MANAGEMENT MODELS FOR PUBLIC-PRIVATE PARTNERSHIP PROJECTS

Livijo Sajko
Faculty of Philosophy, University of Rijeka
After degree Science Study of Public Administration (Faculty of Economics, University of Rijeka)
Croatia
Brune Francetića 3
51000 Rijeka
Tel./Fax: 00385 51 372-302
Mob: 00385 98 90 50 988
E-Mail: livijo.sajko@rtxcom.hr

Abstract

New public management reforms have been undertaken in developed countries in the last forty years, while a new public management approach is present in Croatia not longer ago than in the last ten years. This maybe makes the public administration in transition countries less competent for new public management reform measures.

Out of this context the question arises if the public administration in Croatia is enough competent to achieve expecting policy goals (economies, quality, efficiency and effectiveness) by implementing public-private partnerships in the delivery of public goods? To give an answer to this question the management models of public-private partnership projects in developed countries (USA, Australia, UK, and Ireland) are compared with management models of public-private partnership projects in Croatia. With this comparative analysis the influence of public-private partnership management models on the achievement of economies, quality, efficiency and effectiveness is researched and compared. A thesis is set up, that the implementation of public-private partnership in Croatia enables a more economical production of public goods of higher quality.

The purpose of such a research is to develop the existing management model of public-private partnership projects in Croatia with the objective to figure out the key elements in the project management models that have the significant influence on the achievement of the expected policy goals.

The comparison done between developed countries of "New Public Management" and Croatia shows that a lot of management tools are not used in the prepare and project valuation steps of the PPP-projects in Croatia. Feasibility studies, cost-benefit analysis, user satisfaction analysis, valuation of the public market demands for public services, public finance analyses, Public Sector Comparators, valuation of private partners offers and other is missing. This clearly shows that a systematic education program for public organisations in the field of PPP-project management is necessary.

The main drivers who makes public policy goals reachable and who are present in the cases of Croatia ensured a sooner buildings of public infrastructure and a higher level of efficiency of the government operations can be expected. An improvement of the quality of delivered public services is also ensured. Savings (economies) in public expenditures are possible, but as the Public Sector Comparator is missing this part of the policy goal achievement remains an open question. The chances, that policies will be effective and that all the mentioned policy goals will be reached also remains as an open question, because a performance measurement model for PPP-outputs and outcomes is not developed.

Therefore the existing management model of public-private partnership projects in Croatia must be improved in two ways. In first the education of public employees is needed. In second a Public Sector Comparator has to be quickly established for PPP-projects. Also the performance measurement model, as a task for further study and research and for affectivity measurement should be established.

Keywords: public good, public management reform, management model, competencies, public-private partnership
1. INTRODUCTION

Public goods like education, health care, national security or public order are indispensable. This is the reason why a large demand on the side of potential users for this kind of goods is present. On the other side a lack of private interest in producing public goods is evident, because in most cases the production of such goods is for the private sector unprofitable or impossible. The consequence is an insufficient supply of public goods on the market, what makes government interventions in public goods production necessary.

By government interventions the supply of public goods is maybe ensured, but at the same time monopolies are developed, as the task for the production of public goods is mostly transferred to only one public institution or one private partner. It is discussed that monopolies are ineffective, with high production costs or high public expenditures for services that are below the quality standards. The consequence is a rising pressure for public management reforms in the production of public goods and the implementation of public management reform measures, like decentralisation, deregulation, liberalisation, privatisation and public-private partnerships. The common objective of the mentioned measures is to make public sector organisations (in some sense) to perform better - making savings (economies) in public expenditure, improving the quality of public services, making the operations of government more efficient and increasing the chances that the policies which are chosen and implemented will be effective.

But there is a difference between the public sector in developed countries and transition countries like Croatia. New public management reforms have been undertaken in developed countries in the last forty years, while a new public management approach is present in Croatia not longer ago than in the last ten years. This maybe makes the public administration in transition countries less competent for new public management reform measures. Out of this context the research problem is defined as follows: is the public administration in Croatia enough competent to achieve the expecting goals (economies, quality, efficiency and effectiveness) by implementing public-private partnerships in the delivery of public goods?

To give an answer to this question the management models of public-private partnership projects in developed countries (USA, Australia, UK, and Ireland) are compared with management models of public-private partnership projects in Croatia. With this comparative analysis the influence of public-private partnership management models on the achievement of economies, quality, efficiency and effectiveness can be researched and compared. A thesis is set up, that the implementation of public-private partnership in Croatia enables a more economical production of public goods of higher quality. The purpose of such a research is to develop the existing management model of public-private partnership projects in Croatia. The aim of the research is to figure out the key elements in the mentioned project management models which have a significant influence on the achievement of the expected goals of a reform measure like public-private partnership.

2. THEORETICAL CHARACTERISTICS OF PUBLIC GOODS PRODUCTION

2.1 Private and Public Goods

"A good or commodity is any object or service that increases utility, directly or indirectly. Utility is a measure of the relative satisfaction from or desirability of consumption of goods." 

