DOI: 10.30857/2413-0117.2018.5.8

УДК 351.712.2.025=111

Mariana S. Shkoda

Kyiv National University of Technologies and Design, Ukraine ADMINISTRATIVE SOLUTIONS FOR IMPLEMENTATION OF COMPETITION PROJECTS IN THE FRAMEWORKS OF PUBLIC-PRIVATE PARTNERSHIP

The overall goal of public-private partnership projects (PPPs) is to find solutions to problems combining the benefits of the private sector (availability of financial assets, good governance, propensity for innovation and entrepreneurship) with the advantages of public sector (social issues and environmental concerns). From an economic feasibility perspective, the PPP project should integrate the efficiency of resource allocation with production efficiency which totally outperforms the selected public or private projects. Traditional PPP management (projects under the current stage of national economic development) loses its edge since it stems from the assumption of about the project scale dimension, that is, the project results validity (products to be made and their inherent properties). Thus, eventual PPP projects should be viewed through the prism of systems thinking and management paradigm through which the project becomes apparent not in isolation but as a whole in the context of what is happening. The research findings provide evidence that enhancing management efficiency at all stages of the PPP project can be achieved through implementation of the following actions: 1) improving public access to information about the project and the competition procedures; 2) creating individual websites for the participation of potential partner companies in the competition (for medium and small projects, in particular); 3) increasing competition; 4) building a real project team with an effective leader; 5) providing opportunities for selective monitoring of the performance with the participation of external consultants, thus facilitating a framework for enhancing transparency and overall control as well as contributing to reducing corruption.

Keywords: government project; company project; tender management; project implementation stages; contract.

Мар'яна С. Шкода

Київський національний університет технологій та дизайну, Україна СИСТЕМА АДМІНІСТРАТИВНИХ РІШЕНЬ ДЛЯ ВИКОНАННЯ КОНКУРСНИХ ПРОЕКТІВ НА ОСНОВІ ДЕРЖАВНО-ПРИВАТНОГО ПАРТНЕРСТВА

Загальна мета проектів державно-приватного партнерства (ДПП) полягає в пошуку рішень проблем, в яких переваги приватного сектору (наявність фінансових активів, належне управління, схильність до інновацій та підприємництва) поєднуються з вигодами державного сектору (соціальні питання та екологічні проблеми). Щоб бути економічно доцільним, проект ДПП має поєднувати ефективність розподілу ресурсів з ефективністю виробництва, що повністю перевершує вибрані державні або приватні проекти. Традиційне управління ДПП (поточні проекти в економічному розвитку країни) втрачає свою актуальність, оскільки виходить з припущення про визначеність масштабу проекту, тобто достовірності його результатів (продукти, що вироблятимуться, та властивості цих продуктів). Відповідно, розглядати можливі проекти ДПП потрібно з погляду системного мислення і системи управління, в яких проект проявляється не в ізоляції, а в комплексі, в контексті того, що відбувається. Загалом, після детального аналізу можна стверджувати, що підвищення ефективності управління на всіх етапах проекту ДПП може бути досягнуто шляхом застосування таких заходів: 1) поліпшення доступу громадськості до інформації про проект та процедури конкурсу; 2) створення окремих веб-сайтів для участі в конкурсі потенційних компаній-партнерів (особливо для середніх і малих проектів); 3) посилення конкуренції; 4) створення повноцінної проектної команди з ефективним лідером; 5) можливості вибіркового моніторингу виконання роботи за участю зовнішніх консультантів, що підвищить прозорість і контроль в цілому, а також знизить рівень корупції.

Ключові слова: державний проект; проект компанії; управління тендером; етапи реалізації проекту; контракт.

Марьяна С. Шкода

Киевский национальный университет технологий и дизайна, Украина СИСТЕМА АДМИНИСТРАТИВНЫХ РЕШЕНИЙ ДЛЯ РЕАЛИЗАЦИИ КОНКУРСНЫХ ПРОЕКТОВ НА ОСНОВЕ ГОСУДАРСТВЕННО-ЧАСТНОГО ПАРТНЕРСТВА

