ҚАЗАҚСТАННЫҢ ИННОВАЦИЯЛЫҚ ЖӘНЕ ПОСТИНДУСТРИАЛДЫҚ САЯСАТЫН ЖҮЗЕГЕ АСЫРУ ТИІМДІЛІГІ

ЭФФЕКТИВНОСТЬ РЕАЛИЗАЦИИ ИННОВАЦИОННОЙ И ПОСТИНДУСТРИАЛЬНОЙ ПОЛИТИКИ В КАЗАХСТАНЕ

EFFECTIVENESS OF IMPLEMENTATION THE POST-INDUSTRIAL AND INNOVATION POLICY IN KAZAKHSTAN

UDC 330.34

B.S. Yessengeldin[1], D.A. Sitenko[1], M.K. Abildina[2]

[1]Ye.A. Buketov Karaganda State University;
[2]K. Karasaev Bishkek Humanities University, Kyrgyzstan
(E-mail: yessen_baur@inbox.ru)

The features of international and national standards in the management of innovative projects

The article deals with the characteristics of innovative projects. The paper considers the criteria for selecting innovative projects by the state bodies of the Republic of Kazakhstan: innovation, competitiveness, scale. Article determinates the mechanisms and conditions for financing of industrial and innovative projects: loans, bridge financing, mezzanine financing and project financing. Project management standards of the United Kingdom, Japan, the United States and the Republic of Kazakhstan are studied.

Key words: project, innovative project, project management, standard, project financing.

International and Kazakhstan practice have many approaches for evaluating the effectiveness of innovation, but they can not be considered universal and must be applied differentially, depending on the use of intellectual property purposes. Each case requires individual, specific approach based on consideration of all legal, economic, technical and other aspects.

The innovation process can be interpreted in terms of financing and investment development and dissemination of new types of products or services. In this case, it acts as an innovation project.

The innovative project has a number of features which includes the follow:

– the feature of change as the main content of the project (focused transferring from existing in a desired condition);
– the feature of limited duration in time;
– the feature of the limited resources required;
– the feature of «uniqueness» of the project and the novelty for the company, which is implementing the project;
– the feature of the complexity (multiple environmental factors, the participants which are directly or indirectly affecting the process and results of the project);
– the feature of the legal and organizational generalization (specific organizational structure for the duration of the project);
– the feature of distinction with other enterprise projects.

One of the features of the innovative project is its implementation in the context of high risks. To reduce the risk of innovation the enterprise must firstly conduct a thorough assessment of its own potential for the implementation of the proposed project to the implementation of the innovation. Innovative project, ef-

fective for one company may not be feasible for another due to objective and subjective reasons, such as the geographical location of the enterprise, the level of competence of staff in key areas of the innovation project, the status of fixed assets, etc. All these factors influence the effectiveness of an innovative project, but to evaluate them quantitatively very difficult, and in some cases impossible, so they need to be taken into account at the project selection stage. Since each company has its own factors affecting the effectiveness of the implementation of innovative projects.

Entrepreneurial Code of the Republic of Kazakhstan provides a definition of the concept of «industrial-innovative project». The industrial and innovative project is a set of measures aimed at technology transfer, the creation of new or improved facilities, technology, goods and services sold within a certain period of time [1].

Industrial and innovative projects:

1) which cost up to 4.5 billion tenge included in the regional map of the support of entrepreneurship;

2) which cost above 4.5 billion tenge are recommended in the industrialization map;

3) which does not require government support measures are not included in the map of industrialization and the regional map of the support of entrepreneurship [2].

The authorized body and other state bodies as well as local executive bodies of regions, cities of republican significance, the capitals in the consideration, coordination and provision of state support to subjects of industrial innovation must be guided by certain criteria (Figure 1).

Figure 1. Criteria for selecting of innovative projects

Figure 1 shows that the following criteria are used in selecting of innovative projects:

– *Innovativeness* — aim to increase the economic efficiency of activities through the creation of new or improved production facilities, technologies, goods, works and services with a view to ensuring the environmental safety;
– *Competitiveness* — an advantage in comparison with the same industrial and innovative projects, which manifests itself in the level of achieved economic and social efficiency, defined as the ratio of the effect is achieved to the cost of its preparation;
– *Immensity* — the importance of the implementation of industrial and innovative project for the industrial and innovative development of Kazakhstan.

