

Client-Oriented Technical Design as a Factor of Formation of Industrial Policy Economic Integration

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Abstract: This study designed mechanism for the implementation of industrial policy of vertically integrated structures based on the use of program-target method of public administration with the tools of financial support on the basis of public-private partnerships and attracting resources of the debt market-corporate and public housing bonds which will realize the imperatives of development industrial production to meet the challenges of the knowledge economy.

Key words: Industry, integration, reproduction, cluster, industrial policy

INTRODUCTION

The alignment of the national economy effective integration structures, focused on the use of the industrial sector of the economy as the basis of modern economic system developed the state may be implemented as part of the industrial policy. However as shown above, a component of this policy should be a cluster projects in fact, a synthetic component of a comprehensive industrial policy. Meanwhile, the implementation of any public policy is not possible without the necessary tools and mechanisms.

At the same time, integrated industrial policy is a part of the government economic (social and economic) policy. And the general public policy incorporates a powerful set of tools and mechanisms of implementation, without any refinements that may be used and to implement a comprehensive industrial policy aimed at maintaining the modern processes of transformation of the reproductive role of industry in the national economy. In particular, a set of tools and mechanisms provides a target-oriented approach.

Literature review: The issue of industrial development is one of the most researched in the last few centuries. However, the advanced development of technology confronts the scientific community more and more questions.

The most extensive study of many aspects of industrial development is the theory of the industrial

society in its various directions. From the standpoint of our work more interesting are the approaches in the context of change management systems industry and the economy as a whole including the assessment of the functional role of technocracy in the socio-economic development of society.

These problems are devoted to the works of such well-known foreign scholars like R. Aron, D. Bell, Z. Brzezinski, J. Galbraith, S. Smith, W. Rostow, Horkheimer M., J. Schumpeter and others. These post-industrial themes presented in the works modern Russian scientists-Avdokushin E.F., Burmenko T.D., Danilenko N.N., Dlina N.A., T.A. Turenko, etc.

Of particular note are the scientists trying to find a response to the current challenges the industry coming from the structural reproduction processes Aganbegyan A.G., A.I. Borodin, Galazova S.S. Edelev D.A. Izryadnova O.T. Kostenkova A. Novoselov S.N. Savvateev E.V., Sukharev O.S., Tatuev A.A., etc.

Much attention is traditionally paid to the program-target method of management of modern industry which are devoted to the works of scholars such as V.V. Aleskovsky, Bohr M.A., Bragin A., Dorzhieva I.T.S., Labucka E.I. Tretyakov V.D., Shevchenko I.K., Janzen A.V, etc.

However, the theoretical and practical issues related to the content and the functional transformation of the reproductive role of industry in the national economy remain without proper investigation in spite of the increasing relevance.

THE MAIN PART

The nature and role of program-oriented approach to governance: The main feature of the program approach advocates a strong focus on solving specific problems of the territory in order to ensure optimal use of various kinds of limited resources: industrial, administrative, investment and so on. Due to this, the use of program-oriented approach allows on the basis of social-economic significance to determine priority directions of development and taking into account the priority of funding opportunities appropriate policies at the federal, regional and local levels. This method contributes to the manifestation of structural changes in the economic and social spheres, causing the new state of the economic system which is impossible to achieve with the implementation of specific objectives of individual production, infrastructure or other elements of localized economic systems. In this regard, the use of program-target method in the development of multi sectoral, inter-agency and inter regional cooperation provides expanded reproduction of economic relations and the maintenance of the integration processes in the economy.

Software-oriented approach in public administration contributes to the simultaneous integration of production processes in several planes. Thus, there is a (Tretyakov, 2011):

- Cooperation of several entities of different industries, regions and forms of ownership
- The complex interaction between business entities and public authorities
- A temporary alignment of sequences of the entire set of phases of the program objective

Using a program-oriented approach requires the creation of a number of conditions, the main ones are (Ashkhotov and Neudahina, 2011).

