

## PUBLIC-PRIVATE PARTNERSHIP: IMPROVING LANDSCAPE QUALITY OF MODERN COMMUNITIES

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**Abstract.** The article identifies the principles of private public partnership (PPP) in social and green infrastructure and urban development of modern cities. The paper also focuses on the methodology that explains how local or national governments and the initiative of the private sector can become a strong factor in sustainable urban planning.

The most important goals of developing urban areas and architecture policies include the enlargement of sustainable territories and legislative basis of governance, financial mechanisms and improvement in PPP; however, these measures are impossible to achieve without consistent implementation. One of the major goals for governments is to find effective ways to encourage society to be cooperative and involved in the process of expanding social and green infrastructure, public space and territorial communities in cities. It is obvious that limited resources require cooperation between businesses, government and society. The obtained results have shown that immediate changes are necessary to achieve sustainable urban development.

This article investigates a PPP concept in the context of green city development as well as considers the methods and possibilities of optimizing partnership management and development in Lithuania. Finally, the paper examines worldwide and European experience along with incentives and obstacles of PPP.

**Keywords:** PPP, urban development, sustainable city development, public-private sector cooperation, green architecture, territory community, landscape architecture.

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### Introduction

Nowadays, when the concepts related to urban development, the use of the common good, efficient optimization of financial management and finding effective solutions are constantly changing in a globalized world, public-private partnership (PPP) becomes essentially important. When dealing with the development of urban social and engineering infrastructure, the identification of the models of public-private sector cooperation and improvement on the quality of a new residential environment remain burning questions. Each partner should fulfil its part: the public sector is supposed to be responsible for taking control over public administration issues (e.g. the arrangement of

detailed plans, land consolidation, the issue of permits for construction, etc.), whereas the private sector should be responsible for investment, project management and service provision. Considering a complicated economic situation, it could be appropriate not only to attract financial resources (private and borrowed ones) of the private sector but also to consider the possibilities of European Union funding, which should be treated as the contribution of the public sector to urban development.

The present article is aimed at analysing PPP issues, discussing the aspects of effects synergy between EU financial aid and private capital has on landscape quality.

### Theoretical preconditions for public-private sector cooperation

Public-private partnership (PPP) is one of the world-wide used tools rediscovered in Lithuania. This is a new and rapidly spreading phenomenon. Global practice has shown that the involvement of the private sector (particularly financial and human resources) in the process of public service development and delivery, especially in terms of a persistent deficit of financial resources, is one of the best solutions (El-Gohary *et al.* 2006).

Due to a lack of information, PPP is often treated as the privatisation of state property (Thobani 1999) and is related to unreasonable public distrust. An opinion, that society is deceived by the delegation of some public administration functions to private business prevails. Society is afraid of losing the availability of some public services, increasing the prices of provided services and “depriving” them of public space, e.g. commercialized green areas. However, in general, this is a case of public-private sector cooperation allowing for the efficient use of private and European aid funds in order to provide public services or develop public and manufacturing facilities (De Lemos *et al.* 2000; Hemming *et al.* 2006; Shaoul 2005; Skietrys *et al.* 2008; Jakaitis *et al.* 2009). When dealing with public-private sector cooperation, it could be stated that the public sector employs the principle of delegating their activities to third parties in order to improve operational efficiency: in this case, a private equity firm is committed to provide high quality public services in accordance with standard specifications, finance the operating costs of the state property, construct new buildings or other objects and assume financial and technical risks. Notwithstanding, the public sector is responsible for taking control over service delivery, paying regular payments to a private company during a certain period of time (20–35 years) and allowing for the effective implementation of the project at the initial stage. The cooperation and redistribution of the functions mentioned above enable each partner to fulfil its part: private business develops infrastructure and provides services, and the public sector creates favourable conditions and manages control (Jakaitis *et al.* 2009). According to Akintoye *et al.* (2003), the main problem related to the delegation of public services to the private sector is the fear of society associated with the possible lower quality of the services provided by the private business, its irresponsibility and the loss of management (or even property) control.