One of the most common ways of looking at goods in the economy, illustrated in the table below, is the classic division based on two questions: is there a competition involved in obtaining a given good and is it possible to exclude a person from consumption of a given good?

---


A good is considered either rival or non-rival. Rival goods are goods whose consumption by one consumer prevents simultaneous consumption by other consumers. Most goods are rival goods. For example, a hammer is a durable rival good or an apple that is a non-durable rival good.

Table 1: Private and Public Goods

<table>
<thead>
<tr>
<th></th>
<th>Excludable</th>
<th>Non-excludable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rival</td>
<td>Private goods</td>
<td>Common goods</td>
</tr>
<tr>
<td></td>
<td>Food, clothing, toys, furniture,</td>
<td>(Common-pool resources)</td>
</tr>
<tr>
<td></td>
<td>Cars</td>
<td>Water, fish, hunting</td>
</tr>
<tr>
<td>Non-rival</td>
<td>Club goods</td>
<td>Public goods</td>
</tr>
<tr>
<td></td>
<td>Cable television</td>
<td>National defence, free-to-air</td>
</tr>
<tr>
<td></td>
<td></td>
<td>television, air</td>
</tr>
</tbody>
</table>


In contrast, one consumer may consume non-rival goods without preventing simultaneous consumption by others. Most examples of non-rival goods are intangible. Television is an example of a non-rival good. Here, the non-rival good is not the TV but rather the television service.

A good or service is said to be excludable when it is possible to prevent people who have not paid for it from enjoying its benefits, and non-excludable when it is not possible to do so. An architecturally pleasing building such as Tower Bridges, creates an aesthetic non-excludable good. An excludable good could be a magazine. People who do not pay for the subscription are mostly excluded from obtaining a copy directly from the publisher.

Goods that are both non-rival and non-excludable are called public goods. Common examples of public goods include defence and law enforcement, public fireworks, lighthouses, clean air and other environmental goods.

Club goods (collective goods) are a type of good, sometimes classified as a subtype of public goods that are excludable but non-rival. Examples of club goods would include private golf courses, cinemas, cable television, access to copyrighted works, and the services provided by social or religious clubs to their members.

Common goods are defined as goods, which are rival and non-excludable. A classic example of a common good are fish stocks in international waters; no one is excluded from fishing, but as people withdraw fish without limits being imposed the stocks for later fishermen are potentially depleted. Common goods, which are sustained thanks to an institutional arrangement, are referred to as common-pool resources.

A private good is defined in economics as a good that exhibits these properties: excludable - it is reasonably possible to prevent a class of consumers from consuming the good; rival - consumptions by one consumer prevents simultaneous consumption by other consumers. A private good is the opposite of a public good, as they are almost exclusively made for profit. An example of the private good is bread.

2.2 The Production of Public Goods

Public goods provide a very important example of market failure, in which market-like behaviour of individual gain seeking doesn't produce efficient results. The production of public goods result in
positive externalities those are non-profitable. If private organizations don't reap all the benefits of a public good, which they have produced, there will be insufficient incentives to produce it voluntarily.

If voluntary provision of public goods will not work, then the obvious solution is making their provision involuntary. One frequently proposed solution to the problem is for governments or states to impose taxation to fund the production of public goods. A government may subsidize production of a public good in the private sector. Unlike government provision, subsidies may result in some form of a competitive market. Depending on the nature of a public good and a related subsidy, principal agent problems can arise between the citizens and the government or between the government and the subsidized producers. This effect and counter-measures taken to address it can diminish the benefits of the subsidy.

In general public goods are produced either by the public and private sector, but mostly combined with the appearance of monopolies. Government monopoly or public monopoly is a form of coercive monopoly in which a government agency is the sole provider of a particular good or service and competition is prohibited by law. It is usually distinguished from a government-granted monopoly, where the government grants a monopoly to a private individual or company. Government-granted monopolies may be found in public utility services such as public roads, mail, water supply, and electric power, as well as certain specialized and highly regulated fields such as education and gambling. Any level of government may run a government monopoly - national, regional and local. A coercive monopoly has very few incentives to keep prices low and may deliberately price gouge consumers by curtailing production. "Also a coercive monopolist will tend to perform his service badly and inefficiently."3

When monopolies are not broken through the open market, often a government will step in, to regulate the monopoly, turn it into a publicly owned monopoly, or forcibly break it up. Public utilities, often being natural monopolies and less susceptible to efficient break up, are often strongly regulated or publicly owned.4

### 3. A MODEL OF PUBLIC MANAGEMENT REFORM

But is inefficiency and less quality of the public goods delivered to the final users the main reason for public management reforms?