The terms of financing, including co-financing, industrial and innovative projects, lease financing of subjects of industrial and innovative activity are:

1) the size of the participation of Development Bank of Kazakhstan, as well as other national institutes of development, defined The Government of the Republic of Kazakhstan, in the financing of industrial and innovative projects, which is not more than 80% (eighty percent) of the amount of the project budget;

2) the share of funding under the project cost by the subject of industrial and innovation activity and (or) other third parties made with financial resources;

3) to implement the project risks are covered and provided in full;

4) financing, including co-financing, provided for a period of not more than twenty years;

5) technological and technical feasibility of design solutions.

The mechanisms of financing industrial and innovative projects are presented in Figure 2.

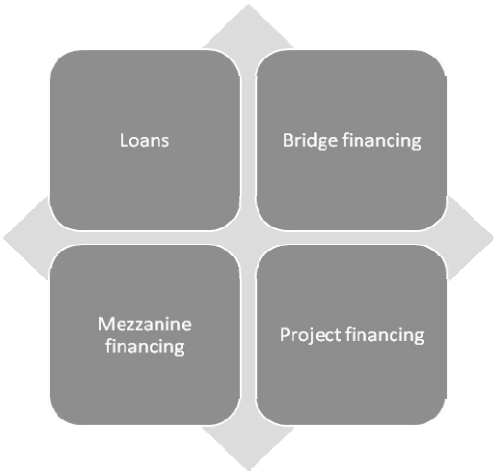

Figure 2. The mechanisms of innovation projects financing

As can we see, the following mechanisms used in the financing, including co-financing of projects:

– *Loans* — loans to subjects in monetary form in terms of payment, maturity and repayment;
– *Bridge financing* — financing of the project to ensure the project preparation and implementation;
– *Mezzanine financing* — a loan with the right to convert into shares or share in the authorized capital of the entity;
– *Project financing* — financing of the project under an assignment of rights requirements, which are providing the expected cash payments for the systematic creation and transfer of property, as well as the provision of services and (or) production of goods and (or) performing works created during the use of the property.

Differences in criteria of selection and mechanisms for financing innovative projects play a significant role in the standardization in the field of project management. When choosing the approach to the management of projects in a particular field of activity it is necessary to consider that at present there is a large selection of methodologies, based on the study design and synthesis of best practices and formalized well-known international and national associations in project management, in the form of standards. Project Management Standards provide answers to questions about the methods and techniques of project management in organizations.

We consider the most popular project management methodologies developed by the below-mentioned organizations.

An important role in the project management organization in the UK takes the Office of Government Commerce — (OGC). This body is a part of the Efficiency and Reform Group within the Cabinet Office of the United Kingdom.Office of Government Commerce (OGC) was established to manage government spending through the following objectives:

– getting the return on money, attracted by a third party;
– getting results on state projects on time, in accordance with quality requirements, within the framework of the planned cost, ensuring extraction of the planned benefits of the project;
– the best use of state property;
– ensuring stable and sustainable procurement operations of state property;
– help in achieving the objectives defined in the policies of the government;
– improving government capabilities in procurement, project management and programs in the management of property [3].

OGC was established for the procurement management, project and state property on the basis of the developed standards.OGC also monitors and compares the results of the government departments in accordance with the requirements of project management standards.

Currently UK as the main standard of project management applied PRINCE2 (PRojects IN Controlled Environments).

Firstly, PRINCE standard was developed in 1989 by CCTA Agency (The Central Computer and Telecommunications Agency), which was later renamed in OGC (the Office of Government Commerce).

Developed in 2009 the fifth edition of PRINCE2 was divided into two books: Managing Successful Projects Using PRINCE2 and Directing Successful Projects Using PRINCE2. The first book is aimed at managers, project managers directly, and the second book — on project committees managers, board members and project sponsors. It is important that the second book also defines the requirements for the qualification of the project sponsors, what was the need of many companies.