The public sector activity and available public services are the centre of constant public attention; therefore, the choice of the partnership model becomes particularly important, considering responsibilities,

risk sharing and payback. At a more general level, PPP occupies a middle ground between traditional public procurement and privatisation (Burger 2008) (Fig. 1). On the one hand, contractual relationship is similar to public procurement; however, when employing the PPP mechanism, the public sector gains a potential to create its own infrastructure development policy funded and administrated by the private sector instead of purchasing fixed assets and pre-paying the full price for them. Thus, the public sector customer could be provided with a service in exchange for a payment corresponding to the level and quality of the offered service. Hence, public authorities do not lose their assets as happens in case of privatisation, but, on the contrary, create and take charge of them when the contractual relationship ends or extends the contract. The undertaken studies have indicated consistent changes in the private sector interest, investment payback and liability. On the other hand, the pursuit of maximum profit does not guarantee the quality of the environment.

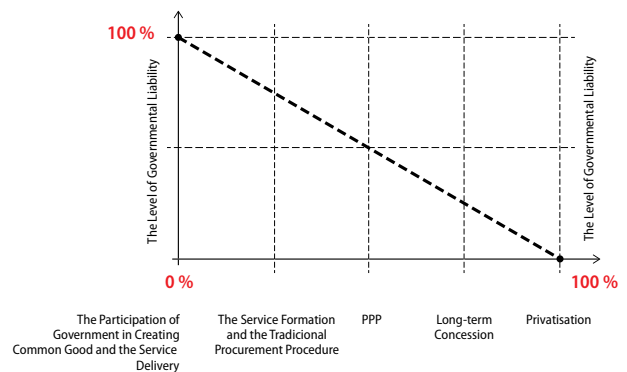


Fig. 1. The relationship between the distribution of responsibility and risk-sharing and the choice of the partnership model

According to Kim (2006), Zhang (2005), in most cases, the main reasons for public-private sector partnership are:

- limited financial resources and capabilities of the public service;
- increasing demand for public service infrastructure;
- the need to improve the quality of public services and reduce the costs of their delivery, etc.

In practice, design solutions to most objects affected by informal factors begin changing during the period of implementing and losing original qualitative characteristics; however, international experience has shown that the proper preparation of the contract between the state (Municipality) and private company, with the clear identification of all areas of responsibilities and obligations inside it, could minimize risks: the state

pays the private sector for actual services provided to the customers – the services must meet quality requirements specified in the contract and poor quality services are subject to sanctions (Eaton *et al.* 2006.)

By choosing the right strategy for cooperation, the private sector could take control over the administration of functions that are not typical. However, the choice of the strategy related to PPP realization in case of cultural heritage, protected areas or landscape objects is usually influenced by European aid policy and models of complex solutions; e.g. the use of the potential for cultural and natural values of the development of recreation and tourism sectors focused on the creation of the common good is not necessarily coincide with the interests of the private entity and maximization of profit indicators. Hence, in Lithuania, protected areas are usually governed applying the most inefficient method (Fig. 1): the authorities both control the retention policy and implement the arranged projects; as a result, the state takes the burden of responsibility, a risk to creating the common good, service delivery, maintenance and other functions typical of private entities, instead of delegating some of the functions to the private entity through PPP service. To ask rhetorically, how is the state economically able to implement all those measures?

The global experience has shown (Ashuri *et al.* 2010; Tievaa, Junnonen 2009; Li *et al.* 2005; Barr 2007; Dixon *et al.* 2006; Sobotka *et al.* 2008) that financial resources of the public sector are limited: its performance bar includes a number of social activities and objects susceptible to investment; moreover, the interest of the personnel to apply the most cost-effective model in the market is not usually motivated. Thus, PPP tools are more effectively applied to the areas of infrastructural development: road construction and maintenance, municipal service delivery, the construction and maintenance of schools, hospitals, airports, bus and railway stations, prisons, power plants and governmental buildings and water and heat sector restructuring.

A traditional model for work done by state and municipal institutions covers (Fig. 2):

- the creation of services;
- the formation of services and creation of the required infrastructure;
- the delivery of services.