Figure 1 provides a generic model of the public management reform process, enabling an understanding of how, and why, governments have responded to similar challenges differently as a result of national differences in socio-economic, politico-legal and administrative systems. As Figure 1 indicates, the socio-economic forces (A) that influences public management reforms include: global economic forces (B), whether material (e.g. global growth rates or the increasing power of international finance) or intellectual (e.g. the philosophies and policies of supranational organisations such as the World Bank and OECD); socio-demographic changes (C) (e.g. the need to provide school education and vocational training); national priorities and policies (D) (e.g. curtailment of debt or budget deficits).

These socio-economic forces can engender moves for reform directly by influencing elite opinion (I, J), or alternatively can do so by bringing forth politico-legal forces (E), notably through the formation of public opinion (H). This pressure for change from the community, citizens, and taxpayers (H) is transmitted to the political system by the political parties (G), which process societal pressures through the lens of their traditional ideologies and philosophies (G). In turn, the political system (G), also informed by new ideas from business or academia about public sector management (F), plays a key role in transmitting public sentiment into elite opinion (I, J).

The model recognises the filtering role of the political and administrative elite, whose perceptions of ‘desirable reform’ (I) and ‘achievable reform’ (J), together with the particular features of the nation’s public administrative system (L), influence the adoption of particular types of reform packages (M), their implementation (N) and outcome (O). This model suggests that public management reform is grounded in

---


the unique features of each nation's history, governance structures and processes, and view of the world and its place in it.

Figure 1: A Model of Public Management reform


The implementation of public management reforms does not depend only on efficiency or inefficiency of public organisations, than on the decisions of the political and administrative elite and those decisions are depending on a lot of considerations. "Reform" today means deregulation and liberalisation, competition, privatisation and private sector participation in the delivery of public goods (public-private partnerships). Deregulation can be seen as a process by which governments remove, reduce, or simplify restrictions on business and individuals with the intent of encouraging the efficient operation of markets. The stated rationale for deregulation is often that fewer and simpler regulations will lead to a raised level of competitiveness, therefore higher productivity, more efficiency and lower prices overall.

Deregulation is different from liberalisation. However, the terms are often used interchangeably within deregulated/liberalised industries. Economic liberalization is a broad term that usually refers to fewer government regulations and restrictions in the economy in exchange for greater participation of private entities. The arguments for economic liberalization include greater efficiency and effectiveness that would translate to a bigger share for everybody: partial or full privatization of government institutions and assets, greater labour-market flexibility, lower tax rates for businesses, less restriction on both domestic and foreign capital, open markets, etc.

Privatisation is the incidence or process of transferring ownership of business from the public sector (government) to the private sector (business). In a broader sense, privatisation refers to transfer of any government function to the private sector including governmental functions like revenue collection and law enforcement.

Public-private partnership describes a government service or private business venture that is funded and operated through a partnership of government and one or more private sector companies. These schemes are sometimes referred to as PPP or P3. In some types of PPP, the government uses tax revenue to provide capital for investment, with operations run jointly with the private sector or under contract. In other types, notably the Private Finance Initiative, capital investment is made by the private sector on the strength of a contract with government to provide agreed services. Typically, a private sector consortium forms a special company called a "special purpose vehicle" to build and maintain the asset. The consortium is usually made up of a building contractor, a maintenance company and a bank lender. It is the special purpose vehicle that signs the contract with the government and with subcontractors to build the facility and then maintain it.

Figure 2: Public Management Reform Measures

As it is shown in figure 2 the reform measures are based on two conceptual pillars. These are private sector management practices at the micro level, including the adoption of performance measures and incentive reward systems.
incentive reward systems and the role of markets at the macro level, informed at the theoretical level by new institutional economics, public choice theory, agency theory and theories of the firm. Public management reforms have typically involved aggressive moves to radically transform the role of government from being a provider of public services to being a purchaser and a manager of service provision, underpinned by policies establishing competitive neutrality in tendering between the public and private sectors.

Public management reforms can be therefore defined as "deliberate changes to the structures and processes of public sector organisations with the objective of getting them (in some sense) to perform better." The common goal of the mentioned reform efforts, as a result of the influence of New Public Management, can be interpreted as "perform better" through outcomes such as: "making savings (economies) in public expenditure, improving the quality of public services, making the operations of government more efficient and increasing the chances that the policies which are chosen and implemented will be effective."

4. A MANAGEMENT MODEL FOR PUBLIC-PRIVATE PARTNERSHIP PROJECTS

Public-private partnership as a measure, not only for building public infrastructure, but also for improving the efficiency of public organisations, requires a "high degree of partnering competency. Partnering competencies include negotiation skills, risk management, procurement, contract management, specification and business case writing and options appraisal. At the leadership levels in the public sector, competence in collaboration, legal and regulatory processes, change management, risk strategy development and project programme management are some of the skills required to enter into PPP's. Solving the problem of skill shortfall by using consultants is not a silver bullet. A further opportunity for improving partnership skills lies in the public sector itself."

It is clear that a management model for public-private partnership projects is needed, as shown in figure 3, that will incorporate competencies required for a successful public-private partnership while enabling the achievement of the mentioned public policy aims.