- Drastic changes in the structure of economic production with the purpose of overcoming the adverse trends in social and economic spheres
- Ensuring inter-sectoral and inter-regional cooperation
- Elimination of the existing system of interaction between the authorities and economic agents to a new level
- Coordinated use of various resources departmental, sectoral, regional and other supplies for the purposes of implementing programmable

The special role of targeted programs in the market economy leads to the failure of the market, despite the

successful solution of problems of use of resources to ensure their reproduction, especially in the case of long investment cycle or a large amount of investment. Therefore, to make the economy of the progressive dynamics of the target, provided the interests of the inertia of the structure of existing links in the system of economic relations requires the use of program-target method.

These properties define the high importance of the method of the state policy in solving the problems of competitive industry in the domestic economy.

It should be noted that the territorial (regional) programs target development as a kind of target complex programs not only ensure effective management of the economic, social, scientific and technological development but also represent a specific form of economic activity, providing the concentration of limited resources to address the most important tasks. In this target-oriented method as a method of forecasting and indicative planning, acts outside (in relation to the economic system) instrument for the implementation of public policy development. In this regard, it requires the research of social and economic processes.

Tools program approach: Carrying out socio-economic research in the implementation of program-oriented approach contributes to the definition of the goals and objectives of economic development and the allocation of the total number of goals and objectives of those who really can be solved program-target method. For example, the target program of scientific and technological development of industrial production are focused on achieving the goals that determine the appearance of structural changes in the management of the facility. The achievement of these goals contributes to the inclusion in the program-target method of management of research, development, organizational, economic and other events.

Particular attention should be paid to the legal basis of the implementation of this method of governance, methods development, financing and implementation of targeted programs as well as certain advantages of program-target method and the main barriers to their implementation.

All the tools program-target method is divided into direct and indirect (Maksimets and Shakirov, 2012). The direct impact on the socio-economic processes is accompanied by the active participation of the state in the regulation of the territorial structure of economic complex. For direct state regulation characteristic of many features of the organizational and economic administration which is manifested in the implementation of regional target programs, financed by the state budget, extra-budgetary funds as well as through the placement of state orders

through the contract system. Direct economic regulation involves the formation of special development funds which accumulate financial resources for the provision of various types of projects (reduction of unemployment, improvement of living standards, the development of competitive industrial production, construction of infrastructure facilities and so forth).

Also, the methods of direct regulation include the creation and development of special economic local or regional industrial, areas. Typically, the formation of such areas requires the development of specific legislation defining the goals and objectives of these zones; especially their control systems; promising areas of specialization of the territory; program activities and investment projects. In addition for the subjects of the special economic zones is provided preferential treatment to business activities as well as a favorable investment climate. In general, this is an effective means of developing competitive production as the basis of modern industrial integration and cooperative forms of organization of economic activity.

Indirect impact on the socio-economic processes is the development and implementation of state special kind of financial, tax, customs and other preferences, providing facilities and software targeted policies relevant conditions for their accelerated growth.

The main advantages of the use of program-target method of management of processes of social and economic development of local economic systems are (Kubareva, 2012):

- Indicative programs, the implementation of which is determined by the level of material and financial support of the process of their implementation
- An integrated approach in determining the goals and objectives of social and economic development
- Unity and methodological approaches to the solution of problems of development of regions different taxonomic levels
- The concentration of limited material and financial resources to address the priorities that determine the effectiveness of the further use of program-target method
- Targeted use of limited budgetary resources and as a consequence, the manifestation of positive multipliers, including at the expense of attracting additional private resources
- The possibility of combining program-oriented approach and other methods of governance, including method of forecasting and indicative planning
- Ensuring public control in the formation of goals and objectives of software development as well as their performance

Thus, we can conclude that the use of program-target method allows for the implementation of the industrial policy aimed at building the national economy effective integration structures, allowing the use of the industrial sector of the economy as the basis of modern economic system. It also provides the possibility of cluster formation and implementation of projects-programs synthetic component of a comprehensive industrial policy.

At the same time, an important point when using a program-target method of integrative industrial policy is a financial support program of cluster projects. So, obvious is the fact that public funding should ensure the involvement of organizations in the cluster until they reach the major advantages of cluster projects. Inadequate government funding may lead to lack of demand for the cluster approach.