A typical feature of operating such model is related to the involvement of the relatively largest amount of resources (including funding provided by the European Union or the institutions themselves) at the initial stage of developing certain services and forming infrastructure. Thus, in order to effectively implement the func-

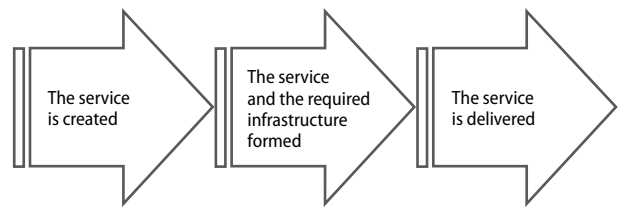


Fig. 2. A traditional model for work done by state and municipal institutions

tions of public administration, the fact that the state is not able to finance all important projects (therefore, some of public services and development projects are delayed or not implemented at all) should be taken into consideration.

According to Aziz (2007) and Wang *et al.* (2000), another important positive feature of such model is the ability of the private sector to implement projects faster and to guarantee their higher quality as the result of the employed management expertise. The above mentioned fact determines the efficiency of investment (e.g. a school in Balsiai was built in 8 months), which is modelled by increasingly common practice in business called outsourcing, i.e. the business is focused on its core activity while the operation of other activities, that are less typical but yet important, is delegated to third parties, for example, a private construction company develops a structure of the third party in order to administrate services for 25-year-period.

There could be distinguished the following four basic elements of value-creation that should be monitored, measured and evaluated in order to disclose a qualitative change in the object of PPP: input, output, outcome and impact (Fig. 3). Each of the introduced elements could be interpreted differently; however, in our case, the most important result of the impact is a qualitative change in the residential environment and landscape.



Fig. 3. The elements of value-creation

Theoretically, new relations in providing public services are formed. Traditionally, state and local authorities are fully responsible for services, i.e. provision, infrastructure (and its development), land use, etc. *In the process of public-private sector cooperation*, the public sector delegates the provision of public services requiring significant investments in infrastructure and

some of the risks related to the private sector for a long term in order to improve the situation (Dailami *et al.* 1999; Meidutė 2009).

The conducted studies have shown that a specific form of PPP for individual cases is not determined in both worldwide and the European Union (EU) law (European Commission... 2003, 2004a, 2004b). Moreover, the rules governing requirements for the implementation of PPP are not established. The EU law does not specify whether public authorities should implement economic activity themselves or by entrusting this work to a third party. In fact, the allowance for different forms of public-private sector cooperation to develop could be appropriate. The assurance of the Member States to inform about the implementation of various forms of PPP, the problems related and the possible solutions achieved is systematically particularly important.

As a result of the EU regulatory framework for inordinate *public-private cooperation*, different countries are using different PPP models when dealing with specific tasks (Dixon *et al.* 2006; El-Gohary *et al.* 2006; Akintoye *et al.* 2003). As foreign and Lithuanian practical experience has shown, there is a need to define the concept of PPP more precisely. What is more, various concepts such as public procurement, PPP projects, concession, etc. should be identified, as they are used for indicating different ways of cooperation between the state and public sector and the relation to the assets and services created by public funds.

The fact that European law and Lithuanian legislation have not yet regulated the concept of PPP as well as identified its forms and provided each of them with specific requirements poses a risk for partnership projects important to the society and state, to be carried out inefficiently, or not to be implemented at all due to a lack of adequate regulation. There is also a risk that the public interest will not be represented appropriately, or the entities of the public sector responsible for the implementation of the projects mentioned above will employ inappropriate (not belonging to PPP or regulating wrong PPP forms) legislation.

According to the European Commission and the practical experience of foreign countries, the following types of PPP are identified:

- institutional, when a mixed capital company is established in order to carry out certain activities;
- contractual, when certain activities are carried out according to contracts the main of which are:
  - concessions;
  - PPP contracts based on public procurement.

As for Lithuania, only one form of *public-private sector cooperation* – concessions – is regulated on the legal basis; however, the law of public procurement could be indirectly attributed to this area. Standard procedures and rules related to *public-private sector cooperation* have not been formed. The coordination and supervision of PPP projects are not efficient at the national level, and the processes of the collection, systematization and analysis of information related to PPP projects implemented in Lithuania and other countries are inadequate.