Currently PRINCE2 standard applies by governments of different countries (Belgium, Netherlands, Luxembourg, Australia, New Zealand, Hong Kong, Singapore, Malaysia, South Africa, Croatia, Poland, etc.) for the management of government programs and projects.

The main features of PRINCE2 are:

– focus on the study of the project from a business perspective;

– defined organizational structure for the project management team;

– product-oriented approach to project planning;

– emphasis on the division of the project into manageable and controllable stages;

– flexibility in accordance with the project level [4].

PRINCE2 can certify the professionals, which includes two levels of qualification: PRINCE2 Foundation (Basic) and PRINCE2 Practitioner.PRINCE2 Foundation level focuses on those professionals who have learned the basics and terminology of PRINCE2.PRINCE2 Practitioner is the highest level of qualification, which correspond to those who are able to manage projects based on PRINCE2.

Japan for the management of public projects applies standards of Project Management Association of Japan (PMAJ), which was established in 2005 by the merger of Japan Project Management Forum (JPMF) and Project Management Professionals Certification Center (PMCC). PMAJ studying various possibilities of creating a unique new Japanese approach to project management develops a qualification system for project management professionals. PMAJ together with The Committee for Innovative Project Management Model Development has developed a standard for Project Management — The Guidebook for Project and Program Management for Enterprise Innovation (P2M) [5].

The main objective of P2M standard is in creating of value by enterprise, regardless of ownership, through a daisy chain from its mission through a strategy that embodies the mission, programs and projects, which are a tool for the implementation of the strategy. The standard places particular emphasis on a holistic, flexible and modular approach to the management of projects and programs aimed at creating value, which is more effective than the traditional approach, focusing on the fact that the project deliveries were performed exactly in and within the planned cost accordance with the established at the beginning of the project requirements for the quality of the results.

The methodology P2M incorporated fundamental concepts, such as the Complexity, Value and Resistance.These components are known as the triangle of contextual constraints within which the innovation activity.The more complex the business problem, the more value it provides a potential solution, and the smaller the number of people able to understand it, to resist the idea of pioneering appropriate.

A Guide to the Project Management Body of Knowledge(hereinafter — PMBOK®) is a national US standard, which includes expertise in project management process. Standard Edition is engaged in Project Management Institute (PMI), located in Pennsylvania, USA [6].

PMBOK® contains guidelines for the management of the individual project, based on best practices and experience of project management professionals. The guidance gives certain key aspects of project management, as well as describes the life cycle of project management and related processes.

PMBOK® is a universal standard and can be used as the main reference material for project management for professional development and certification programs. Also standard can be used as a basis and adapted to the needs of project activity in any organization implementing projects.

The current version of the standard · PMBOK ® Fifth Edition — was released in January 2013. The fifth edition of the PMBOK® standard is allocated a number of key structural elements.

Firstly, It designated the main object of standardization — the project, as well as the relationship between the projects, programs, portfolios and operating activities. Secondly, it described a typical project life cycle and the impact of organizational policies on project activities. Thirdly, fifth edition of PMBOK® standard describes the project management technology through the identification of groups of administrative processes (designated five groups) and functional areas (highlighted ten areas). Finally, in the annex to the standard quality disclosed interpersonal skills that are important for the project manager activities.

In addition to international regulations and standards, number of countries developed and used the national system of standards and requirements. They are private and regulate certain aspects of project management.

Despite the positive international statistics in the Republic of Kazakhstan the development of project management has not yet been properly developed. While certain steps in this direction is still being made. In particular, a very important and significant is the adoption by the Kazakhstan the national standard ST RK ISO 21500-2014 «Project Management Guide» which is based on the same international standard and is identical to it [7].

An indication of the importance of recognizing the state of project management, in our opinion, is also the fact that the State program of the Republic of Kazakhstan industrial-innovative development for 2015–2019 years, provides the creation of the office of management of Programs for monitoring projects of the Industrialization Map.