In Russia, even under conditions of excessive state influence on the economy, the level of public funding of cluster projects are significantly lower than in developed countries. In the developed countries in the implementation of cluster policy focuses on the line ministries and in Russia the Ministry of Finance. Thus, the Ministry of Finance on the one hand, plays a key role in the economic bloc of the government on the other hand, poses a serious opposition to the expert for the implementation of the cluster policy. This results in poor performance of Russian clusters even in comparison with countries in Eastern Europe. This gap with developing and transit countries can be attributed to insufficient compensation of public funding the participation of international donors which in Russia is not playing a significant role (Proskura, 2012).

The main instrument of the state of activation and development of clusters in favor of integrated development programs funding by organizing the competition for financial support for programs aimed at combining business and academic institutions. These programs can combine common development infrastructure projects as well as projects to strengthen innovation-oriented interaction of subjects in the cluster. (Stepanov, 2012). In this case, the state has the right to set certain priorities and criteria for the selection of programs, however, very competitive mechanism involves a high degree of freedom and initiative of the cluster members. This approach helps to ensure that support is provided as a result of the clusters that have stood the competition and were able to put forward joint projects. Due to this, the instrument cluster policy promotes the selection of the most promising in terms of the impact on the economy, competitiveness and performance of investment attractiveness of clusters.

It is worth noting that the distinguishing feature of a comprehensive program of cluster development advocates integration of a wide range of inter-related companies and the reduction factor of restriction of competition and one-sided distribution of the benefits in the process of government support. Therefore, to improve the efficiency of government activities in the framework of the cluster policy needs to respect the principles of priority and competition. That is why the development and implementation of such programs should be a priority of the cluster projects of industrial policy in the Russian Federation.

In addition, it should be added that in order to improve the efficiency of government activities in the framework of the cluster policy needs to respect the principles of priority and competition. Compliance with these aspects and features integrated program of cluster development which enable the integration of a wide range of inter-related companies and the reduction factor of restriction of competition and one-sided distribution of the benefits in the process of government support. That is why the development and implementation of such programs should be a priority of the cluster projects of industrial policy in the Russian Federation.

At the same time, the development and implementation of cluster programs that are part of industrial policy requires a partnership between government and business. Because on the one hand, the state can not rely only on their own sources of funding of cluster initiatives which raises the need to attract private funds. At the same time private business as the world practice shows it has little interest in developing cluster initiatives in the initial stages, when the commercial integration has not yet been able to bring significant positive effects.

Public private partnership: Obviously in such a situation, it is necessary to use different forms of public-private partnerships, actively integrate into the cluster program of industrial policy.

The modern concept of public-private partnership that is used in various sectors of the economies of the US, EU asia and Latin America was formed in the 1990s in Europe. Public-private partnerships (hereinafter-GCHP) is long-term and mutually beneficial partnership between the state and business structures to meet the needs of society by combining tangible and intangible resources of the division of powers, responsibilities and risks (Kabashkin, 2010).

PPP mechanism is the institutional and organizational cooperation between the public authorities and the private sector in the implementation of national and international large-scale socially significant projects

(development of strategic industries, provision of public services, etc.) (Zainasheva and Semkin, 2013). Also this type of partnership can be a tool of urban and regional economic and social development and planning at the level of the regions and municipalities. This cooperation lasts for the period specified in the contract of the implementation of a project, after which it shall be terminated.

Programmes and projects PPPs are used in various sectors of the economy, however is often characterized by its use for road construction, public transport, energy, education and health. In particular, the high relevance of the PPP is typical for areas traditionally belonging to state responsibility. The main ones are:

- Objects of general use (transport, utilities, social infrastructure, telecommunications and cultural facilities, historical and architectural monuments, etc.)
- Public services (repair, reconstruction and maintenance of public facilities, housing, etc.)
- Facilities environmental sphere (environmental facilities, post-privatization support of business entities, etc.)
- Scientific institutions (investment and other specialized funds, various economic zones, etc.)
- Ensuring public order
- Social services (social protection, education, health)

However, complete elimination of the state's participation in these sectors of the economy is impossible, hence the need to exercise control over these activities and the preservation of property rights to the property concerned. As part of the state (municipal) segment of the PPP this is reflected in the financing at the expense of the respective budgets and future budget revenues of the state or municipality. We single out the main features of public-private partnerships (Goryainova 2011):

- Combine two or more partners of different forms of ownership and the level of the executive branch in order to achieve common goals
- Maintenance of state powers (functions) by the joint services of the private sector of the economy
- The most complete satisfaction of needs of the population through the use of borrowing or the resources of the private sector
- Sharing partners, resources and effort in the risk-sharing
- The conclusion of long-term partnerships, involving the separation of powers and risks
- The presence of developed legal and regulatory framework, to meet the obligations of their partners and protection

Thus, the system of partnership can be seen as a set of subjects, objects and means of partnerships that make up a whole in achieving the desired results and the implementation of commitments.