Considering the facts that different international organizations distinguish different types of PPP and certain states have regulations for different forms of this cooperation, in order to make them similar in all Member States, the European Commission has divided them into two broad categories:

- *purely contractual PPPs*;
- *institutionalized PPPs*.

However, the State coordinating bodies, i.e. the Ministry of Finance of the Republic of Lithuania, do not pay particular attention to the analysis of the qualitative indicators of PPP<sup>1</sup>. Moreover, in 2009, one more PPP model related to PPP contracts based on public procurement was proposed. The main idea of the model is that according to the conditions determined in the contract of cooperation between the state and private entity, it is invested in the areas of activities assigned to the functions of the government entity while specific activities for which the private entity is paid by the government entity, are implemented in those areas; nevertheless, this model has not found real application yet. Hence, the following problems related to the fact that the principle of PPP is not widely used in Lithuania could be indicated:

- no political will to develop public-private sector cooperation;
- only one form of public-private sector cooperation, i.e. *concession* regulated by the law is created;
- no state authority responsible for the development of implementing the principle of public-private sector cooperation;
- virtually no work with society that is not aware of the opportunities and benefits of public-private sector cooperation.

<sup>1</sup> Ministry of Finance of the Republic of Lithuania. 2012. *PPP* [online], [cited 28 March 2012]. Available from Internet: <http://www.ppplietuva.lt/partneryste/apie/partneryste-lietuvoje/puslapis-5.html>

### The interaction between public-private partnership and EU aid funds

Considering the opportunities of urban regeneration and development provided by EU aid funds (for a new funding period of 2014–2020), it could be noted that the instruments of PPP should be developed and methods should be improved, as most municipalities are particularly interested in their level of debt. However, Lithuania has not yet created an appropriate legal environment to uptake EU aid funds through PPP “uniting” the funds of the EU aid and investments in the private-sector. Therefore, the use of the EU aid together with PPP contracts is a rare phenomenon. Individual projects of public or private sectors are usually funded, thus remaining an integral part of a larger PPP project or its phase (Fig. 4).

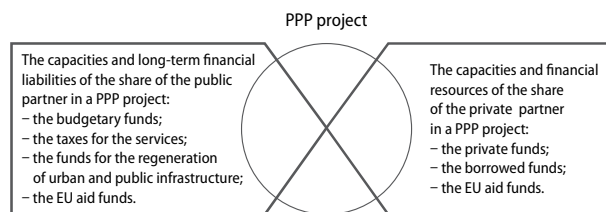


Fig. 4. The interaction between the EU aid and PPP in case of the ESCO model

The process is disintegrated and inefficient for achieving the highest quality of services. In order to use EU Structural Funds through PPP, the following factors should be considered:

- The programming period of EU Structural Funds (3–7 years) is relatively short, in comparison to that of PPP projects (25–30 years) and in order to be able to keep funding the provision of services under PPP contracts. Consequently, the disbursement of the funds at the stage of constructing and designing public infrastructure, considering certain results of private partner activity, is one of the most acceptable alternatives for the absorption of EU Structural Funds through PPP.
- EU Structural Funds support individual projects that are fully developed (however, the costs related to feasibility studies, financial and economic analyses, environmental impact assessment and the preparation of documents for public procurement could also be funded by EU Structural Funds). In order to have more PPP projects financed by EU Structural Funds within the period of 2014–2020, they must be already prepared at the beginning of the new programming period or even before.

Considering the failure of the housing modernization programme in Lithuania, it was the longest period of feasibility related to urban development and efficient energetic use untapped in 2008–2012, or even the darkest period in the development of the science and practical experience of urbanization over the period of 20 years of independence. Housing and Urban Development Agency under the Ministry of Environment of the Republic of Lithuania (HUDA) ended the year of 2011 with 644 houses modernized since 2005. Those objects were chosen from other 38000 buildings and included into the programme since launching it.

The “promising” Law on Territorial Planning of 1995, which has been revised probably 25 times, has finally messed up the process of the development of Lithuanian territories lacking the urban policy. Modern urbanization has been left beyond the bounds of complex urban modernization as a result of the highest level of the government’s reluctance (or inability) to use a wider range of models as well as PPP along with the consolidation of European aid funds for housing modernization. However, professional competence and ability to administrate the areas strategically important to the state and society is a question of another topic.

