

## Government procurement of high-technology products in Republic of Kazakhstan

Togzhan Takhirovna Khaidargaliyeva

Buketov Karaganda State University, Universitetskaya 28, Karaganda, 100028, Kazakhstan

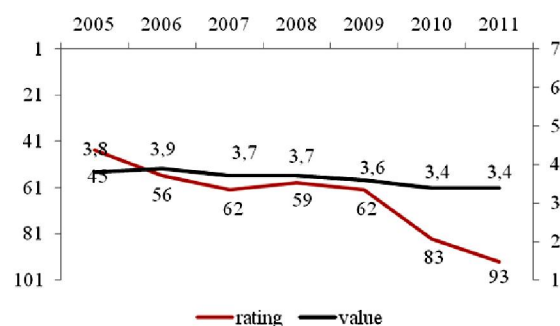
**Abstract.** Currently, government procurement did not become significant tool to encourage innovative activity, while in the world practice government procurement acts as an important resource for creating demand for innovation. Relevance of the scientific article due to the fact that the problems of procurement of innovative products in Republic of Kazakhstan is currently time rests against very ideology of the current system of public procurement. Current legislation does not stimulates procurement of innovative products, but does not prevent it. System of public administration and delivery of public services should be upgraded in accordance with the requirements of innovative development. Purpose of the article is to examine the mechanism of government procurement of high-technology products. A review of international practice was made using examples of Canada, United Kingdom, USA and Japan. Current situation in Kazakhstan was made and given a recommendations.

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### Introduction

According to the ranking of global competitiveness WEF index "Government procurement of high-tech products" during the period of participation of Kazakhstan in the rankings, that is, since 2005, has decreased by 48 positions, from 45 to 93 positions. The value of the index fell by 0.4 points, from 3.8 to 3.4 out of a maximum of 7 points (Figure 1).



**Figure 1 - The dynamics of the rating and the value of the indicator "Government procurement of high-tech products"**

In a survey of executives WEF 2011 question related to the index of "Government procurement of high-tech products," reads as follows:

"Does Government procurement policy help Promote technological innovation in your country? (1 = not at all does not help, 7 = yes, very effectively helps)".

According to Law of the RK "On Government procurement" dated July 21, 2007 N 303-III (hereinafter - the Law), Article 1, paragraph 12:

"Government procurement - the purchase of the customers for a fee of goods, works and services required for the operation and performance of public functions or the customer's authorized activities, carried out in accordance with this Law and the Civil Code of the Republic of Kazakhstan, except for services purchased from individuals under labor contracts or from individuals who are not subjects of entrepreneurial activity, paid service agreement, as part of government jobs, and making contributions (deposits), including in the charter capital of the newly created legal entities "

Technological innovation - activity of the organization as related to the development, as well as the introduction of innovations. In particular, in the industry - technologically new products and processes and significant technological improvements in products and processes in service industries - technologically new or significantly improved services and new or improved methods of production (transfer) services [1].

Government procurement can be divided into three levels in terms of their orientation to innovation:

1) Government procurement "standard" products / services for which can be formed standard selection criteria (for example, cars or office equipment);

2) Government procurement "complex" technology-and knowledge-based products / services for which it is difficult to standardize the selection criteria (for example, integrated fire safety systems for complex industrial projects, architectural projects and large-scale structures, etc.) [2];

3) Government procurement of R & D, which is even more difficult to standardize the

selection criteria. Here, two types of R & D - (1) finding solutions to existing problems (for example, to develop ways to control and prevent man-made disasters in the hydropower), (2) basic research focused on the understanding of a phenomenon (for example, determining the causes of disease).

In this case, each level Government procurement is stimulating by innovation in greater extent [1].

Government procurement of advanced technology, technological innovation by individual regulations of the Republic of Kazakhstan are not regulated.

The Canadian experience. Ministry of Public Works and Services Canada (MPWSC) - the country's largest buyer of goods and services for public use: it serves more than 100 federal departments and agencies. The share MPWSC about 80% of the total value of Government procurement and 20% of all contracts entered into by the Government of Canada [3]

MPWSC divides contracts into three main streams:

1) Low cost (5-25 thousand dollars), in this case can be made purchases from a single vendor;

2) Average cost (25-75 thousand dollars), here traditionally a contest;

3) The high cost (more than 75 thousand dollars), held open (electronic) competition.

