provide some recommendations for further strengthening of institutional cooperation in the Czech Republic, Hungary and Serbia.

The Czech Republic made a great shift, from non-recognition of the brownfield issue at the beginning of the 1990s to building the institutional capacities, policies, legal framework and financing instruments by the end of the first decade of the new millennium. This shift resulted from an overall transition and maturing of the

real estate market. In this context, brownfield regeneration is seen as a complex socio-economic and strategic planning challenge involved with engaging a broad coalition of different stakeholders. However, there is a constant progress concerned with the mentioned topic – the evolution of the existing institutions and the establishment of new ones. In addition to this, the Czech Republic is a successful pioneer in developing new policies on brownfield regeneration. Moreover, recent documents contain policies concerning not only one aspect of brownfield regeneration. The newly formulated policies intend to cover a range of urban problems that can be interconnected with the brownfield issue. Some future actions to be taken in order to increase effectiveness in the brownfield regeneration are as follows:

- Appointment of a direct governmental responsibility or a specific body in charge of collaboration with different sectors,
- Assignment of an authority in the field of urban and spatial planning to the mentioned body,
- Provision of expertise and know-how in the field of brownfield regeneration to the appointed body.

The transformation from Hungary as a post-socialist country to Hungary as an EU member state resulted in a number of new methods towards sustainable spatial development, and, thus, brownfield regeneration. One of the most important instruments aimed at achieving sustainable development was the fostering of the collaboration within the same, but also between various strategic planning levels. It is worth mentioning the collaboration between the ministries and non-profit expert organisations. This is a key to success, especially in order to satisfy the demands for the achievement of public interest. Finally, Hungarian national level institutions responsible for spatial development are organised fully in accordance with the requests of the EU funding organisations. There are some further actions which should be taken in terms of institutional strengthening:

- Greater involvement of the ministries in charge of spatial development; nowadays they have only a role of the supervisors for the already prepared documents,
- Introduction of the competent managers as a liaison between the private investors and district authorities,
- Compatibility of brownfield regeneration policies on both the municipal and district levels.

In Serbia, there is an obvious lack of appropriate institutions regarding brownfield regeneration at both the national and local levels. This is the main difference from the previously analysed countries. However, similar to other countries, the national-level institutions are the most responsible for the topic of brownfield regeneration in Serbia. Nevertheless, there is only one expert institution in charge of sustainable development in contrast with the previous case studies, where many institutions participate in policy-making. When preparing the basic concepts for formulation of the most important documents, the Regional Agency for Spatial

Planning is a crucial player in coordination between several institutions with different profiles. In addition to the horizontal coordination, the role of the agency is reflected in the vertical cooperation as well – the spatial development documents to be implemented at the local level need to be previously approved by the agency. The activities of local governments towards brownfield regeneration are minimal, which makes the main difference from previous case studies. Some future actions can be defined as follows:

- Implementation of European documents in the field of brownfield regeneration should become a liability,
- There is a need to deepen the cooperation with international expert agencies,
- The role of local governance should be strengthened – they must develop mechanisms for boosting the collaboration with public, private and civil sector,
- Public promotion of brownfield regeneration and, more importantly, planning education should obtain system support.

An insight into the institutional structure of the selected case studies places emphasis on the necessity for a proper expertise in planning the brownfield regeneration process. More precisely, the planners of the future should be able to recognise the complexity of the brownfield regeneration issue and then to embed it into a spectrum of other land management problems. Having also the challenge of overcoming the language barriers in mind, we should be aware of the importance of promoting the transfer of international expertise – capacity-building on good practices and know-how covering efficient decision-making. Such networking activities contribute to improve skills, competence and motivation of staff in the public sector. Hence, the establishment of the cross-border cooperation in the spatial planning domain is essential for the balanced European development.