In order to expand the areas of the JESSICA support programme for the period 2007–2013, the necessity of the document to cover not only the costs related to building renovation and energetic efficiency improvement but also to the regeneration of the residential environment such as street lighting, social infrastructure, heating system renovation and public building complex planning and modernization has been discussed. The experts have admitted<sup>2</sup> the fact that the problem of housing modernization could be solved employing the ESCO (Energy Service Company) model, i.e. the investor increases the energetic efficiency of the client using private funds or those for the renewal of public infrastructure and recovers money invested by taking the funds saved for energetic resources.

<sup>2</sup> The authors of the present article has been invited by the Ministry of Finance to participate in round table discussion as an expert of VGTU.

Ministry of Finance of the Republic of Lithuania. 2012. *Aptartos ES paramos teikiamos galimybės miestų atgaivinimui ir plėtrai* [online], [cited 28 March 2012]. Available from Internet: <http://www.esparama.lt/naujiena?id=090bdd53801369e0>



### Examples and prospects of the forms of public-private partnership

The majority of governmental institutions consider the so-called Private Finance Initiative (PFI) as the most successful and productive form of PPP. Accordingly, the private sector invests a large amount of money in the object (e.g. a hospital or school building) during the first 3–5 years while the public sector (e.g. municipality) accounts for that by paying in instalment to the private company in the following period of 25–35 years. In Europe, such private-sector investments using PFI contracts constitute about 10–15% of the total investment in the public sector.

The projects of public-private partnership could be divided according to the level of public-sector institution initiating the project and participating in it. Partnership could be implemented at the following levels:

- state level, i.e. public authority is one of the partners;
- local authority level, i.e. the institution of local authority is one of the partners (employing a similar way, the PPP project on the school in Balsiai, which is one of few Lithuanian projects, has been implemented) (Figs. 5, 6);
- transnational level, i.e. several countries are involved in the projects of partnership (the project of the Nuclear Power Station of Ignalina is planned to be implemented by the partners of concession signing an agreement with a private investor).

In Lithuania, PPP has not been developed enough and is usually implemented only at the municipal level; for example, in 2010, investment reached 90 million, which was about 35% of that carried out under contracts; in 2011, Lithuanian municipalities implemented 41 PPP contracts. In general, PPP contracts have been carried out in 24 municipalities<sup>3</sup> from 60.

In 2011, the following division of PPP contracts, according to the areas, was made:

- 11 PPP contracts related to waste recovery, recycling and management, i.e. 25% of the total PPP amount, were implemented;
- 9 PPP contracts related to culture, sports, leisure facilities and equipment as well as other infrastructure, i.e. 23% of the total PPP amount, were fulfilled;



Fig. 5. The realization of the partnership project on the school in Balsiai at the local authority level: the main façade



Fig. 6. The realization of the partnership project on the school in Balsiai, Vilnius at the local authority level: the courtyard

- 6 PPP contracts related to energetics, including the processes of extraction, transmission, distribution and provision of thermal energy, electricity, petroleum and natural gas, i.e. 15% of the total PPP amount, were completed.

Even though the distribution of PPP contracts, according to the areas, illustrates the potential of this model for implementing the projects related to landscaping, energetics and sustainable city development on the basis of PPP contracts, the maximum profit-making does not usually guarantee a qualitative aspect of the environment. The analysis of Lithuanian examples has shown that landscapes, having nothing in common with ethnic architecture or natural and cultural heritage, are usually influenced by informal factors (e.g. economic, social, political, etc.) (Figs. 7–9).

<sup>3</sup> Ministry of Finance of the Republic of Lithuania. 2012. *PPP* [online], [cited 28 March 2012]. Available from Internet: <http://www.ppplietuva.lt/partneryste/apie/partneryste-lietuvoje/puslapis-5.html>



Fig. 7. Snow Arena in Druskininkai with an indoor ski slope made of artificial snow covering

Note: During implementation, an innovative project influenced by informal interactions has formed landscapes non-specific to the local environment.