Общая цель проектов государственно-частного партнерства (ГЧП) – найти решения проблем, в которых выгоды частного сектора (доступность финансовых активов, хорошее управление, склонность к инновациям и предпринимательству) сочетаются с преимуществами государственного сектора (социальные и экологические проблемы). В рамках экономической иелесообразности проект ГЧП должен сочетать эффективность распределения ресурсов с эффективностью производства, которая полностью превосходит выбранные государственные или частные проекты. Традиционное управление ГЧП (текущие проекты в экономическом развитии страны) утрачивает свою актуальность, так как исходят из предположения о масштабности проекта, то есть о достоверности его результатов (продукты, которые будут сделаны, и свойства этих продукты). Соответственно, рассматривать возможные проекты ГЧП следует с точки зрения системного мышления и системы управления, где проект проявляет себя не изолированно от реального, окружающего его изменения, а в комплексе, в контексте происходящего. В целом, после проведения детального анализа мы можем констатировать, что повышения эффективности управления на всех этапах проекта ГЧП можно добиться путем применения следующих мер: 1) улучшения доступа общественности к информации о проекте и процедурах конкурса; 2) создания индивидуальных сайтов для участия в конкурсе потенциальных компаний-партнеров (особенно для средних и малых проектов); 3) усиления конкуренции; 4) создания полноценной проектной команды с эффективным руководителем; 5) возможности выборочного мониторинга выполнения работ с участием внешних консультантов, что повысит прозрачность и контроль в целом, а также снизит уровень коррупции.

Ключевые слова: державный проект; проект компаниии; управление тендером; этапы реализации проекта; контракт.

Problem statement. The overall goal of public-private partnership (PPP) project management is to find solutions to problems in which the advantages of the private sector (availability of financial assets, effective management, a propensity for innovation and entrepreneurship) are combined with the advantages of the public sector (solving social issues and caring for the environment). To be economically viable, a PPP project must combine the efficiency of resource allocation with production efficiency, completely surpassing individual public or private projects. The traditional management of PPP – projects in modern economic development of the country ceases to be relevant, since it proceeds from the assumption of certainty regarding the scope of the project, that is, the certainty of the project results (the products that need to be made and the properties of these products). Accordingly, it is necessary to consider the eventual PPP projects from the point of view of system thinking and system management, in which the project manifests

itself not in isolation from the real changes surrounding it, but in combination, in the context of what is happening around.

Analysis of recent research and publications. Such foreign and domestic scientists as N.M. Bodnar [2], J. Delmon [4], L. Ganushchak-Efimenko [3], and others have devoted their attention to issues related to the systemic management of PPP projects. Some scientists in the field of management projects, in particular N.D. Babiak [1, p. 96], suggest considering the range of knowledge about the PPP project management from the standpoint of multiple points of view, give a synergistic effect: knowledge management, change management, general management, project implementation models (and others), Strategic management, social sciences.

Highlight previously unsolved aspects of the problem. Having analyzed the research of scientists on this problem is complex, we propose to consider the complex project from a completely new point of view without dividing it into components, denying the possibility of inductive analysis of the project.

The purpose of the article. The main goal of this work is to systematize management decisions when conducting complex, complex, eventual PPP projects.

Presentation of the main research material. The provision of PPP contracts by tender is one of the main management procedures of the state. The tender stimulates the development of competition to select the most appropriate partner of a PPP project by maximizing the number of applicants, protecting openness, transparency, minimizing the risks of corrupt behavior and erroneous decisions. This is a complex, expensive and lengthy process. Often, the state also involves the participants in the tender procedures to create conditions, harmonize requirements and other provisions.

To optimize the management of the tender there are a number of requirements:

- open competitions should be held with a wide range of qualified participants;
- it is necessary to minimize the possibility of corruption on the part of officials and lobbying of large companies;
- it is necessary to carry out a comprehensive economic analysis of applicants' applications assessing the accuracy of the information provided. Most often, independent consultants and organizations are invited to do this, who are provided with all the necessary data for detailed calculations.

There are a large number of various criteria for the selection of a partner company. In world practice, each proposed version of a contract by one or another potential partner must undergo a procedure of qualified selection (due diligence). This is the process of conducting a detailed analysis of each application for its compliance with the objectives of the future PPP project and its most effective implementation, the absence of the hidden possibility of private influence on the public partner. During the process of "due diligence", the project itself is proposed, proposed by the applicant companies, subcontracts, financial documents and guarantees.

The following criteria are commonly used to evaluate financial performance:

- 1) the minimum required grant of money;
- 2) the maximum amount of concession payments;
- 3) the minimum duration of the contract;
- 4) the minimum level of the tariff, etc.