Figure 3: Competencies and Public Policy Objectives in a Management Model for PPP-projects

Source 4: prepared by the author

4.1 Management Models of PPP-Projects in Developed Countries

---

7 op. cit., p. 6
By comparing the management experiences of public-private partnership projects in the USA, Australia, UK and Ireland, some common characteristics are determined. The management models proceed in five (5) steps: preparation of the project, project valuation, competition dialogue, realization and business of the project, with licences from the authorized agencies, and project evaluation in the end, as it is shown in figure 4.

The mentioned authorized PPP-agencies are providing public organisations, that decided to establish PPP-projects, with consultant services, but are also issuing licenses about the validity of chosen projects and private partners. Another task of authorized agencies is the business observation of running projects, with reports about the observation results to bodies of representatives. For example, the U.S. Department of Transportation submits reports to the U.S. Congress with the value of public-private partnerships. Another example is the UK National Audit Office. This office audits the accounts of all central government departments and agencies, as well as a wide range of other public bodies, and reports to Parliament on the economy, efficiency and effectiveness with which they have used public money. Since 1997, the Office has published over 50 reports of investigations into PFI and PPP deals and produced nearly 500 recommendations. Reports produced by the House of Commons’ Committee of Public Accounts (the PAC) following hearings based on PFI and PPP investigations of the Office include nearly 1000 recommendations.

Figure 4: A Management Model of PPP-projects

Source 5: prepared by THE author

---


10 In more detail: United States Department of Transportation, Report to Congress on Public-Private Partnerships, December 2004, pp. 41-71

4.2 The Project Management Process

The first part of the project preparation includes the identification of potential projects for public-private partnerships. It is recommended that a project that is prior defined as priority, for example in a strategic development program or priority building program, should be first taken in consideration as a potential PPP-project. After defining a project as potential for PPP, the possibility of bundling this project with other projects (who are similar in activities and locations) should be analysed. The bundling of more projects into one PPP-project increases the investment volume, what makes savings possible. In case of finding more priority and potential PPP-projects, bundled or unbundled, a priority matrix has to be made with the criterions of urgency and investment volume. Its aim is to figure out which of the priority projects is the most appropriate.

After the project is defined as appropriate for PPP, a project letter has to be written. The project letter has to contain a brief description of the present situation, the subject (new building, sanitation, reconstruction, etc) and the objectives of the project, with global numeric data about the overall project. A main part of the project letter is a feasibility study in which the demands of the private sector for public-private partnership should be evaluated, as well as the possibility for public tasks and risk transfers to the private partner. A valuation of legal matters and case studies of running PPP-projects should also be involved. Cost-benefit analysis, SWOT-analysis and user satisfaction analysis of the delivered public service can be added to the feasibility study.

The most important part in the preparation of the PPP-project is the valuation of the demands for public services on the public goods market. The valuation of the market demands has to contain quality and quantity data. An answer must be given on how many public services of which quality has to be delivered. If the valuation shows that there is not enough demand for public services on the market, the planned project can be considered as inappropriate for PPP.

The second part of the project preparation includes a public finance analysis. The aim of this analysis is to define the public budget possibilities of financing the project. On this level of the project management public finance possibilities can be shown in rough outlines, but what has to be considered seriously is the possible PPP-model and the public tasks that can be transferred to the private partner. These two criterions influence essentially the needs for public capital. With the finance public analysis, a human resource analysis has to be added. The goal of the human resource analysis is to value the PPP-competences of the employees in the public organisation. An answer has to be given to the question: can the public organisation manage the PPP-project by itself, or will it be necessary to outsource PPP-advisers?

The data collection in the first and second part of the project preparation must contain enough data for the final suitability or acceptability test of the proposed PPP-project. The suitability test includes two kinds of criterions: non-project criterions and project criterions. Non-project criterions are the competency of the public organisation for PPP, legislative matters, political and bureaucracy barriers. Project criterions include the investment volume, the floor space of the project, the transfer of public tasks to the private partner, private capital involvement, the location of the project and the bundle of more projects into one PPP-project. Every of this criterion can be pointed or rated and if the proposed PPP-project collects enough points for each criterion and in the overall result, it can be considered as suitable for PPP. If not, the proposed project will be deleted as suitable for PPP.

The second and most important step in the PPP-project management model is the project valuation. In this step the final PPP-organization model (ownership model, leasing model, concession model, project model, etc) has to be defined, as well as the public tasks that will be transferred to the private partner (techniques of collaboration like DBFO, BOOT, BOT, DB, etc). A controlling model must be built into the PPP-organization model to enable the public service delivery of the private partner. Output specifications of the construction work and the services that the private partner has to fulfil in the PPP-project must also be defined. This output specifications are later translated as Service Level Agreements in the PPP-contract. A Public Sector Comparator (profitability calculation) has to be set up. The Public Sector Comparator compares the realisation of the project in a traditional way with the realisation of the project by a PPP-model and must clearly show that the PPP-model is cheaper than the realisation of the project in the traditional way. Another aim of the Public Sector Comparator is the definition of business risks transfers from the public to the private partner and the influence of the defined risks on the
profitability of the project. Finally, the ultimate financing model of the PPP-project with exact financing data has to be defined.