Fig. 8. The realization of the project on Snow Arena in Druskininkai with an indoor ski slope made of artificial snow covering<sup>4</sup>



Fig. 9. The realization of the project on Snow Arena in Druskininkai with indoor ski slopes made of artificial snow covering: the view of the landscape

<sup>4</sup> The Project of Druskininkai *Snow Arena* with Indoor Ski Slopes Made of Artificial Snow Covering was implemented within the Cohesion Promotion Action Programme of 2007–2013. According to the PPP concession contract signed by the municipality of Druskininkai and the *Stamita* Company, the entrepreneurs has invested about 70 million LTL in this project, and the State has supported it by allocating 40 million LTL of the EU funds. *Snow Arena* will attract at least 130,000–140,000 winter sports enthusiasts per year. It was estimated that the investment will pay off within 15 years.

Municipality of Druskininkai. 2008. *The Project of Druskininkai Snow Arena* [online], [cited 28 March 2012]. Available from Internet: <http://www.miestai.net/forumas/showthread.php?t=4755&page=8>

Considering the results of the study (with reference to the example of Druskininkai “Grand SPA Lietuva” health and relaxation centre (Figs. 10–11)<sup>5</sup>), innovative design solutions, as well as the formation of the sustainable environment, were possible to implement by a mutual agreement with the municipality only; however, a different approach to the promotion of private investment was used. Druskininkai “Grand SPA Lietuva” health and relaxation centre is a private object providing public services. Consequently, the development and provision of services along with the implementation of object development are private partner’s competencies with the full risk and responsibility. The issues related to urban infrastructure development and tax policy are subject to municipal jurisdiction. Hence, both the private entity and municipality were engaged in the service development process; however, the latter has acted strictly within the limits of the functions delegated to it by the government.

The results of the performed analysis have shown that PPP processes are implemented very slowly in Lithuania due to a lack of understanding public authorities. Therefore, the question related to coordinating the variety of the financing models for public-private sector cooperation remains open. Not surprisingly, the importance of sustainable growth, mentioned in the EU’s *Europe 2020*<sup>6</sup> Strategy, was particularly emphasised during the round table discussion on European support funding for 2014–2020 organized by the Ministry of Finance of the Republic of Lithuania. Sustainable growth is closely related to the protection of natural biological diversity as well as natural and cultural heritage. It also covers the development of a resource-efficient, environmental friendly and competitive economy, including the implementation of green technologies, strengthening competitiveness, improvement in the business environment and promotion of the efficient use of resources. The measures mentioned above are important for protecting the environment and biodiversity.

*Europe2020* strategy puts forward three priority areas, including the promotion of a more competitive economy, green and resource-efficient energy use and the fight against climate change. The implementation of actions mentioned above should contribute to social,

<sup>5</sup> Stauskis, G.; Jakaitis, J.; Misius, V. 2013. Case Study. *Hotel “Lietuva”, Grand SPA “Lietuva”* [online], [cited 28 March 2012]. Available from Internet: <http://www.construction21.eu/lietuva/case-studies/>

<sup>6</sup> Communication from the European Commission *EUROPE 2020: A Strategy for Smart, Sustainable and Inclusive Growth*. Brussels, 3.3.2010, COM(2010) 2020 final.





Fig. 10. Druskininkai "Grand SPA Lietuva" health and relaxation centre: the example of the innovative modernization of the urban complex in Lithuania

economic and territorial cohesion. Evaluating projects on the development of tourism and protection of biodiversity and natural and cultural heritage implemented on the grounds of financial assistance provided by the EU funds in the EU Member States, a number of good practice examples, that may be useful for determining priorities over getting financing from EU structural funds for the period 2014–2020 in Lithuania, could be identified.

Considering the fact that the quantitative indicators of infrastructure development receive more attention than the ability to offer attractive products effectively, qualitative interventions should be stronger promoted. Human resources are one of the key elements, and therefore could be useful for supplementing ERDF infrastructural investment with "soft" ESF interventions by supporting territorial communities.

The B2N (Business to Nature: Interregional Approach to SMEs and Entrepreneurship in Natural Areas) initiative financed by INTERREG IVC funds focuses on contributing to the sustainable develop-



Fig. 11. Druskininkai "Grand SPA Lietuva" health and relaxation centre: the example of the innovative modernization of the urban complex in Lithuania

ment of European regions by promoting entrepreneurship and protecting biodiversity and natural and cultural heritage.

