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New approaches to strategic program-targeted management of Ukrainian construction sector innovation and economic development

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The situation analysis is carried out and the problems in the innovative and economic sphere of Ukraine development during its independence are revealed. Theoretical researches of modern tendencies, processes and procedures concerning progress organization and management of the leading countries and companies of the world are carried out. The model and algorithm of practical realization of this process are offered. The characteristic of structural and hierarchical construction of the strategic program-target management system of Ukraine progress and its elements is presented. The sequence of effective improvement of the public administration sustainable development system of the national economy and social life is determined. The practical implementation of the proposals outlined in this paper will help accelerate Ukraine's progress towards global economic standards.

Keywords: construction sector, innovation and economic development, program-target management, strategic planning

Нові підходи до стратегічного програмно-цільового управління інноваційно-економічним розвитком будівельного сектора України

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Установлено, що характерною рисою сучасної глобальної економічної системи є активний вплив держави та її органів влади на стратегічний розвиток передових галузей науки, виробництва й бізнесу, забезпечення їх інтеграції в єдиний механізм науково-технічного та соціально-економічного прогресу постіндустріального суспільства, в якому задіяні не тільки окремі країни та органи їх державного управління, а й провідні компанії світу. Проведено аналіз стану та виявлено проблеми в інноваційно-економічній сфері розвитку України за часів її незалежності. Здійснено теоретичні дослідження сучасних тенденцій, процесів і процедур щодо організації та управління прогресом передових країн і компаній світу. Розроблено нові підходи до формування системи та організації процесів стратегічного планування і програмно-цільового управління інноваційним та економічним розвитком держави, її регіонів, галузей господарювання і підприємств, здатних створювати та реалізовувати на світових ринках наукоємну конкурентно-спроможну продукцію з високим рівнем доданої вартості. Розроблено практичні рекомендації щодо ефективної реалізації цього процесу, зокрема, запропоновано модель і алгоритм стратегічного планування й програмно-цільового управління соціально-економічним та інноваційним розвитком України. Наведено характеристику основних параметрів і елементів структурно-ієрархічної організації системи державного управління стратегічними та програмно-цільовими заходами в процесах розвитку держави та її елементів. На основі узагальнення світового досвіду провідних країн і компаній світу сформовано пропозиції щодо покрокової практичної реалізації ключових заходів, процедур та інструментів стратегічного програмно-цільового управління інноваційно-економічним прогресом України. Практична реалізація розроблених пропозицій буде сприяти прискоренню прогресу України за світовими стандартами господарювання

Ключові слова: будівельний сектор, інноваційно-економічний розвиток, програмно-цільове управління, стратегічне планування



Introduction

A characteristic feature of the modern global economic system is the active influence of the state and its authorities on the strategic development of advanced science branches production and business, ensuring their integration into a single mechanism of scientific, technical and socio-economic progress post-industrial society. According to the practice of the most developed countries of the world, public strategic management of the economy is a system of effective strategic measures of legislative, executive and controlling nature. These measures are implemented by relevant government agencies and public organizations with the aim of stabilization, quality transformation and accelerated transition to sustainable progress of the whole society. This is achieved by the fact that the central authorities determine the most promising directions of the country's strategic development for 5 - 10 years and more and ensure the implementation of the plans with financial and other resources. An innovative model of economic growth is at the heart of these countries' progress.

Ukraine has not created its own mechanism and management system for its development, has not defined a clear strategy for the implementation of this process, the topic of this article is relevant, has scientific novelty and practical value.

Review of the research sources and publications

Analysis of well-known publications [1-18] showed that although today there is some research in the field of theory and practice of innovation and investment management, development of the economy and its production systems, including the use of modern standards of strategic and project management, but they are not enough for the practical implementation in the new conditions of transformation of the economy, public life and, especially, the system of public administration. Today there are still no effective mechanisms, procedures and tools for strategic planning, multi-project and project management of innovative development of the national economy, its high-tech research and production systems and enterprises.