After the project valuation as the most important step in the PPP-project management who has to ensure the drivers for higher efficiency, a competitive dialogue can be started. It must be mentioned that the authorized PPP-agency will not give the permission for the realisation of the proposed project, if the drivers for higher efficiency or "value for money" are not incorporated into the PPP-project. The competitive dialogue itself consists of several phases. The public organisation must insure a formal award form the representatives for an invitation for tenders. An expert group (economists, lawyers, engineers, etc) for the competitive dialogue has to be established. The invitation for tenders is calling the private partners to make a statement of interest for the PPP-project. If with the invitation for tenders more then two (2) private partners competent for PPP cannot be chosen, the PPP-project has to be stopped. If at least three (3) private partners are selected the competitive dialogue goes on with the formal presentation of the private partners offers. Every offer has to be evaluated with the Public Sector Comparator. If the Public Sector Comparator shows that the private partners offers are more expensive then the traditional way of building public infrastructure, the PPP-project will also be stopped. The PPP-contract will be signed with that private partner, who can deliver the best efficiency (savings, quality, efficient operations, policy effects) to the public partner.

The public infrastructure can now be designed, build or financed and the public service delivery business can start, with the controlling of the public organisation over the private partner. The agreed payment from the public budget to the private partner for public service delivery depends on the quality controlling of the public organisation and the achievement of Service Level Agreements. If Service Level Agreements are not achieved the private partner has to pay penalties to the public sector and if the quality is on a higher level then agreed, the private partner charges money bonuses from the public organisation. The Public Sector Comparator is also in use in this step of PPP-project management because he can clearly show unexpected changes in the planned costs. If the costs (or the possible incomes in concession models) of the PPP-project are higher then foreseen an adaptation of the original PPP-contract can be taken in consideration. As PPP-contracts are long-term contracts up to 25 years a flexible contract management is necessary for the amortisation of unexpected changes.

In the end the fifth step of the management model for PPP-projects is the project evaluation. Again the Public Sector Comparator is used for the final evaluation of the PPP-project after the expiration of the PPP-contract. This final evaluation is of high importance as it can deliver empirical data for the success or non-success of PPP-projects. In final the ownership over the public facilities has to be in some cases transferred to the public partner and a decision of further use of the public infrastructure by the public organisation has to be made.

4.3 Public-Private Partnership Efficiency Drivers

The project valuation of the management model for PPP-project is considered as the most important one, because it consist the main drivers that makes public policy goals reachable:
• The PPP-organization model with the techniques of collaboration and the controlling model ensures a higher level of efficiency of the government operations and sooner buildings of public infrastructure;
• Output specifications of the construction work and the services that the private partner has to fulfil in the PPP-project are improving the quality of delivered public services;
• The Public Sector Comparator together with the financing model and risk transfers makes savings (economies) in public expenditures possible;
• The project evaluation of the PPP-project as the final step of the management model for PPP-projects makes outputs and outcomes measurable, what increases the chances that policies will be effective and that all the mentioned policy goals will be reached.

In the mentioned Report of the Federal Highway Administration to the US Congress, time and cost savings as an indicator for government operations efficiency and savings in public expenditures are presented. Cost savings are ranging from 6 to 40 percent and timesavings from 30 to 60 percent. It should be noted that there are a lot of variations in the accuracy and quality of engineer estimates, so this may limit the utility of this comparison. Cost and timesavings associated with public-private partnerships are more readily quantifiable. The reason for these savings is that the private sector often has more appropriate incentives to limit costs than the public sector. In addition, having one entity responsible for design, construction, and operation can result in efficiencies that are not possible with traditional design-
bid-build methods. Public-private partnerships help reduce the time it takes to build a project in two ways, through innovative finance and project management. The most significant timesaving generated by public-private partnerships are a result of innovative financing. By restructuring the financing of the project and borrowing funds, public-private partnerships can cut many years off the time needed for the project delivery. Although frequently less dramatic, innovative project management also reduces the time it takes to finish a project, often saving months if not years.\textsuperscript{12}

In contrast to traditional contracting methods, public-private partnerships have more flexibility to maximize the use of innovative technologies that will lead to increases in quality and the development of faster and less expensive ways to design and build public facilities. The traditional contracting approach has limited opportunities for contractors to incorporate innovative materials and techniques in the design and construction of public projects. Lowest price on bids is often required, even when best value would be a more effective approach. The private sector also has access to product and trade secrets available to the public sector, and these can be quickly and easily incorporated into public-private partnerships. The departure from the traditional contracting approach allows designers and builders to take advantage of the advances in technologies and techniques relating to construction materials, equipment, and design methods. These innovative techniques and materials improve the quality and reduce the duration of the construction project, and normally result in lower life-cycle costs.