The principle of public-private partnership financing in different areas, and often from different funding sources, i.e. applying the principle of synergy and integration, is widely used in the European Union, etc. Western European countries have noticed that the effectiveness of PPP depends on the cohesion of the best properties of public and private sectors; e.g. in Great Britain, the significance of the PPP approach is particularly evident in the areas of health care and education (Barr 2007). Most *public-private sector cooperation* projects are implemented in Great Britain, i.e. 80% of infrastructure development projects are implemented applying the PPP principle, which accounts for 60% of all projects implemented in the EU. Ireland, Portugal, Spain, France and the Netherlands are also actively involved in the process of implementing projects. New EU Member States, such as the Czech Republic, Hungary, Slovakia, Bulgaria, etc. have also launched new projects. In Poland, PPP projects are being rapidly developed in the area of road construction (Zhang 2005).

Considering the evaluation of impact, the example of improvements made to the Hong Kong education system could be noted. The investment of the Hong Kong Government in education increased by 20% over the periods from 1989 to 1999 and from 2003 to 2004: the new buildings of exclusive design and functionality were built and all technological innovations of the given period were installed (Leung *et al.* 2006). However, the conducted surveys have shown that new infrastructure does not fully meet the expectations of teachers. One of the above mentioned key problems was the fact that



their opinion on planning facilities was ignored. As a result, their behaviour has not changed on the contrary to all expectations. Hence, the above highlighted case confirms the fact that, in order to achieve a long-term positive impact, when improving infrastructure and providing services, the interests of the end-user, or the target community, should be considered.

Public-private partnership shows considerable potential for the development of urban areas. The following key features of PPP projects on the discussed field could be identified:

- the private partner undertakes both to build/reconstruct and maintain infrastructure objects;
- construction/reconstruction is financed by the private partner funds; thus, a sound initial investment of the public partner is not required;
- the objects of urban area (real estate) development remain the property of the public partner, or are transferred to its ownership after the end of the project;
- the payments of the public partner to the private partner are related not to the execution of construction/reconstruction works but to the compliance of the real estate with certain technical characteristics over the entire project implementation period.

The incorporation of the private sector in the development of urban areas enables:

- the provision of more effective services;
- the redirection of infrastructure in order to achieve users' satisfaction and life cycle maintenance;
- the transfer of the financial burden from the infrastructure of taxpayers to users;
- the use of new financing (investment) sources.

However, it should be noted that PPP is not a “magical” or unique investment option. According to the EC, when dealing with projects, it is important to evaluate the level of the contribution of partnership to a certain service or public works, and compare it with other options (e.g. a regular contract). PPPs enable public entities to take advantage of private enterprise expertise and tools for the allocation of risk to public and private sectors (Hemming *et al.* 2006; Dailami *et al.* 1999).

In order to use PPP facilities more effectively, it is particularly important to develop an effective system of *public-private sector cooperation*, promote cooperation in society and provide consulting services to each entity of cooperation at both national and municipal level. In this case, the system would include the following aspects:

- PPP policy, governance and regulation;
- public interest security standards;

- tendering procedures and documents;
- clear risk sharing provisions;
- the analysis of increasing value-added in projects;
- rational monitoring procedures.

At the model level, the following main partnership members and interest groups could be distinguished:

- the public sector;
- education institutions (universities, colleges, etc.);
- the private sector;
- public and civil formalized organizations (associations, NGOs, etc.).

The smooth and effective cooperation between all PPP entities is the desirable result, in order to achieve which, a model leading for effective cooperation with minimal risk and high-quality service delivery should be developed (Fig. 12).



Fig. 12. Construction21 case studies

*Note:* Construction21 (author is content manager of C21) is a multi-stakeholder collaborative platform dedicated to all professionals active in the sustainable building sector and in economic and energy efficiency, PPP, green urbanism, etc. On releasing the platform had 58 case studies related to sustainable urban development, landscape architecture and life quality (Author of fig. (online [www.ai.ar.vgtu.lt/](http://www.ai.ar.vgtu.lt/)) is investigator of Construction21 arch. V. Misius).