Procurement process consists of six stages:

1) Determining the needs of the state body: project assistant identifies the need for goods or services, and transfers the data referent on contracts MPWSC (expert on Government procurement), based on the information they jointly develop objective criteria for evaluating applications;

2) Purchasing strategy: project officer and assistant on Government procurement determined approach to trading (possible approaches: a request for standing offer, request for information, request for proposal or invitation to bid), and create a group evaluation of proposals;

3) Request for Proposals: Request is published, used a number of methods, including electronic trading program (Government Electronic Tendering Service - MERX), spread by fax through the media. Companies consider the request and submit applications;

4) Evaluation of applications: created group analyzes the proposals on the basis of certain procedures and criteria. Assesses the technical and financial aspects of the proposal, and then determine the winner of the contest;

5) The award of the contract: project officer and assistant on Government procurement claim contract, then negotiates the price Department or

council of the Treasury and the contract is signed. After the announcement of the winner the other bidders are informed about the results and have the right to obtain information about the cause of his loss;

6) Management contract and the closing of the transaction: The Contractor will perform the work under the contract, payment is requested control (on the terms and within the time stipulated by the contract), the referent of the project signed the certificate of acceptance of goods / services, and financial director endorses the act and authorizes payment.

Contract Practices in MPWSC is that in this procedure involved a limited number of people (responsible for projects and contracts, members of the evaluation of proposals).

Among the measures taken MPWSC to reduce the risk of fraud include establishing ethical standards for the order of senior management, the announcement of the leadership position in the fraud, the use of hard and effective internal controls, training in ethics and fraud. MPWSC main principle - the creation of a corporate culture in which misconduct are unacceptable [4].

British Experience. In accordance with the strategy of Government procurement for local authorities in England and Wales, developed in 2011, the Office of the Deputy Prime Minister, the Government is trying to develop a more unified approach to Government procurement in order to create local regional centers of excellence.

According to the Strategy of Government procurement by the local administration, in the next three years it is encouraged to invest heavily in the development of procurement services of local governments in the framework of support for regional centers of excellence. In all the regions, centers of excellence (purchases) are created. Quality center will become a catalyst of cooperation in the region.

It is assumed that quality centers will perform the following tasks:

1) To develop centers of expertise for the procurement;

2) To disseminate best practices of procurement, project management and maintenance of partnerships;

3) To provide high quality consulting services procurement regional authorities, in particular the small administrations that do not have their own resources for the conduct of the procurement;

4) In cases where it is economically advantageous to promote cooperation in the procurement of various assets, services and supplies;

5) Together with the project on e-procurement, to support the development of regional e-procurement;

6) Form a group (association) experienced procurement specialists and project managers involved in the management and coordination of its activities, in order to bring to work with local municipalities.

7) Provides two pilot training and development programs. These programs will be implemented in conjunction with a number of organizations that offer educational services, and local authorities.

Objectives of the program are continuous Education (members and leadership of municipalities) through training strategies (rules and practices) of purchases and partnerships and training of group members of groups [5].

In order to protect their own high-tech industries the British Government, government departments, government laboratories and public companies are required to purchase computers, electronic products and telecommunications equipment from domestic manufacturers. In Government procurement of water, energy, communication and transport share of domestic content must be greater than 50%.

10% of Government procurement contracts are reserved for small and medium enterprises, and the Ministry of Finance UK each year oversees the provision. According to the Ministry of Finance, in 2004 the share of Government procurement contracts signed with SMEs was 49.6%, and the share of these purchases from the total contract value was 25.3%.

The U.S. experience. U.S. is the first country that launched a Government procurement policy to support technological innovation and high-tech industries. Government procurement governed by the "Federal Law on Procurement", where there are more than 4,000 positions.

American Management Agency is a federal agency responsible for Government procurement (except for defense procurement) and consists of a "federal bodies of provide" responsible for procurement in certain sectors. Management Agency is responsible for the overall management and implementation of the Government procurement system and has branches in major cities, and the Agency for the provision of consulting services, Committees on special Government procurement, professional Associations of procurement, the Federal Bureau of Government procurement policy and other support agencies.