Definition of unsolved aspects of the problem

Despite the experience of successful progress of the leading countries and companies of the world, a considerable number of theories of providing innovative development of different economic systems, today the domestic economy and its enterprises are unsatisfactory. There is a constant manifestation of crisis phenomena in the economy and public life due to the chaotic nature and inefficiency of previous transformations in the state and business. A clear confirmation of this conclusion is the fact that the National Strategy and Development Program of Ukraine has not been developed and legally approved to date, and there are practically no state policies and effective mechanisms for managing this process. That is why it is possible to determine that in our country new systems and tools for strategic and current management of innovation and economic progress of the state, its regions, leading industries and

enterprises should be created. At the same time, any development strategies and programs should be aimed at building modern types of high-tech research and production systems and powerful enterprises in Ukraine. At the same time, it is necessary to ensure the formation of a professional and effective structure and processes for managing the functioning and development of socio-economic and production-economic systems, capable of creating and selling the latest high-value products and services with a high level of added value, to increase the competitiveness and well-being of the whole society. The above factors highlight the relevance of the scientific and practical research topic of this article, which reveals the essence, the main purpose and main results.

Problem statement

The purpose of the work is to highlight the results of theoretical research and practical recommendations on the formation in Ukraine of a new system, mechanisms and procedures of strategic, program-targeted and project management of innovation and economic development of the state, national economy, its high-tech scientific-production systems and enterprises capable of creating science-intensive and competitive, high value-added products.

Basic material and results

Today, strategic innovation policy should be an integral part of the overall system of state strategic management of Ukraine's socio-economic and innovation development. It should be based on: a national strategy for innovation and organizational and economic transformation; a set of national measures, through which certain goals of development are realized.

Strategic planning and program-targeting, as the main form of state regulation of innovation and economic development, have been widely used in the countries of the European Union (EU), Japan, South Korea, China. It can be noted that today, in the EU, ten directions of a pan-European wide-ranging innovation strategy are being implemented in the EU on the basis of a program-based method: development of an innovation-oriented education system; formation of the European Institute of Technology; creating a single attractive research-oriented labor market; Strengthening links between research organizations and industry promoting regional innovation and development through cooperation policy programs; reforming the rules of state support for scientific research; strengthening the protection of intellectual property rights; development of digital products and information service; formation of "advanced" markets, favorable for innovation; stimulating innovation through procurement. The key instruments of the EU strategic development policy for recent years have been targeted programs such as: VIII Horizon 2020 Framework Program for Scientific Research 2014 - 2020; EURIKA; EUROSTAR; COST program and more. [5].

Considering Ukraine, it should be noted that with considerable experience of theoretical research, a large number of projects of national strategies and programs

in the field of innovative progress of the state and its economy have been developed, but have not yet been adopted due to the lack of a separate legislative and regulatory framework, the organizational and methodological basis for strategic planning and programming of innovative development of the domestic economy, as well as due to the organizational and functional imperfection of the system of state strategic management. Therefore, as noted above, the issue of state regulation and strategic planning organization needs further refinement and is therefore also part of this study.

The innovative progress of the economy today should become an integral part of the overall process of functioning and development of the state. With this in mind, the methodological approach to the strategic planning organization in the field of Ukraine state regulation of socio-economic and innovative development can be schematically reflected in the model of the system formation of national values, interests and national program goals, as shown in Fig. 1.

Today, the state strategic planning of socio-economic and innovative development of Ukraine is based on the procedures of program-targeted approach with the use of modern tools of scientific prediction of economic progress, including foresight methodology, as one of the leading tools of scientific forecasting. Such planning is part of the policy formulation and implementation process. In the development and implementation of conceptual and practical documents of socio-economic development of the country, it is necessary to solve the following tasks: to scientifically substantiate and determine the long-term goals of social development; identify directions and develop an effective algorithm for achieving goals by coordinating central and local government, corporate systems, institutions, public associations; focus efforts and resources on priority areas of development. It should be remembered that the programmatic approach is a kind of multiproject management, which is widely recognized in leading countries and companies of the world on the basis of American, Japanese, European and other standards of project management (PMBok, P2M, IPMA, PRINCE) [1–6].

The process of forming the conceptual frameworks and programming documents should begin 2 years before the end of the current Strategy and the National Program. The process of forming and implementing strategic and programmatic documents covers the following three steps.

Stage 1 covers the development of the state Strategy of socio-economic development. At this stage, the situation is analyzed, the dynamics of its changes in the country and the international environment are revealed, negative and positive tendencies and their causes are evaluated, the forecast of the state for the long and medium term, the methodology of foresight is applied to predict the development of the situation and determine the priorities of the country's development.