REFERENCES

- ADAMS, D. and WATKINS, C. (2002), *Greenfields, Brownfields and Housing Development*, Oxford: Blackwell Publishing.
- ALKER, S., JOY, V., ROBERTS, J. and SMITH, P. (2000), 'The definition of brownfield', *Journal of Environmental Planning and Management*, 43 (1), pp. 49–69.
- BARTA, G., BELUSZKY, P., CZIRFUSZ, M., GYORI, R. and KUKELY, G. (2006), *Rehabilitating the Brownfield Zones of Budapest (Discussion Papers no. 51)*, Pecs: Centre for Regional Studies of Hungarian Academy of Sciences.
- BEGOVIĆ, B. (2002), 'Ekonomski aspekti upravljanja lokalnom zajednicom: ka povećanju ekonomske efikasnosti (The economic aspects of the local community management: towards the increase of economic efficiency)', [in:] BEGOVIĆ, B., VACIĆ, Z., LAZAREVIĆ BAJEC, N., RAIČEVIĆ, B., ROGANOVIĆ, M., SIMIĆ, A. M., STOJANOVIĆ, D. and HIBER, D. (eds.), *Principi modernog upravljanja lokalnom zajednicom (The Principles of Modern Local Community Management)*, Belgrade: CLDS, pp. 112–128.

- BEGOVIĆ, B. (2003), 'Reforma zakonodavstva o gradskom zemljištu, planiranju i izgradnji (Legislative reform of urban land, planning and construction)', [in:] VACIĆ, Z. and MIJATOVIĆ, B. (eds.), *Strategija reformi (The Strategy of Reforms)*, Belgrade: CLDS, pp. 196–208.
- BROOS, L., ERTEL, T., GRAY, A., SCHUG, B. and VEGTER, J. (eds.) (2007), *European Brownfield Revitalisation Agenda*, <http://www.eubra.eu> (12.06.2012).
- CABERNET (CONCERTED ACTION ON BROWNFIELD AND ECONOMIC REGENERATION NETWORK). (2007), *CABERNET Network Report: Sustainable Brownfield Regeneration*, Nottingham: University of Nottingham.
- CABERNET (CONCERTED ACTION ON BROWNFIELD AND ECONOMIC REGENERATION NETWORK). (2009), *Sustainable Brownfield Regeneration*, <http://www.cabernet.org.uk> (10.12.2008).
- COUCH, C., LEONTIDOU, L. and PETSCHER-HELD, G. (eds.) (2007), *Urban Sprawl in Europe: landscapes, land-use change and policy*, Oxford: Blackwell Publishers.
- GREENBERG, M., LOWRIE, K., MAYER, H., MILLER, K. and SOLITARE, L. (2001), 'Brownfield redevelopment as a smart growth option in the United States', *The Environmentalist*, 21, pp. 129–143.
- DANILOVIĆ, K. and DAMJANOVIĆ, D. (2011), 'Mogućnosti ozivljavanja braunfilda u Srbiji (The possibilities of brownfield revitalization in Serbia)', paper presented at the conference *Susreti urbanista (The Meetings of Urban Planners)*, Novi Becej, Serbia, 22–23.09.2011, <http://www.vuu.org.rs> (26.11.2011).
- DIXON, T., RACO, M., CATNEY, P. and LERNER, D. N. (2008), *Sustainable Brownfield Regeneration: Liveable Places from Problem Spaces*, Chichester, GBR: Wiley.
- DORSEY, J. W. (2003), 'Brownfields and Greenfields: The Intersection of Sustainable Development and Environmental Stewardship', *Environmental Practice*, 5 (1), pp. 69–76.
- EC (EUROPEAN COMMISSION). (2010), *Action plan for the EU Strategy for the Danube Region*, Brussels: European Commission.
- FALUDI, A. (2010), 'European Spatial Planning: Past, Present and Future', *Town Planning Review*, 81 (1), pp. 1–22.
- FOLDI, Z. S. (2006), *Neighbourhood Dynamics in Inner-Budapest. A realist approach* (doctoral dissertation), Netherlands Geographical Studies, No. 350, Utrecht: Utrecht University.
- GARB, Y. and JACKSON, J. (2001), 'The search for brownfield leadership in Central European Cities: Overview and case study of the Czech Republic', paper presented at the ITDP brownfield seminar *Recycling Urban Land*, Prague, <http://www.brownfields.cz/wp-content/uploads/2008/04/brownfield-leadership-in-ceec-2001.pdf> (05.12.2008).
- GARB, Y. and JACKSON, J. (2006), 'Central Europe's Brownfields: Catalysing a Planning Response in the Czech Republic', [in:] ALTROCK, U. et al. (eds.), *Spatial Planning and Urban Development in the New EU Member States – From Adjustment to Reinvention*, Hampshire: Ashgate, pp. 271–286.
- GARB, Y. and JACKSON, J. (2010), 'Brownfields in the Czech Republic 1989–2009: The long path to integrated land management', *Journal of Urban Regeneration and Renewal*, 3 (3), pp. 263–276.
- GRIMSKI, D. and FERBER, U. (2001), 'Urban Brownfields in Europe', *Land Contamination & Reclamation*, 9 (1), pp. 143–148.
- GRISEL, M. and VAN DE WAART, F. (eds.) (2011), *Multilevel Urban Governance or the Art of Working together – Methods, Instruments and Practices*, The Hague: European Urban Knowledge Network.
- GCSD (GOVERNMENT COUNCIL FOR SUSTAINABLE DEVELOPMENT). (2010a), *The Strategic Framework for Sustainable Development in the Czech Republic*, Prague: GSDC.