U.S. policy in the field of Government procurement of high-tech products promoted the rapid development of high-tech industrial cluster. In

the 90 years Administration of the President Clinton's adopted the "Comprehensive Economic Development Plan" in order to encourage innovation and development of new products, and made a purchase of a new high-tech product in the field of computer accessories in the amount of 90 billion U.S. dollars. Thus, the U.S. government has received such companies as IBM, Hewlett-Packard, Texas Instruments and several international IT giant companies.

To protect its own industry, the U.S. government in 1933 adopted a law "Buy American." According to this law, only 25% of cases you can purchase goods, works or services from abroad. In addition, government purchases are made from TNCs only if more than 50% of the content of their products will be manufactured in the United States. For imported goods high technical barriers are set, such as "increased technical standards", "additional tests" etc.

The U.S. government has concluded with foreign states and international organizations "Agreements on Government Procurement" and the relevant trade agreements to participate in the Government procurement of foreign states. For example, from 2001 to 2003 for innovative businesses the U.S. Government of Canada has allocated the number and value of contracts for Government procurement in the ratio of 19% and 21%, mainly concentrated on computers, telecommunication, technology, environmental protection and other fields [6].

Japan's experience. In order to protect their own high-tech industries, in contrast to the U.S., Japan has a policy of supporting the high-tech industry by determining the ratio of government purchases of domestic and foreign manufacturers to purchase from foreign manufacturers provide high tariff restrictions.

For the development of the automotive industry, government agencies are required to purchase 100% domestic cars, foreign and domestic auto parts production content is 30 and 70%, respectively, the share of foreign content of other high-tech products does not exceed 20% relative to the procurement of foreign computers, provided duties on their imports established at 15% and 25%, purchase of domestic technology and equipment supported by subsidies, as well as long-term low interest rates on loans, etc.

The Japanese government is guided by the principle of priority use of domestic products, thus ensuring the growth of domestic electronic communications market through the implementation of Government procurement by public companies, such as «Telegraph and Telephone Corporation»

(NTT) and «Japan's electronic computer company» (JECC).

The Japanese government adopted in 2000 the Law on "Promoting Government procurement of recycled products," which was designed to motivate the government and local authorities to actively acquire environmentally friendly recycled products, providing them with comprehensive information about the "green" procurement. A year after the adoption of the law 74% of the suppliers of refined products increased their sales and 75% of suppliers have developed and launched a new production of environmentally friendly products.

The current situation in Kazakhstan. The existing Law on Government procurement of 21 July 2007 entered into force on 1 January 2008.

By July 2011 in the Law "On Government procurement" various amendments have been made 11 times. However, the number of complaints of inadequate methodology of Government procurement from customers - government agencies and potential suppliers - private companies continues to increase, well as the number of offenses related to their implementation.

As a whole on Government procurement system, a survey of business executives on outreach workshops were presented issues relating to Government procurement by price proposals request. First, in accordance with the law, government procurement price proposals request carried out on goods, works and services, the specification of which has no significant value to the customer, and the decisive factor is the price. However, in practice, customers made purchases by way of inquiry of price offers, including consulting services, service repairs of buildings, construction work, correspondingly increases the risk of poor quality of service.

In the Law of RK "On Government procurement", as well as in the Rules for Government procurement of goods, works and services approved by the Government of the Republic of Kazakhstan on December 27, 2007 № 1301 (hereinafter - the Rules), certain provisions governing the implementation of government procurement of advanced technology products, technological innovation, are not provided.

At the same time, it should be noted that the legislation of RK there are no concept and criteria for high-tech products, as well as there are no statistics on the volume of high-tech products purchased by the state. Only in the Law of RK "On Subsoil and Subsoil Use" gives the following interpretation (Article 1): high technology - the new recognized achievements in technology and processes that have received realization in the form of new and improved products and the most environmentally friendly technology used for integration products produced at

the territory of the Republic of Kazakhstan into the world market.

According to the Law "On state support of innovation", an innovation - the result of scientific and technological activities, received a realization in the form of new or improved products (works, services) or technology that has qualitative advantages in practical activity compared with analogues and having applied economic and (or) social benefit. At the same time, the concepts and criteria of "technological innovation" in the legislation are not provided; the subject of statistical records of the Statistics Agency serves food, process and management innovation types.

Summary. In general, the system of Government procurement:

1. The Ministry of Finance of RK in cooperation with the Agency for Protection of Competition to develop a method for determining the amount of the initial procurement.