An obligatory condition for the stage completion is the procedure of promulgation, discussion and mutual agreement of the provisions of the Ukraine Strategy of social and economic development, its consideration and approval by the Verkhovna Rada of Ukraine.

At the second stage, the National Program of Social and Economic Development is being developed. At this stage, the following steps are implemented:

- set tasks for solving the problems identified by the Strategy, directions for solving them and achieving the strategic goals; a competition for the development of projects on the mentioned issues, terms and procedure of holding is announced;
- development, examination and selection of projects as ways of tasks accomplishment are carried out;
- generalize and coordinate projects and regional development programs, existing and new international, targeted state programs, develop an action plan;
- developing a cost estimate of the consolidated plan for all resources;
- an organizational and executive structure is formed for the implementation of the National Program - the main executors, co-executors, control bodies are determined and their functions are determined.

The National Program can be adjusted every year at the same time as the approval of the short-term Program of Socio-Economic Development of Ukraine and the State Budget for the following year (Fig. 1).

Stage 3 concerns the implementation of the Program, the provision of tasks to the contractors and the direct implementation of program activities. At this stage, the implementation of the developed measures is monitored, interim and final results are adopted, their compliance with the goals and the budget of the expenditures, changes to the tasks, regrouping of available resources and means are evaluated.

At the end of this phase, the Verkhovna Rada of Ukraine should review the report on the implementation of the National Program and draw conclusions that are made public through the media.

It is also worth noting that the annual budget plans for the implementation of the National Program of Social and Economic Development are drawn up and balanced during the development of the State Budget.

In parallel with the formation and implementation process of work individual stages and complexes of the Ukraine National Strategy and Program of Social and Economic Development, appropriate measures to ensure innovative development of the national economy should be developed, coordinated, approved and implemented. The process organization conceptual model of formation and implementation of strategic and programmatic documents on state management of innovative economy development can be presented in the form given in Table. 1.

Based on the theoretical and practical experience of organizing state strategic planning and programming of innovative progress in the world and Ukraine (since its independence), the following general conclusions and suggestions can be made regarding the practical improvement of strategic state management of innovative development of the domestic economy.