There are basic forms of implementation of the PPP, used in various sectors and industries. For example, the PPP can be implemented in the form of concession (different organizational types), leasing, production sharing agreements, public order, etc. PPP branch determines its organizational type (for example, road concession and forest concession). Public-private partnership can be realized in the following forms (Kozlov, 2012):

- A contract for works and public services, the supply of goods for state needs
- A contract for the provision of technical assistance
- The management contract
- Leasing (rental)
- Production sharing agreement
- The investment contract
- concession
- Auctioning, equity participation of private capital in state-owned enterprises

The first four listed forms of PPPs are contractual system, the rest belong to the concession and close to her forms. The choice of a form depends on the degree of participation of the state such as organizational partnerships, etc. This classification is based on the ratio of ownership and the ability to manage it. The dominant form of public-private partnership concession stands.

For example in the area of waste management the most common form of the partnership model is the operator with a clear delineation of responsibilities between the private partner and the state as well as the preservation of the controlling functions of the state.

The model is characterized by the establishment of cooperation in the framework of the joint project of the partnership of the state and a private investor. As a rule, this model is used in areas where there is no sufficiently clear definition of services which complicates their isolation as separate objects of taxation, depreciation and amortization.

Model concession shows the highest efficiency when implemented in industries with long term projects as well as the impossibility of transfer of ownership from the state to the private partner for political or other reasons.

Contract model is used in the energy industry, the investment in which is carried out in the first place in order to reduce the current costs of production. As a rule, investment costs are fully recouped through savings achieved by reducing operating costs.

Model leasing is most effective in the construction of public buildings. As international experience shows this form is characteristic of the partnership between the local government and private business. Despite, the differences all the forms and mechanisms of implementation of PPP provide:

- Consolidation of relations and agreements between the public and private participants in official documents (for example, in normative legal acts)
- Equivalent partnership participation of the state and private sector in the implementation of the project, which precludes the use of the organs of state or municipal government authority with respect to the private investor
- Coordination of joint goals and interests of the partners, taking into account national public interest objectives
- Joint action partners to attract investment and resources, decision-making for project financing and management

The entire set of sources of financing PPP projects can be divided into the following groups (Kabashkin, 2010):

- Budget funds
- Means of state organizations
- Means the domestic business
- Foreign public and private funds
- The means of public and non-profit organizations
- Borrowed funds (loans and securities)
- Funds of individuals
- Means of other sources (international financial institutions)

According to the sources of funds used distinguish the following scheme of financing PPP projects:

- Financing from the resources of the business
- Financing from public funds
- Financing by borrowing, provided on a repayment basis

Under these schemes are formed following funding mechanisms for PPP projects:

- Mixed-fundraising several partners in the project
- Credit-borrowing
- Hybrid-fundraising partners and borrowings

Each of these mechanisms for financing PPP projects has specific advantages and disadvantages, mediated

mainly by the nature of the sources used in the implementation of funds. Thus, the financing from public funds overcomes many limitations posed by the investment climate and the specificity of the projects. However, the efficiency of public investment generates a lot of debate about their misuse. Furthermore, the size of such sources tend always limited. In contrast, the resources of the private sector have a much greater volume and are characterized by a high efficiency of their use including and as a result more than adequate control over their targeted use. But the attraction of these funds in some areas with a strong social message and a low level of profitability is not always possible, especially if it is a long investment horizon and high-volume investments. As a result, borrowed funds are partly deprived of these problems. But there are limitations, the high cost of attracting them, making low-profit projects unattractive for implementation.