2. The Ministry of Finance of in cooperation with the concerned government agencies to develop a draft Law "On amendments and additions to the Law of the Republic of Kazakhstan" On Government procurement "in order to improve, except for the possibility of committing irregularities in its implementation. In particular:

(A) Recognize competition the main way for Government procurement (according to data posted on the web portal of Government procurement, in 2010, 68% of Government procurement carried out by the method of price offers, 13% - procurement from a single source, without the application of the law - 18%. Whereas in the 2005 open competitions carried 63.5% of the total purchases, then the results of 2010 the figure was only 1%).

According to UN experts in the field of Government procurement, the main method of procurement should be open competition - as the most effective in terms of competition, economy and efficiency in procurement. For example, the Model Law on Procurement of goods (works) and services developed by the United Nations Commission on International Trade Law (UNCITRAL) in order to assist States in reforming and modernizing their laws on procurement, does not contain the cases that are derived from the scope of regulatory legislation on Government procurement [7].

(B) Develop requirements for the implementation of the procurement method of price proposals. One possible option is to compile a list of services (goods, works), for which the procurement method of price proposals request is unacceptable. For example, the organization of children's food in educational institutions or development of any strategic, policy documents, repair buildings, and

others to reduce the risk of vital and socially significant services of poor quality.

(B) eliminate the provision in the law (paragraph 1 of Article 24 of the Law), which states that the tender committee shall open the envelopes with applications for participation in the competition within the period, at the time and place specified in the tender documentation. And rectified in accordance with the generally accepted international principles of Government procurement, according to which in the interests of transparency, envelopes with application forms must be opened immediately after the deadline for submission of applications (for example, paragraph 1 of Article 33 of the Model Law, UNCITRAL).

3. The Ministry of Finance of RK (LLP "commerce center") to improve the quality of functioning web portal of Government procurement (eg, currently difficult to find lots of potential suppliers, because the system has no separation of purchases by region, place of delivery of goods or services).

4. The Ministry of Finance in cooperation with central and local government agencies to develop guidelines for Government procurement professionals on the development of technical specifications of the goods, works and services to improve their quality [8].

5. The Ministry of Finance of RK in cooperation with the concerned government agencies to develop a methodology to assess the effectiveness of Government procurement (perhaps by analogy to the OECD).

According to the OECD methodology for assessing national Government procurement systems (from 17 July 2006), the system of Government procurement is estimated at 12 basic indicators, which include 50 sub-indicators and 23 indicators of compliance / performance to cover the following areas [9, 10]:

1) The legal and regulatory framework governing procurement in the country (completeness, scope of legislation, procedures and tender documents, etc.);

2) The organizational structure of the system of regulation of Government procurement (the status and powers of the authorized body, the integration of Government procurement system with the system of public sector management, budget development, etc.);

3) The functioning of the system of Government procurement (the availability of effective partnerships between the public and the private sector, the level of competence of the state procurement officials, etc.);

4) The fairness and transparency of the procurement system (the presence of the country's effective control and audit services, the effectiveness of the appeals mechanism, the degree of freedom of access to information etc.) [11].

According to the OECD assessment of the national Government procurement system should be carried out with the assistance of independent experts in their close collaboration with the staff of the authorized body for Government procurement.

For Government procurement of high-tech products, technological innovation:

1) The Ministry of Industry and Trade of the Republic of Kazakhstan and the Ministry of Education and Science of RK, JSC NC "Parasat", JSC "National Innovation Fund" JSC "Fund of Science" to determine the criteria for assigning products to high-tech and innovation;

2) The Ministry of Finance of RK in cooperation with the Ministries of Education and Science, Industry and New Technologies to develop a separate procedure for Government procurement of high-tech and innovative products, providing vendor selection based on clear criteria of innovation and high-tech products;

3) The Ministry of Finance of RK in cooperation with the Ministries of Education and Science, Industry and new technologies to develop quality requirements of the technical specifications of the goods, works and services that are attributable to high-tech and innovative;

4) The Ministry of Education and Science, Industry and Technology, Agency of Statistics together to develop form of statistical and departmental reports on the acquisition, production, export and import of high-tech products, innovation in the production of goods and work in enterprises.

#### **Corresponding Author:**

Dr. Khaidargaliyeva Togzhan Takhirivna  
Buketov Karaganda State University  
Universitetskaya 28, Karaganda, 100028, Kazakhstan

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