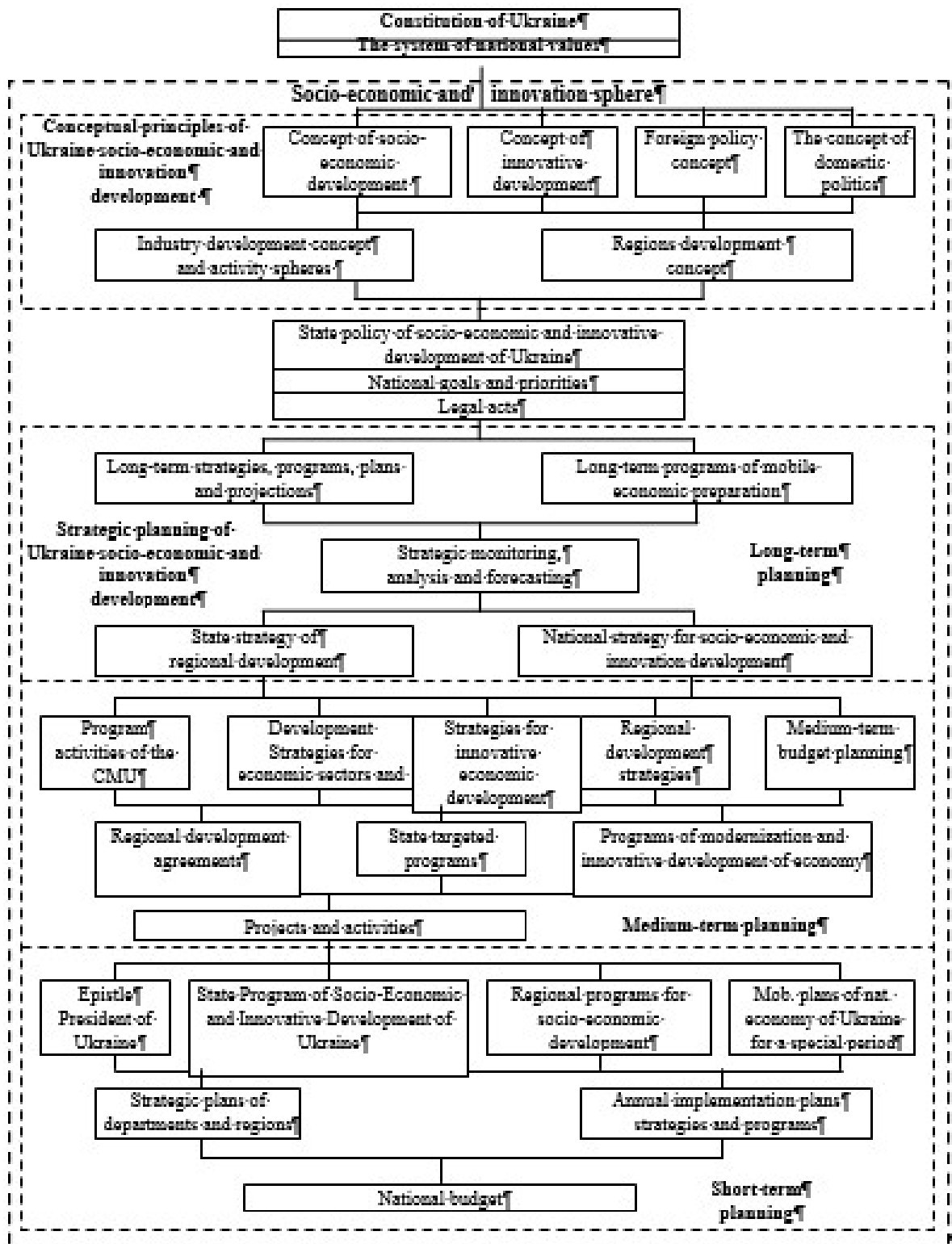


Figure 1 – Scheme of strategic program-targeted planning in the sphere of public administration of socio-economic and innovative development of Ukraine (improved on the basis of [11])

Table 1 – Characteristics of the structural-hierarchical organization of public administration of strategic and program-targeted measures for innovative economic development

Characteristics of organizational and process elements of development management	Characteristics of a strategic state management of economic development hierarchical organization			
	the highest nationwide management level	central government authorities	regional and local authorities	management teams managing the Targeted Development Programs (TDP)
	strategic program-planning and state regulation of economic development			project management
Organizational structures of the entity managing the innovative development of the national economy	<ol style="list-style-type: none"> 1. President of Ukraine, Committee on Economic Reforms and State Development. 2. Cabinet of Ministers of Ukraine, inter-agency coordination council. 3. The Verkhovna Rada of Ukraine. 4. Ministries and other authorities. 	<ol style="list-style-type: none"> 1. Ministry of Finance, Ministry of Economic Development and Trade. 2. Other central executive bodies are their strategic planning departments. 	<ol style="list-style-type: none"> 1. Regional State Administration. 2. Regional Council of People's Deputies. 3. Regional Offices for Science, Technology and Innovation. 	<ol style="list-style-type: none"> 1. Sectoral, regional and other TDP project management offices. 2. Organizational structures of TDP management teams.
Organizational measures and methodological support for strategic and programmatic management	<ol style="list-style-type: none"> 1. Initiation of actions and coordination management based on the Constitution and Laws of Ukraine. 2. Methodology and standards for strategic management and implementation of strategic national measures. 	<ol style="list-style-type: none"> 1. Organization of strategic planning of economic sectors. 2. Regulatory and methodological support for development planning. 3. Organizational and methodological support for improving education. 	<ol style="list-style-type: none"> 1. Organization of strategic planning for regional development. 2. Organizational and methodological support for improving education. 	<ol style="list-style-type: none"> 1. TDP Planning organization. 2. Development and application of project management standards. 3. Implementation of maturity models for project management skills.
Objective results of managerial influence that characterize the essence of a management object	<ol style="list-style-type: none"> 1. National strategic development priorities (10–30 years). 2. National Concept, Strategy and Development Program. 3. Perspective (for 2–5 years) and annual state plans and budgets of the current implementation of development. 4. Legislation. 5. Regulatory and methodological explanations. 6. Strategic national control. 	<ol style="list-style-type: none"> 1. Sectoral development priorities. 2. Industry concepts, strategies and development programs. 3. Sectoral programs and standards of innovation, innovation and technological development. 4. Prospective and annual plans for the implementation of development programs. 5. Regulatory and methodological support, training of staff. 6. Coordination management and controlling of development results. 	<ol style="list-style-type: none"> 1. Identifying regional needs and priorities. 2. Regional concepts, strategies and programs of socio-economic development. 3. Regional programs of innovative development. 4. Regulatory and methodological support, training and advanced training. 5. Coordination management and controlling of development results. 	<ol style="list-style-type: none"> 1. Implementation of targeted development programs. 2. Organization of TDP professional project management. 3. Ensuring the effectiveness of TDP implementation results.