Thus, it becomes apparent that for each PPP project, depending on its characteristics it is necessary to choose their own scheme and the funding mechanism. If we go back to the implementation of cluster programs in the industrial policy of industrial integration formations then you can select a number of requirements to the scheme and the financial mechanism. Namely, the bulk of the financing required for the development of basic industries, the formation of supporting industries, infrastructure development. Those we are talking about a significant amount of funds raised is greatly stretched in time and the returns are not expected before the beginning of the operation of the cluster. On this basis, we can conclude about the most full compliance requirements called hybrid mechanism with a predominance of cheap loans.

Relatively cheap borrowings, subject to a significant amount can be brought through the issue of the bond issue (Milshina, 2012). Depending on the issuer (the borrower) there are two main types of bonds: government (municipal) and corporate. State (municipal) bonds are available for tasks such as: covering the budget deficit; cover cash gaps in the budget; attraction of financial resources for the implementation of major projects; raising funds for debt repayment to other government securities. Corporate bonds are issued to finance ongoing operations.

Thus, it becomes clear that the state and the private sector have the ability to issue debt securities in order to attract borrowed funds to implement various kinds of investment projects in particular the cluster programs of industrial policy. However, this source of funds is associated with the need of the current debt service obligations as partial payment, usually occur long before

the term of the loan. This creates the need to find funds for the maintenance of the bond issue-long before the moment could be a positive effect of the cluster project.

In the world practice are three main types of infrastructure bonds on the basis of the purpose of raising the loan:

- Project bonds (project bonds)
- Bonds backed by income (revenue bonds)
- General obligation bonds (general obligations bonds)

Project bonds are issued by an organization or a partnership or in possession of which is a POI. Repayment of the bond issue is carried out by direct revenues from the business activities of the facility infrastructure. Moreover, debt service begins only at the moment when the infrastructure facility begins to generate income. And in order to protect the interests of bondholders for they provide the ability to control the circumstances of business infrastructure facility, significantly affect the cash flows for servicing the bond issue.

Bonds are secured by revenues, issued by state (municipal) government. According to such securities as opposed to project bonds, infrastructure facility does not act as collateral for the loan and the bondholders is not possible to exercise control over the economic activity of the object. At the same time, debt servicing is carried out not by the direct revenues from the business activities of the infrastructure but due to indirect payments to the state budget and extrabudgetary funds (tax levies, duties, tariffs and so on) which tend to have greater stability in comparison with the payments on project bonds and may be accompanied by various kinds of tax breaks for the holders of such bonds.

Bonds are general obligation bonds advanced analogue, secured revenues. Their major difference lies in the fact that debt servicing is carried out not only through indirect payments to the state budget and extrabudgetary funds, arising in the course of economic activity of the infrastructure but also due to other income from various sources which form the general revenues of the budget and extra-budgetary funds. This condition allows you to increase the attractiveness of long-term projects where the involvement between the loan and the beginning of the economic activity of the infrastructure it takes quite a long period of time.

Thus, it becomes clear that the most promising mechanism for the implementation of industrial policy, based on the use of reproductive imperatives of the modern industrial economy is a program-target method of governance. As already mentioned, the benefits of using this method in industrial policy are indicative;