- GCSO (GOVERNMENT COUNCIL FOR SUSTAINABLE DEVELOPMENT). (2010b), *Spatial Development Policy of the Czech Republic*, Prague: GSDC.
- HEALEY, P. (1997), *Collaborative Planning – Shaping places in fragmented societies*, London: MacMillan Press.
- HEALEY, P. (2007a), 'Re-thinking Key Dimensions of Strategic Spatial Planning: Sustainability and Complexity', [in:] DE ROO, G. and PORTER, G. (eds.), *Fuzzy Planning: The Role of Actors in a Fuzzy Governance Environment*, Abingdon, Oxon, GBR: Ashgate Publishing Group, pp. 21–41.
- HEALEY, P. (2007b), 'The New Institutionalism and the Transformative Goals of Planning', [in:] VERMA, N. (ed.), *Institutions and Planning*, Oxford: Elsevier, pp. 61–90.
- HEALEY, P. and WILLIAMS, R. (1993), 'European Urban Planning Systems: Diversity and Convergence', *Urban Studies*, 30 (4/5), pp. 701–720.
- HIRT, S. (2005), 'Planning the Post-Communist City: Experiences from Sofia', *International Planning Studies*, 10 (3–4), pp. 219–240.
- IMMUDTC (Informal Ministerial Meeting on Urban Development and Territorial Cohesion). (2007), *Leipzig Charter on sustainable European cities*. Agreed on the occasion of the Informal Ministerial Meeting on Urban Development and Territorial Cohesion, Leipzig 24.05.2007, http://ec.europa.eu/regional_policy/archive/themes/urban/leipzig_charter.pdf (11.06.2012).
- INNES, J. E. and BOOHER, D. E. (1999), 'Metropolitan Development as a Complex System: A New Approach to Sustainability', *Economic Development Quarterly*, 13, pp. 141–156.
- JANIN RIVOLIN, U. (2008), 'Conforming and performing planning systems in Europe: an unbearable cohabitation', *Planning Practice & Research*, 23 (2), pp. 167–186.
- KAUKO, T. (2010), 'Where have all the planners gone? The Law of the Wolf in an Era of Ignorance', paper presented at the *Regional Studies Association Conference*, Pecs, Hungary, 24–26.05.2010, <http://www.regional-studies-assoc.ac.uk/events/2010/may-pecs/papers/kauko.pdf> (10.05.2011).
- KLUSÁČEK, P., KREJČI, T., KUNC, J., MARTINAT, S. and NOVAKOVA, E. (2011), 'The Post-Industrial Landscape in Relation to Local Self-Government in the Czech Republic', *Moravian Geographical Reports*, 19 (4), pp. 18–28.
- Law on the Spatial Plan of the Republic of Serbia from 2010 to 2020*. Official Gazette, No. 88/10. *Local Self-Government Law*. Official Gazette RS 129/07.
- MADARASZ, T. (2007), *Brownfield redevelopment status and lessons from Northern Hungary*, http://www.nicole.org/publications/Akersloot/madarasz_t_casehu.pdf (20.02.2012).
- MAIER, K. (1998), 'Czech planning in transition: Assets and deficiencies', *International Planning Studies*, 3 (3), pp. 351–365.
- MINISTRY OF INDUSTRY AND TRADE. (2008), *The National Strategy for Brownfield Regeneration*, Prague: Ministry of industry and trade.
- MTA RKK KETI (MAGYAR TUDOMANOS AKADEMIA, REGIONALIS KUTATASOK KOZPONTJA). (2007), *Regionalis Fejlesztés Operatív Program (ROP 2.2.): A városi területek rehabilitációját célzó intézkedések értékelése*. Budapest: MTA RKK, <http://www.nfu.hu>, (05.12.2012).
- NDA (NATIONAL DEVELOPMENT AGENCY). (2007), *New Hungarian Development Plan*, Budapest: NDA.
- NDA & MoEW (NATIONAL DEVELOPMENT AGENCY & MINISTRY OF ENVIRONMENT AND WATER). (2007), *National Sustainable Development Strategy*, Budapest: NDA.
- NEDOVIĆ-BUDIĆ, Z. (2001), 'Adjustment of Planning Practice to the New Eastern and Central European Context', *Journal of the American Planning Association*, 67, pp. 38–52.
- OECD (ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT). (2006), *Competitive Cities in the Global Economy – Horizontal Synthesis Report*, Bilbao, Spain.