The analysis should be completed at the evaluation stage of proposals, but sometimes it is carried out later, after the best partner has been selected. In parallel, this assessment is carried out and stakeholders: creditors and subcontractors.

It is also important to emphasize that if the goal of the state when initiating a PPP project, for example, is to reduce government spending, then the greatest value is given to financial criteria (minimum subsidies, etc.). If at the forefront is the achievement of the best quality of service for

end users and the size of tariffs, social consequences, then most often the proposals are assessed primarily on the basis of indicators of the minimum tariff and stipulated fines for reducing the quality of work.

The final choice of a partner as a result of all these procedures leads to the fact that a private company becomes the only state partner for implementing a PPP project, finds monopoly rights, is protected by law.

So, the state should take particular care in choosing its partner, create a clear, well-established institutional environment for the selection of applicants, defining in advance the criteria, procedures, and regulations for the tender.

At the final stages of the project development stage and the start of financing by investors, a project company is formed. The state may require local investors to be included in the project company in order to make possible the transfer of technology, the creation of new jobs and the training of local personnel. The expediency of creating a project company is caused by the following:

- This scheme allows sponsors to finance a project under the terms of the "limited right of recourse". The right of recourse granted to creditors is limited mainly or fully to the assets of the project. The level of recourse to shareholders 'assets is often referred to as "sponsorship", which may include obligations to cover unforeseen project expenses from shareholders' equity or provide a subordinated loan to cover overspending.
- It can not be affected by those arising in other areas of business that are not related to the implementation of a PPP project.

Project management after financial closure can be carried out by the project company's own efforts and with subcontractors included in the management process. There are several alternative management models. On the one hand, the project company may not have a permanent staff, that is, all key management activities: construction, operational management and operation are performed by subcontractors. And monitoring and control over the activities of subcontractors and the preparation of financial statements are transferred to independent specialized companies. The only permanent structure that has a project company in such a model is the board of directors.

On the other hand, the project company may invite subcontractors only to perform the "construction work" and take over the remaining functions. This approach is most often used in the concession model of PPP.

In general, it can be said that for a project company it is better to have a small staff and give a large number of narrow functions to experienced, specialized organizations. This greatly facilitates the process of communication and control for the state, and the leader of the project organization becomes a public person, who also provides social support for the PPP project (meetings with consumers, etc.). It is also necessary to entrust the work of permanent control over the subcontractors to an independent person, rather than to perform this management function within the project company itself.

After the tender and the final selection of a partner, the state should take the following necessary measures to manage the project:

1. Creating a state management team.

The state management team deals with the public administration of the PPP project, in particular, the management of the relevant budgets and functions for staffing the state, etc. It should consist of specialists who have experience of participation in such groups. It is desirable that such a team should include experts from different areas of knowledge: financiers, lawyers, technical specialists, etc. Moreover, they should also have free access to external consultants specializing in narrower issues.

No less important is the role of the leader of the group, for establishing effective interaction between all its members, it must be at a high enough position and have great prestige among both state decision makers and entrepreneurs. From this directly depends on the ability to quickly resolve certain issues on the project.

Among other things, the leader of the project team needs to develop an effective system of motivation of the project team members, which would stimulate the team before adopting a new approach. Support team motivation throughout the project is a key element of customer satisfaction and project execution on time and within budget. For this, the group leader can use such management theories as Douglas MacGregor's X and Y theory or Frederick Herzberg's theory of motivational hygiene.

In order to ensure quality work on the project, monitoring its implementation, it is advisable to nominate specialists from the administrations of the subjects of the state:

- by general purpose (economists, financiers, specialists in tariff regulation and public procurement, etc.);
- according to the sectoral basis of the project (specialists in the energy sector, housing and public utilities, health care, education, etc.);
 - by territorial affiliation (may include local government specialists).

Of great importance for the state in implementing PPP projects is the organization of seminars and specialized advanced training courses for state specialists who are members of such management teams.

2. Approval of the project of the organization of construction, the actual design of the facility and the development of technical (working) documentation.

These issues are resolved after the work of technical consultants. Documentation of a large project is being prepared for more than a year, the price of such preparation comes to 3–5% of the value of the investment project [4, p. 123].