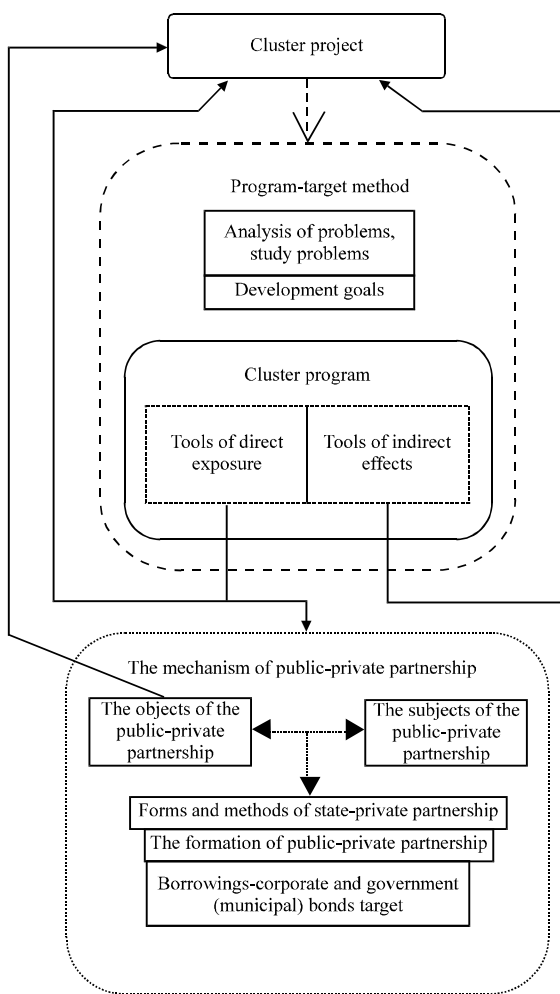


Fig. 1: The mechanism of implementation of industrial policy, based on the use of reproductive imperatives of the modern industrial sector of the economy (the scheme drawn up by the researchers)

a complex approach and methodological unity; the concentration of material and financial in promising areas; targeted use of budgetary resources; the possibility of combining program-oriented approach and other methods of public administration; ensuring public control. This method allows for interaction between the different levels of government, business and society.

Accordingly, Fig. 1 shows the organization of the mechanism of implementation of industrial policy, based on the use of reproductive imperatives of the modern industrial economy. In particular, the figure illustrates the realization of an element cluster project (Fig. 1). Their scheme shows that the implementation of program-target method here involves a number of stages. These are the

basic steps-analysis of problems and research problems of development of vertical integration structures within the identified priority industries. Development goals, characterizing the degree of implementation of tasks. And drawing on the basis of the goals and objectives of the cluster program containing elaborate tools of state regulation of the formation and development of clusters.

DECISION

Thus, the implementation of effective economic policy of industrial development based on the use of reproductive imperatives of the modern industrial economy, could be carried out on the basis of existing methods and mechanisms of governance. An important aspect of this trend is the proper organization of a complex individual methods and mechanisms. Particular attention should be paid to the implementation of the scheme of industrial policy, the centerpiece of which is to stimulate the development of vertically integrated entities. Accordingly, the main purpose of industrial policy is to provide the expanded reproduction which is dictated by the constant need of socio-economic development of society. At the same time, expanded reproduction can be achieved by stimulating the vertical form of economic integration that has natural background.

The most promising mechanism for the implementation of industrial policy, based on the use of reproductive imperatives of the modern industrial economy is a program-target method of governance. The main advantages of using this method in industrial policy are indicative; a complex approach and methodological unity; the concentration of material and financial in promising areas; targeted use of budgetary resources; the possibility of combining program-oriented approach and other methods of public administration; ensuring public control. This strengthens the interaction between the government, business and society.

Accordingly, it is required the implementation of schemes of the mechanism of implementation of industrial policy, based on the use of reproductive imperatives of the modern industrial economy, meet the challenges of the knowledge society.

Implementation of program-target method involves a number of steps-analysis of problems and research problems of development of vertical integration structures within the identified priority industries; development of goals, characterizing the degree of implementation of tasks; drawing up on the basis of the goals and objectives of the strategic program containing elaborate tools of state regulation of the formation and development of clusters.

At the same time, a significant aspect of the practical implementation of program-target method of governance is financial security programs. In addressing this issue it has a high potential of public-private partnership. But the implementation of the mechanism, namely its financial component is also faced with certain restrictions imposed by the specifics of the cluster program and the limited means of the direct partners for its implementation. To solve these limitations allows mobilization of resources of the debt market-the issue of corporate and government bonds. It also removed a large number of restrictions relating to the service of the bond debt-in a valid implementation of cluster programs is the use of various kinds of special purpose bonds infrastructural type is precisely calculated for funding long-term and attractive enough for private sector projects.

CONCLUSION

However as mentioned above a significant aspect of the practical implementation of program targeted method of governance is financial security programs. In addressing this issue it has a high potential of Public-Private Partnership (PPP). But the implementation of the mechanism, namely its financial component is also faced with certain restrictions imposed by the specifics of the cluster program and the limited means of the direct partners for its implementation. To solve these limitations allows mobilization of resources of the debt market the issue of corporate and government bonds. It also removed a large number of limitations related to service the bond debt. Since, the conditions of implementation of cluster programs is a valid use of various kinds of special purpose bonds infrastructural type is precisely calculated for funding long-term and attractive enough for private sector projects.

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