Quality is difficult to measure in public construction because of the unusually long life of the asset being constructed. Public-sector partners can measure quality over the life of an asset but quality is difficult to gauge immediately after the public infrastructure is constructed. Even so, with special measurement methods a higher quality (29 to 56\%) of public services in PPP-projects in contrast to traditional models has been figured out.

### 4.4 Management Models of PPP-Projects in Croatia – The Cities of Varaždin and Koprivnica

In the City of Koprivnica in 2007 a school gymnasium with a school sports hall and the city sports hall is build as one PPP-project.\textsuperscript{13} In the county of Varaždin school buildings (44) are in the process of reconstruction and building trough PPP-models.\textsuperscript{14} At the same time a sports hall for the World Handball Championship in Croatia is build in the City of Varaždin, also by a PPP-model.\textsuperscript{15} As public sources for these projects are not available an interview with the authorized public officials of these cities is made to research how these public organisations have managed their PPP-projects.

By comparing the PPP-management experiences of these cities with the PPP-management experiences mentioned in chapter 4.1, some common characteristics are determined. The management model in the cases of Croatia, as a transition country, also proceeds in five (5) steps: preparation of the project, project valuation, competition dialogue, realization and business of the project, with licences from the authorized agencies, and project evaluation in the end. But in a more reduced way than it is the case in developed countries.

Firstly, the authorized PPP-agency in Croatia\textsuperscript{16} is not a sole stated agency for PPP. The full name of the agency is "Trade and Investment promotion Agency" with a PPP-sector who started to work on the 1\textsuperscript{st} March 2007. The main tasks of the agency's PPP-sector are the same as in other observed agencies:

- **Organisation of the register of PPP contracts;**
- **Providing answers to all the queries requesting the clarification of particular vague or disputed issues related to taxes, laws, finances etc.;**
- **Controlling the tendering and contractual documentation, proposed distribution of risks and other elements of PPP contracts, and reviewing the documents submitted to confirm that a PPP project has been well concluded;**
- **Work on the improvement of the legal framework for PPP projects;**

\textsuperscript{12}In more detail: United States Department of Transportation, Report to Congress on Public-Private Partnerships, December 2004, pp. 41-62
\textsuperscript{13}City of Koprivnica <http://koprivnica.hr/gradskauprava/2006_08_gimnazija_galerija.asp> (14 May 2008)
\textsuperscript{14}Public-private partnership Varaždin county <http://www.varazdinska-zupanija.hr/> (14 May 2008)
\textsuperscript{15}City of Varaždin <http://www.varazdin.hr/galerije/dvorana022008.html> (14 May 2008)
\textsuperscript{16}Agencija za promicanje izvoza i ulaganja, <http://www.apiu.hr/hr/Home.aspx?PageID=107> (14 may 2008)
Studying the development of the PPP practice in EU Member States and the implementation of the best practices.

Secondly, a lot of management tools are not used in the preparing and valuation of the PPP projects. Potential projects for PPP are identified as priorities through "city programmes of main projects for the period 2005 – 2009". The bundling of projects is done, as a school sports hall is built together with the city sports hall in Koprivnica. In Varazdin county 44 school buildings represents one PPP-project. What is not done is the priority matrix with the criteria of urgency and investment volume. According to the city programmes of main projects some other projects could also be identified as high priorities, especially in the fields of street infrastructure and water management. By defining these projects as potential for PPP at least with the priority matrix a bigger potential for PPP and the intention for further PPP-projects could be stated.

Project letters are written with a brief description of the present situation. The subject and the objectives of the project are defined, with global numeric data about the overall project. A clear feasibility study with the valuation of the private sector demands for PPP and the possibilities of public tasks and risk transfers to the private partner are not done. Cost-benefit analysis, SWOT-analysis or user satisfaction analysis are not added to the feasibility study. The valuation of the public market demands for public services with quality and quantity data is also not prepared, as it is understood that enough demand is present. In the City of Koprivnica school classes where running in three shifts and in the City of Varazdin too many sports clubs had not enough sports places for training. With consideration for this fact, a research of public demands for public services could give useful data for further implementation.

Likewise, special public finance analyses are not presented as written documents. In the case of Varazdin the total amount of public expenditures available for capital buildings is 60 million Kuna in 2006 (8 million €) and in the case of Koprivnica this amount counts in the same year 44 million Kuna (6 million €). It is obvious that there is not enough public capital for financing public infrastructure buildings in a traditional way without going into debts. In the case of Koprivnica even incurring debts was not possible. It is understood that private capital is needed for financing public infrastructure and that the possible PPP-model would be a Private Finance Initiative with the transfer of public tasks like build, finance and operate. Therefore a BOT-model (T means that the private partner is the owner of the public building and transfers the ownership to the public sector by end of the PPP-contract) within a PPP-project model (the private partner establishes a project company for running the PPP-business) is defined. As the small amounts in the capital parts of the public budgets were not big enough even for this way of financing the intended projects, subventions where made possible. In the case of Varazdin the state government of Croatia is financing the city sports hall with 50% of amount and in the case of Koprivnica the Koprivnica county subsidies the PPP-project with 65%.