3. Assistance to the project company in submitting applications, passing approvals, obtaining permits.

It is especially important here that all these approvals are obtained by the project company as quickly as possible, in which the state plays a fundamental role.

- 4. Development of a results control system.
- 5. Monitoring the implementation of state obligations.
- 6. Acceptance of construction works and the start of operation of the facility.
- 7. Conduct public procedures.

They should include a meeting of citizens, expert and public consultations, hearings in legislative bodies, the dissemination of essential data about the project through the media. This will allow creating a positive image of a PPP project in the community and expert community, increasing its public support and acceptance, which in many cases plays a very positive role for effective project management.

Next after the main capital costs in the project are:

1. Establish internal instructions for project management.

Approved schedule and working plan.

2. Monitoring the fulfillment by the project company of its obligations and ensuring the fulfillment of obligations by the state.

To implement this function, the state often resorts to the help of independent specialists, whose task is to impartially monitor the fulfillment by partners of their obligations to each other.

- 3. Audit and performance reporting.
- 4. Monitoring the financial sustainability of the project.
- 5. Prevention, detection and resolution of disputes in the early stages of their occurrence.

Project management PPP does not belong to the classic functions. To fulfill its functions, the state should involve consultants who will assist in the preparation of project management. Most often, the involvement of consultants is used in the following cases:

• to compile a risk matrix and management plan with clarification of each individual risk, its monitoring, management, and insurance capabilities;

In such a risk management system, a certain risk-fixing strategy should be stated by the side that takes the risk.

• to monitor key economic indicators during project implementation.

It is also necessary to say that for PPP projects, taking into account the duration of the project implementation and operation, the complexity and large scale of such projects and their existence within a strictly regulated framework, periodic reviews of the contract terms are typical. Some data indicate that, for example, about 75% of contracts in the transport sector are subject to revision.

The revision of conditions is a complex process when adjustments are necessary, given the new information and circumstances. Most often, viewing is perceived unambiguously negative, as evidence of the overall disadvantage of the project. Such an attitude is generated mainly by poorly regulated and controlled renegotiation processes. There are always fears that this will lead to a decrease in the quality of the services provided, this indicates a lack of transparency and the presence of corrupt practices, etc.

However, the specifics of PPP projects are such that the renegotiation of contract terms is a natural process and the possibility of changing parameters that are inconsistent with the actual situation. Initially, the project should include an effective mechanism for managing these processes and quickly responding to emerging conflicts and how to solve them.

It is also important for the state as a PPP partner to keep in mind what procedures should be carried out in case of expiration of the contract or its early termination. The readiness of the state project team for early termination of the contract, in our opinion, can minimize a lot of negative consequences. They must be ready before

- a) evaluation of project exit options;
- b) developing an exit strategy from the project, a clear statement of the state's position;
- c) assessing and identifying assets that need to be transferred to a private partner;
- d) replacement of the project company;
- e) monitoring the transfer of assets to the state.

Of particular importance are effective mechanisms for coordinating interaction with all stakeholders throughout the project life cycle. Only when ensuring the openness and transparency of these mechanisms and making the necessary decisions in a timely manner will the PPP project be implemented in strict accordance with the requirements and expectations of customers and project users. This, ultimately, reduces the cost of correcting defects and completing a product or service, and allows for a certain stability of demand. Timely consideration of the interests of all interested parties helps to minimize the risk of delay in the implementation of the project under the influence of external factors.

Summing up, it is possible to describe the proposed measures for managing a specific PPP project, highlighting the key success factors in the three basic stages of project implementation (Table 1).

Table 1

Fundamental centers of government partner governance and key success factors at all stages of PPP implementation of the project