- PALLAI, K. (2008), 'Hungary', [in:] RYSER, J and FRANCHINI, T. (eds.), *International Manual of Planning Practice (IMPP)*, The Hague: International Society of City and Regional Planners (ISoCaRP), pp. 156–166.
- PERIĆ, A. (2013), 'The Review of Planning Practice in Brownfield Regeneration – Some European Experiences', *Journal of Applied Engineering Science*, 11 (1), pp. 1–8.
- PERIĆ, A. (2014), *Brownfield Regeneration in the Danube Macro-Region: Institutional Dynamics*, Saarbrücken: LAP Lambert Academic Publishing.
- PERIĆ, A. (2015), 'The role of local governance in the process of brownfield regeneration: European planning practice', *Serbian Architectural Journal*, 7 (3), pp. 263–284.
- PERIĆ, A. and MARUNA, M. (2012a), 'Predstavnicu društvene akcije u procesu regeneracije priobalja – slučaj braunfeld lokacije „Luka Beograd“ (The Representatives of Social Action in Waterfront Regeneration – the Case of the Brownfield Site “Belgrade Port”)', *Sociologija i prostor*, 50 (1), pp. 61–88.
- PERIĆ, A. and MARUNA, M. (2012b), 'Brownfield Regeneration versus Greenfield Investment – Is Serbia on the Way to Integrated Land Management?', *Journal of Urban Regeneration and Renewal*, 6 (1), pp. 79–90.
- PLUREL (Peri-Urban Land Use Relationships – Strategies and Sustainability Assessment Tools for Urban-Rural Linkages). (2010), *National spatial planning policies and governance typology*. (Deliverable Report 2.2.1), <http://www.plurel.net>. (25.05.2011).
- Planning and Construction Law*. Official Gazette, No. 72/09, 24/11.
- RASP (REPUBLIC AGENCY FOR SPATIAL PLANNING). (2009), *Spatial Development Strategy of the Republic of Serbia from 2009 to 2020*, Belgrade: RASP.
- Regional Development Strategy of the Republic of Serbia from 2007 to 2012*. Official Gazette, No. 21/07.
- Restitution and Denationalisation Law*. Official Gazette, No. 72/11.
- RESCUE (REGENERATION OF EUROPEAN SITES IN CITIES AND URBAN ENVIRONMENTS). (2004), *Guidance report for the management of the Brownfield Regeneration Projects*. (Work Package 6, Deliverable 6.1), <http://www.rescue-europe.com> (26.11.2008).
- RICZ, J. and SALAMIN, G. (eds.) (2010), *Handbook for the National Implementation of the Territorial Agenda of the European Union – The Case of Hungary*, Budapest: The Ministry for National Development and Economy, Republic of Hungary.
- SIEPA (SERBIAN INVESTMENT AND EXPORT PROMOTION AGENCY). (2011), *Lokacije – SIEPA baza investicionih lokacija (Locations – SIEPA base of investment locations)*, <http://serbia-locations.rs> (25.11.2011).
- SKGO (STALNA KONFERENCIJA GRADOVA I OPŠTINA – STANDING CONFERENCE OF TOWNS AND MUNICIPALITIES). (2011), *Reaktiviranje braunfilda u Srbiji – Sistemski pristup ili ad hoc rešenja? (Brownfield Reactivation in Serbia – System Approach or Ad-hoc Solutions?)*, Belgrade: SKGO.
- STANILOV, K. (ed.) (2007), *The Post-Socialist City: Urban Form and Space Transformations in Central and Eastern Europe after Socialism*, Dordrecht: Springer.
- TASAN KOK, T. (2004), *Budapest, Istanbul, and Warsaw: Institutional and Spatial Change*, Delft: Eburon.
- THE MUNICIPALITY OF BUDAPEST. (2003), *Budapest City Development Concept*, Budapest: The Mayor's Office.
- THE MUNICIPALITY OF BUDAPEST. (2005), *The Podmaniczky Programme 2005–2013: Medium-Term Urban Development Programme of Budapest, Summary*, Budapest: The Mayor's Office.