A human resource analysis on PPP-competencies of the public employees is not made as it is taken obvious that no at all experiences with PPP are available. The decision was made to employ an outstanding PPP-adviser. In both cases the "Croatian Institute for Bridge and Structural Engineering – Project Management and Facility Management Division", as a 100% government owned institute, has made the PPP-consulting. Finally, a suitability or acceptability test with non-project and project criteria of the proposed PPP-project has also not been made. As the Croatian Trade and Investment promotion Agency with his PPP division only started to operate in March 2007, licenses have not been ensured for all the projects. State government decisions covered the projects instead.

In the second and most important step, the project valuation, the final PPP-organization model (project model) is defined with the collaboration technique stated as a BOT-model. A controlling model is built into the PPP-organization model. Output specifications of the construction work and the services that the private partner has to fulfill in the PPP-project are defined with Service Level Agreements. But a Public

---

19 Croatian Institute for Bridge and Structural Engineering <http://www.himk.hr/e-o3-3.html> (16 May 2008)
Sector Comparator is not set up. The comparison between a traditional way of project realisation and PPP-project realisation is therefore not possible. At least business risks transfers are defined but the influence of those risks on the profitability of the project is not present. Finally, the ultimate financing model of the PPP-project with exact financing data has been made.

The competitive dialogue with expert groups is preceded in the same way, as it is usual for PPP. As the Public Sector Comparator is not established, the offers of the private partners could not be evaluated for "value for money". The choice of the private partner was therefore made in a classical way, by the lowest price. The PPP-contracts, for a period of 25 years, are signed with "Tehnika d.d. Zagreb" for the PPP-project in Koprivnica. For the projects in Varaždin PPP-contracts are signed with a private collaboration of "Zagorje Tehnobeton d.d. Varaždin" and the branch of the German The Max Bögl group of companies in Croatia²⁰, "Routing – Max Bögl d.o.o. za graditeljstvo Zagreb".

All of the mentioned PPP-projects are designed by the public sector. The build, financing and operating of the PPP-projects is transferred to the private partners and with exception of the city sports hall in Varaždin the public buildings are operational. With the controlling of the public organisation over the Service Level Agreements payments are made to the private partner. In the case of the city sports hall in Varaždin monthly amounts of 2.3 million Kuna (320,000.00 €) will be paid to the private partner over a period of 23 years and 8 months. In the building period of 16 months as a rest of the 25 years contract payments are not made. This makes an overall project amount of 253.2 million Kunas or 90.7 million € for the sports hall in Varaždin. Within the same principles a monthly amount of 845,000.00 Kuna (117,000.00 €) is paid to the private partner in the City of Koprivnica, what makes an overall project amount for the school building and the city sports hall of 240 millions Kuna or 33.3 million €.

It is too early to tell whether the PPP-projects are successful. As the Public Sector Comparator is not set up the project evaluation can hardly be done with exact data and the final evaluation of the PPP-project after the expiration of the PPP-contract will be impossible. This is the main defect in the management model for PPP-projects used in Croatia. In final the ownership over the public facilities has to be transferred to the public partner and a decision of further use of the public infrastructure by the public organisation has to be made.

4.5 Advantages and Disadvantages of Public-Private Partnerships

Public-private partnerships as an "New Public Management" approach represents not only an innovative form of financing the construction of public facilities and the production of public goods, but also an innovative form of public procurement. Public-private partnership provides the public sector with a long-term possibility of more efficient production of public goods and the private sector with a long-term achievement of profitable business. With this the fundamental interests among the partners are secured. An additional interest between the public and private partners is therefore a conservation of the formed partnership. Between the public and private sector can not rule the policy of competition, but the policy of cooperation and partnership. And cooperation and partnership can be achieved by the creation of such a situation in which the realization of interests and goals of one partner means the realization of interests and goals of the other partner (win-win situation). The possible reasons for the interests of the public sector for public-private partnerships can therefore be defined as follows:

- The reputation of the public administration will be increased with the construction of high-quality infrastructure and providing the public with quality services;
- The involvement of private partners provides additional financial resources that are necessary for building the public infrastructure, thus overcoming the financial crisis of public budgets;
- Within public-private partnerships the transfer of knowledge (know-how) from the private sector into the public sector comes up, which leads to the development of human capital in public administration;
- The public administration will try to minimize the long-term uncertainty and business risks in the production of public goods;
- The development of projects on economic grounds, which allows the public administration to increase its efficiency;
- The payment of minimum fees for the private partner which delivers the public good.