However, despite the positive character, these steps are extremely insufficient. We suggest that the successful implementation of the tasks of the new economic policy «NurlyZhol», identified in the message of the President of the Republic of Kazakhstan also needs to use the project approach.

In addition, project management mechanisms also need to be implemented in the planning and implementation of innovative projects funded by the budget, such as the construction of schools, hospitals and kindergartens.

Of course, the progressive way will be the use the methodologies of project management and the implementation of government projects on creation, introduction and development of information systems.

References

1 Кодекс Республики Казахстан от 29 октября 2015 г. № 375-V «Предпринимательский кодекс Республики Казахстан» (с изменениями и дополнениями по состоянию на 09.04.2016 г.). — [ЭР]. Режим доступа: www.online.zakon.kz

2 Об утверждении Правил включения проектов в карту индустриализации и карты поддержки предпринимательства регионов. Постановление Правительства Республики Казахстан от 27 января 2016 года № 32. — [ЭР]. Режим доступа: www.zakon.kz

3 The Office of Government Commerce. — [ER]. Access mode: http://www.cabinetoffice.gov.uk/

4 PRojects IN Controlled Environments. — [ER]. Access mode: www.best-management-practice.com

5 Project Management Association of Japan. — [ER]. Access mode: www.pmaj.or.jp

6 *Есенгельдин Б.С., Есенгельдина А.С., Катышев Д.М.* Взаимодействие элементов системы управления государственными программами и проектами // Вестн. Караганд. ун-та. Сер. Экономика. — 2016. — № 1. — С. 92–98.

7 СТ РК ISO 21500-2014 «Руководство по управлению проектами». — [ЭР]. Режим доступа: http://online.zakon.kz/Document/?doc_id=39196466

Б.С. Есенгельдин, Д.А. Ситенко, М.К. Абильдина

Инновациялық жобаларды басқарудағы халықаралық және ұлттық стандарттардың ерекшеліктері

Мақалада инновациялық жобалардың ерекше сипаттары ашылған. Қазақстан Республикасы мемлекеттік органдарының инновациялық жобаларды іріктеу талаптары қарастырылған: инновациялық, бәсекелестік, ауқымдылығы. Индустриалды-инновациялық жобаларды қаржыландырудың механизмдері мен шарттары анықталған: қарыздар, аралық қаржыландыру, мезониндік қаржыландыру, жобалық қаржыландыру. Ұлыбританияның, Жапонияның, Америка Құрама Штатының және Қазақстан Республикасының жобаларды басқару стандарттары зерттелген.

Б.С. Есенгельдин, Д.А. Ситенко, М.К. Абильдина

Особенности международных и национальных стандартов в управлении инновационными проектами

В статье раскрыты характерные признаки инновационных проектов. Рассмотрены критерии их отбора государственными органами Республики Казахстан: инновационность, конкурентоспособность, масштабность. Определены механизмы и условия финансирования индустриально-инновационных проектов: займы, промежуточное финансирование, мезонинное финансирование и проектное финансирование. Исследованы стандарты управления такими проектами в Великобритании, Японии, США и Республике Казахстан.

References

1 Code of the Republic of Kazakhstan dated October 29, 2015 № 375-V «Entrepreneurial Code of the Republic of Kazakhstan» (with changes and amendments dated 09.04.2016), [ER]. Access mode: online.zakon.kz

2 On approval of the Rules of inclusion projects in the industrialization map and the regional map of the support of entrepreneurship. Decree of the Government of the Republic of Kazakhstan dated January 27, 2016, 32, [ER]. Access mode: www.zakon.kz

3 The Office of Government Commerce, [ER]. Access mode: http://www.cabinetoffice.gov.uk/

4 PRojects IN Controlled Environments, [ER]. Access mode: www.best-management-practice.com

5 Project Management Association of Japan, [ER]. Access mode: www.pmaj.or.jp

6 Yessengeldin B.S., Yessengeldina A.S., Katyshev D.M. *Bulletin of the Karaganda University. Economy Series*, 2016, 1, p. 92–98.

7 STRKISO 21500-2014 «Guide line by project management», [ER]. Access mode: http: // online zakonkz / Document / doc _ id = 39196466.?