	at all stages of PPP implementation of the project			
		Stage of negotiations signing a	Stage of formation	
	Planning stage	contract and financial closing	operational management and	
			transfer of assets	
Basic		1. Process of negotiations with	_	
activity	for the development of these		and interaction with a partner.	
	or other objects.	2. The due diligence procedure		
	2. Assessment of the	proposed by the potential partners	adjustments.	
	economic, social,	of the state of the project options.	3. Monitoring of the	
	environmental, budget	3. Determination of project	implementation by the project	
	performance of the project.		company of its obligations and	
	3. Determination of the legal	payment mechanism.	ensuring the fulfillment of	
	framework of the project.	4. Final choice of the partner and	obligations by the state.	
	4. Political and public	legislative consolidation;	4. Monitoring of financial	
	evaluation of the project;	5. Creation of a risk management	sustainability of the project.	
	5. Analysis of major risks.	system.	5. Audit and reporting on the	
	6. Determination of the main	6. Financial closure.	results of work.	
	managerial functions.			
Key	1. Identification and removal	1. Creation of detailed rules for		
success	of legislative gaps and	conducting competitive tenders.	instructions for project	
factors	obstacles.	2. Involvement of independent	management.	
	2. Creating an effective state	consultancy firms (for legal,	2. Prevention, detection and	
	management team.	financial, economic analysis, for	resolution of disputes in the	
	3. Study of the positive and	drawing up a management plan	early stages of their	
	negative experience of	with clarification of each individual	occurrence.	
	implementing such PPP	risk, possibilities of its monitoring,	3. Development of the rules for	
	projects.	management, insurance).	amending the contract.	
	4. Study of basic market data	3. Maximization of the number of	4. Preparation of procedures in	
	(market interest, methods	qualified contestants without the	case of expiration of the	
	financing, opportunity to		contract or its pre-termination.	
		applicant, without the lobbying of	5. Develop a strategy to exit	
		large companies.	the project, clearly state the	
		4. Comprehensive economic	*	
	the principles of the concept		6. Open and regular	
	of VfM.	applicants with an assessment of		
		the accuracy of the information		
	possible possible increase in	provided at maximum possible		
	costs.	* *	7. Independent engineering	
		processing time.	control over "construction".	
		5. Maximization of opportunities	_	
		for innovation in the project.	9. The possibility of	
		6. Prediction of possible changes		
		in the contract and possible		
		solutions to issues.	of the project to increase	
		7. Creation of an efficiently	_	
		functioning communication	corruption.	
		system with all interested parties.		
		8. Public procedures in order to		
		increase the approval of the		
		project by the public.		

Conclusions from the conducted research. In general, after conducting the detailed analysis, we can state that an increase in management efficiency at all stages of a PPP project can be achieved by applying the following measures:

- 1) improving access to information about the project, the competition procedure;
- 2) creating distinct websites to attract the participation of potential partner companies to the competition (especially for medium and small projects), increase in competition;
 - 4) creating of a fully functioning project team with an effective leader;
- 5) provisioning of creditors who suffer large financial losses in the event of corruption schemes in the project, the possibility of conducting selective monitoring of work with external consultants, will increase transparency and control in general, will reduce the level of corruption.

The work was carried out with the support of the Ministry of Education and Science of Ukraine in the framework of the project 16.04.55 DB "Innovative platform of business education on the basis of cluster business for demobilized soldiers and migrants from the ATO zone".

References

1. Babyak, N.D. (2014). Kontrolinh ryzykiv proektiv 1. Бабяк Н. Д. Контролінг ризиків проекderzhavno-pryvatnoho partnerstva [Controlling the тів державно-приватного партнерства risks of public-private partnership projects]. Finansy Ukrainy [Finances of Ukraine], No. 6, P. 95-111. Retrieved from: http://nbuv.gov.ua/j-pdf/Fu 2014 6 10.pdf [in Ukrainian].

- 2. Bondar, N.N. (2014). Instrumenty i formy gosudarstvennoi podderzhki proektov gosudarstvennochastnogo partnerstva v infrastrukturnykh otrasliakh ekonomiki [Tools and forms of state support for public-private partnership projects in infrastructural sectors of the economy]. Young 2014. – №8. – C. 60–65. scientist, No. 8 (11), P. 60-65 [in Russian].
- 3. Ganuschak-Efimenko, L.M. (2014). Innovatsiinyi 3. Ганущак-Єфіменко Л. М. rozvytok pidpryjemnytstva v Ukraini: stratehichni oriientyry: monohrafiia [Innovative development of entrepreneurship in Ukraine: strategic benchmarks]. Kyiv: National Academy of Management. 343 р. [in Національна академія управління. Ukrainian].
- 4. Delmon, J. (2010). Public-Private Infrastructure Partnership: Practical Guide for Public Authorities. Astana: IC "Orange". 250 p.
- 5. Dussauge, P., Garrette, B., Mitchell, W. (2017). Learning from Competing Partners: Outcomes and Durations of Scale and link Alliances in Europe, North America and Asia. Strategic Management Journal, Vol. 21, Is. 2, P. 99–103.
- 6. Pro skhvalennia Kontseptsii rozvytku derzhavnopryvatnoho partnerstva v Ukraini na 2013–2018 roky On Approval of the Concept of Public-Private Україні Partnership Development in Ukraine for 2013–2018: Розпорядження Decree of the Cabinet of Ministers of Ukraine dated України