- TIMBRE (TAILORED IMPROVEMENT OF BROWNFIELD REGENERATION IN EUROPE). (2012), *Report on results of survey on brownfield regeneration and statistical analysis information*, Brno: IOG.
- TOSICS, I. (2006), 'Spatial restructuring in post-socialist Budapest', [in:] TSENKOVA, S. and NEDOVIC-BUDIC, Z. (eds.), *The Urban Mosaic of Post-Socialist Europe*, Heidelberg: Psysica-Verlag, pp. 131–150.
- VOJVODÍKOVÁ, B. (ed.) (2010), *Brownfields-Handbook: Cross-disciplinary educational tool focused on the issue of brownfields regeneration – Educational tool for Latvia and Lithuania*, Ostrava: Technical University.
- VOJVODÍKOVÁ, B., BERGATT JACKSON, J. and HERMANN, G. (2006), 'Drive Towards Sustainable Urban and Rural Development Skills', http://www.socialpolis.eu/index.php?option=com_docman&Itemid=199&task=doc_download&gid=71 (05.12.2008).
- VUJOVIC, S. and PETROVIC, M. (2007), 'Belgrade's post-socialist urban evolution: Reflections by the actors in the development process', [in:] STANILOV, K. (ed.), *The Post-Socialist City: Urban Form and Space Transformations in Central and Eastern Europe after Socialism*, Dordrecht: Springer, pp. 361–384.
- ZEKOVIĆ, S. (2007). 'Prostorno-planska politika i industrijski braunfildi u gradovima Srbije (Spatial Planning Policy and Industrial Brownfields in Serbian Cities)', [in:] DANILOVIĆ, K. *et al.* (eds.), *Oživljavanje braunfilda u Srbiji (Brownfield Revitalisation in Serbia)*, Belgrade: PALGO centar, pp. 61–70.