## Conclusions

International experience suggests that to effectively apply the PPP principle, it could be appropriate to start with a small and simple project. It may take a long time (1.5–2 years) before the realization of the project starts, especially at the initial stage of applying the principles of PPP. It is also appropriate for financing PPP projects using the budget and EU funds in addition to private funds (including bank loans). In order for the state (government) to take advantage of *public-private sector cooperation*, certain legal acts are required; moreover, incentives for the entities of the private sector engaged in partnership projects should

be provided and legal procedures required for PPP regulation in the field of urban infrastructure development should be established.

Lithuania still faces a lack of political will for the widespread use of the PPP principle in public services: the quality of the services is not being improved, modernization and effective management are required, the necessary property is not provided and the activities of central government institutions are insufficient.

Considering information provided by the institutions that implemented PPP projects by 31 January 2011 and regarding the contracts signed, it could be noted that most PPP contracts were made by local authorities (i.e. municipal administration); on the whole, PPP contracts have been completed in 24 municipalities. The distribution of PPP projects, according to the fields, has indicated that PPP is a potential instrument for the implementation of landscape, energy efficiency and projects on sustainable city development. Thus, in Lithuania, the PPP initiative could be observed at the municipal level only.

PPP tools should be developed, as the question about the level of debt is particularly relevant to most municipalities. Housing renovation could be implemented according to the ESCO model: the investor increases the energetic efficiency of the client using its own funds and then recovers the money invested by getting funding saved on energy resources; in this case, the business takes all risks.

The results of the study have shown that the employment of the PPP principle is characterized by excellent opportunities for improvement on the qualitative indicators of landscape development. In order to evaluate the achieved impact, input and output (i.e. results and consequences) should be considered. There is a risk to a negative evaluation of the impact of the PPP project if the interests of the end-user are not taken into consideration. In order to achieve both efficiency and effectiveness, a support policy and strengthening the partnership between interest groups should be carried out.

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## VIEŠOJI IR PRIVAČIOJI PARTNERYSTĖ KAIP ŠIUOLAIKINIŲ BENDRUOMENIŲ KRAŠTOVAIZDŽIO KOKYBĖS GERINIMO PRIEMONĖ

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**Santrauka.** Straipsnio tema siejama su šiuolaikinių miestų teritorijų vystymu, architektūros politikos formavimu, kraštovaizdžio infrastruktūros kokybinių rodiklių pagerinimu taikant viešosios ir privačiosios partnerystės (VPP) principus kaip šiuolaikinių bendruomenių kraštovaizdžio kokybės gerinimo priemonę. Per ekonominį sunkmetį pasaulis, taip pat ir Lietuva ieško miestų tvarios plėtros galimybių ir ypatingą dėmesį skiria partnerystės modelių paieškai.

Šioje situacijoje vienas iš pagrindinių valdžios institucijų uždavinių yra rasti būdus, kaip formuojant miestų kraštovaizdžio ar architektūros politiką sudaryti prielaidas visuomenei

tapti naujo tipo aktyviai bendradarbiaujančia miesto kūrimo procesuose dalyve. Šių problemų sprendimas yra svarbus siekiant gamtinės, ekonominės bei socialinės aplinkos ir teritorinės sanglaudos. Akivaizdu, riboti išteklių šiam tikslui pasiekti skatina bendradarbiauti verslo, valdžios atstovus ir visuomenę efektyviausiais, straipsnyje aptariamais partnerystės būdais. Konstatuojama, kad labai svarbu užtikrinti gerą veiksmų bei darbų koordinaciją racionaliai paskirstant išteklius ir pareigas tarp valdžios, privataus verslo ir visuomenės įtraukiant visuomenines organizacijas bei miestų teritorinių bendruomenių narius į aplinkos formavimo procesų valdymą.

Straipsnyje nagrinėjama VPP samprata vystant miestus, prielaidos, galimybės ir partnerystės optimizavimo būdų taikymo Lietuvoje problematika. VPP Lietuvoje raida tiriama pasaulio patirties kontekste.

**Reikšminiai žodžiai:** viešoji ir privačioji partnerystė, miestų teritorijų vystymas, miestų darni plėtra, žalioji architektūra, teritorinės bendruomenės, kraštovaizdžio architektūra.

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