Література

- [Електронний ресурс] / Н. Д. Бабяк // Фінанси України. – 2014. – No. 6. – С. 95-111. - Режим доступу: http://nbuv. gov.ua/j-pdf/Fu 2014 6 10.pdf.
- 2. Бондарь Н. Н. Инструменты и формы государственной поддержки проектов государственно-частного партнерства в инфраструктурных отраслях экономики / the H. H. Бондарь // Молодий вчений.
 - Інноваційний розвиток підприємництва в Україні: стратегічні орієнтири: монографія Л. М. Ганущак-Єфіменко. К.: 2014. − 343 c.
 - 4. Delmon J. Public-Private Infrastructure Partnership: Practical Guide for Public Authorities / Jeffrey Delmon. - Astana: IC "Orange", 2010. – 250 c.
 - 5. Dussauge P. Learning from Competing Partners: Outcomes and Durations of Scale and link Alliances in Europe, North America / P. Dussauge, and Asia B. Garrette, W. Mitchell // Strategic Management Journal. – 2017. – Vol. 21, Is. 2. – P. 99–103. 6. Про схвалення Концепції розвитку
 - державно-приватного партнерства на 2013-2018 роки: Кабінету Міністрів 14.08.2013 № 739-p від

- August 14, 2013 No. 739-г]. Retrieved from: [Електронний ресурс]. Режим доступу: http://zakon4.rada.gov.ua/laws/show/739-2013-r Ukrainian].
- 7. Ganushchak-Efimenko, L., Shcherbak, Nifatova, O. (2018). Assessing the effects of socially responsible strategic partnerships on building brand equity of integrated business structures in Ukraine. Oeconomia Copernicana, No. 9(4), P. 715–730.
- 8. Pro derzhavno-pryvatne partnerstvo [On Public-Private Partnership: Law of Ukraine dated 01.07.2010 No. 2404-VI]. Retrieved from: http://zakon2. rada.gov.ua/laws/show/2404-17.
- 9. Nifatova, O.M., Shkoda, M.S. (2017). Aktyvizatsiia 9. Ніфатова О. М. Активізація політики polityky innovatsiinoho rozvytku cherez utvorennia innovatsiinykh klasteriv yak formy derzhavnopryvatnoho partnerstva [Activation of the policy of innovation development through the formation of innovative clusters as a form of public-private Київського національного університету partnership]. Visnyk Kyivskoho natsionalnoho universytetu tekhnolohii dyzainu. Seriia ta Ekonomichni nauky [Bulletin of the Kyiv National University of Technologies and Design. Series of Economic Sciences], No. 6 (117), P. 110–120.
- 10. Pro innovatsiinu diialnist [On Innovation Activity: 10. Про інноваційну діяльність: Закон Law of Ukraine dated July 4, 2002 No. 40-IV (as України amended on December 5, 2012)]. Retrieved from: (редакція від 05.12.2012) [Електронний http://zakon3.rada.gov.ua/laws/show/40-15 Ukrainian].

- [in http://zakon4.rada.gov.ua/laws/show/739-2013-r.
- V., 7. Ganushchak-Efimenko L. Assessing the effects of socially responsible strategic partnerships on building brand equity of integrated business structures in Ukraine / L. Ganushchak-Efimenko, V. Shcherbak, O. Nifatova // Oeconomia Copernicana. – 2018. – No. 9(4). – P. 715–730.
 - 8. Про державно-приватне партнерство: Закон України від 01.07.2010 № 2404-VI [Електронний ресурс]. – Режим доступу: http://zakon2.rada.gov.ua/laws/show/2404-17.
 - інноваційного розвитку через утворення інноваційних кластерів як форми державно-приватного партнерства О. М. Ніфатова, М. С. Шкода // Вісник технологій та дизайну. Серія Економічні науки. – 2017. – № 6 (117). – С. 110–120.
- від 04.07.2002 № 40-IV [in pecypc]. – Режим доступу: http://zakon3. rada.gov.ua/laws/show/40-15.