The interests of the private partners that can be realized in public-private partnerships are:
- To increase their own business reputation by the construction of large infrastructure projects;
- The possibility of free capital investments with high rates of return on invested capital;
- The long-term profitability is secured;
- The use of the knowledge from the public sector, which increases the human capital in the private sector;
- A long-term security for their own investments;
- The possibility of business risks distribution with the public sector and the transfer of as many as possible business risks to the public partner;
- Higher incomes from fees paid by the public partner for delivered public goods or from user fees that are charged from the end-users, with lower operating expenses.

By overlapping the interests of the public and private sector, possibilities of achieving synergy effects and maintaining partnerships develop. In those areas where the interests are opposing, the threats can be located that can endanger the partnership cooperation between the public and private sectors.

Starting from such a constellation of mutual interests, opportunities and threats it can be concluded that the most positive effects of public-private partnerships to public sector management reform processes are:
- The possibility of overcoming the lack of financial capital necessary for financing capital facilities, if the partners agreed on the goals that they want to achieve in the long run;
- The mutual long-term compatibility in the delivery of public services if the public administration is trained for public-private partnerships and if the choice of the private partner is well made;
- The transfer of knowledge and experience between the public and private sector;
- The public property, which is often unused and represents "dead capital", can be efficiently converted into cash and made functional without a transfer of the ownership;
- The achievement of the savings in public budgets and the delivery of higher quality of public services.

On the other hand there are certain negative effects possible of which the most important are:
- By using private capital, the public administration does not enter into new direct debt, but the contract payments due to the private partners will still come up, which might be seen as just as a new debt for the citizens;
- The complex contractual and organizational structures with a whole series of details requires from the public administration a special competence, and the same contract complexity significantly reduces the transparency of public administration;
- The actual effects of public-private partnerships are becoming visible only in a long-term period, when every possibility of intervention is too late;
- Capital facilities can be built faster and cheaper, but the analysis for proving such claims can take place only through long-term periods;
- The regulations for public-private partnerships are defined, but are not prescribed by law as mandatory, what opens space for speculations;
- The incorrect behaviour of the private partner can not be penalized without special mechanisms of control and supervision, which raises transaction or agency costs;
- The projects of public-private partnerships require from the public administration a long-term preparation, which causes high transaction costs.

5. CONCLUSION

After the comparison done between developed countries of "New Public Management" and Croatia, a transition country without the habit to use new public management methods and tools, the question if the public administration in Croatia can achieve the expected policy goals (economies, quality, efficiency and effectiveness) by implementing PPPs in the delivery of public goods has to be addressed.

As has been shown, many management tools are not being used in the preparation and valuation steps of the PPP-projects in Croatia, including the following:
- Priority matrices with the criteria of urgency and investment volume;
- Feasibility studies with the valuation of the private sector demands for PPP and the possibilities of public tasks and risk transfers to the private partner;
- Cost-benefit analysis, SWOT-analysis or user satisfaction analysis;
- The valuation of the public market demands for public services with quality and quantity data;
- Special public finance analyses;
• Human resource analysis;
• Suitability or acceptability test with non-project and project criterions of the PPP-project;
• A Public Sector Comparator is not set up;
• The offers of the private partners could not be valued for "value for money";
• Project evaluation can hardly be done with exact data;
• The final evaluation of the PPP-project after the expiration of the PPP-contract will be impossible.

This clearly shows that a systematic education program for public organisations in the field of PPP-project management is necessary. The authorized agency in Croatia for PPP could be the player for such a challenge. The adoption of management knowledge, what has to be mentioned, is not only beneficial and helpful for the needs of PPP-projects, but for a better performance of the public organisations in other administration areas.

The main drivers who makes public policy goals reachable and who are present in the cases of Croatia are:
• The PPP-organization model (project model) with the techniques of collaboration (BOT-model) and the controlling model – this ensured a sooner buildings of public infrastructure and a higher level of efficiency of the government operations can be expected;
• Output specifications of the construction work and the services that the private partner has to fulfil in the PPP-project – an improvement of the quality of delivered public services can be ensured;
• The financing model and risk transfers to private partners – savings (economies) in public expenditures are possible, but as the Public Sector Comparator is missing this part of policy goal achievement remains an open question;
• The project evaluation of the PPP-project with (output and outcome measurement) without the Public Sector Comparator and other performance measurement models is not possible – the chances that policies will be effective and that all the mentioned policy goals will be reached also remains as an open question.

Therefore the existing management model of public-private partnership projects in Croatia has to be developed in two ways. In first the education of public employees, as it is mentioned, is needed. In second a Public Sector Comparator has to be quickly established for PPP-projects in Croatia as the main defect in the management of PPP-projects.

Also a performance measurement model for collecting data on PPP-outputs and PPP-outcomes should be developed, as a task for further study and research. Such a model can give valuable empirical data for the successes or non-successes of PPP-projects and the final answer to the question if public-private partnership is a suitable measure for increasing the efficiency of the public administration.

References:

1. 4ps, local governments project delivery specialist. (14 may 2008). <http://www.4ps.gov.uk/>