One of the main shortcomings of the previous transformation period of innovation and economic transformations in the country was the lack to date of the National Concept, Strategy and Program of Socio-Economic and Innovative Development of Ukraine. This shortcoming has largely caused the inconsistent nature of the organization and governance of previous reforms. It enhances the effect of another strategic mistake of the period 1991 - 2020 – the application of the philosophy of the state policy implementation of the domestic economic transformation on the basis of the market self-regulation neoliberal mechanism and the removal of the state from the process of regulating its

innovation and technological modernization and socio-economic development. As a result, today Ukrainian society has unfinished economic reforms, increasing the gap between the level of innovation and technological development of the leading countries of the world.

The conducted analysis and generalization of the world and domestic experience of organization and management of economy innovative development allowed to determine ways and improvement procedures of development strategic state program-target regulation and its strategic innovation policy in this sphere, which are given in Table. 2.

Table 2 – Generalization of the experience of innovative development strategic state regulation in Ukraine and other countries of the world

World practical experience of innovative and sustainable economic development	Modern strategic state innovation policy of development of Ukraine	
	disadvantages and remarks	suggestions for improvement
<p>It is established that each country has a very specific national character and diverse approaches to the formation and implementation of national innovation policy. At the same time, common aspects of development are:</p> <ol style="list-style-type: none"> 1. Each country makes its progress on the basis of the methodology of strategic management of national development programs and projects. 2. The generator and basis of development is the creation and effective activity of an extensive network of the national innovation system and the variety of forms of its participation in innovative projects and programs. 3. In the EU and other socially, economically and technologically developed countries of the world, development is being implemented on the basis of the strategy of national, regional and local development of territories. 4. State regulation of innovation processes is carried out in a wide range of administrative interventions and regulation in development management from the centralized programmatic to the liberal-state mechanism of support and stimulation. 	<ol style="list-style-type: none"> 1. Formal definition and weak adherence by the authorities of the legislation and state normative-legal acts on the regulation of the innovation sphere (activity, processes and development, etc.), including scientific and scientific-technical policy. 2. Lack of a clear mechanism for the practical implementation of regulatory functions and instruments in the state innovation policy. 3. Absence of the Concept, Strategy and Development Program of Ukraine developed and legally enshrined. 4. Absence of complex reforms in the main spheres of economy and public life. 	<ol style="list-style-type: none"> 1. Formation of a more sophisticated and practical application of the content of strategic and current state innovation development policy, which covers the legislative and procedurally defined Concept, Strategy, Innovation Development Program, procedures and instruments for their implementation. 2. Formation of clear and effective mechanisms for aligning them with strategic processes of managing other spheres of development of the national economy and life of society. 3. Transition to the methodology of strategic program-target and project management of development, the main elements of which should be: <ol style="list-style-type: none"> 3.1. Identification of contemporary social needs and interests. 3.2. Macroeconomic forecasting and planning. 3.3. Hierarchical definition of strategic, tactical and current development goals. 3.4. Ensuring social orientation of the market economy and development processes. 3.5. Development and approval of a new Concept for Sustainable Socio-Economic and Innovative Development. 3.6. Development and approval of a new National Sustainable Development Strategy and Plan (Program). 3.7. The transition to state programmatic planning and strategic management. 4. Taking into account world and national experience of planning, organizing, coordinating, controlling and regulating the course of implementation and ensuring the effectiveness of development results.

Conclusions

The authors of the article are convinced that the theoretical results and practical recommendations given in this work will allow not only qualitatively and effectively to modernize the system of strategic management of the country's innovation and economic development, but also to ensure its rapid progress on the basis of attracting the best world experience and creating its own mechanism of sustainable economic progress and the whole society by the advanced standards of this process implementation.

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