

Outsourcing Noncore Activities of Industrial Enterprises in the Arctic Zone of the Russian Federation

V. A. Tsukerman^a, * and A. A. Kozlov^a

^a*Luzin Institute for Economic Studies, Kola Science Center, Russian Academy of Sciences, Apatity, Murmansk oblast, 184209 Russia*

**e-mail: tsukerman@iep.kolasc.net.ru*

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Abstract—The growing competition and increasingly diversified structure of the world economy and consumption of various resources require the intensification of innovative industrial activity in the Arctic zone of the Russian Federation and enhancement of its management effectiveness. The paper has considered theoretical foundations for industrial service development. It has been shown that participation of small innovative businesses in industrial outsourcing can promote the introduction of innovative technologies and the corresponding equipment for industrial enterprises.

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Strategic use of noncore assets of industrial enterprises in the Arctic zone of the Russian Federation. Core assets of industrial enterprises are usually understood as the fixed assets, intangible assets, and construction in progress that are essential to their ability to conduct their principal activity. Accordingly, assets that are not essential for a company's primary activity are considered noncore assets. Industrial enterprises of the Arctic zone of the Russian Federation (*hereinafter referred to as the Arctic*) are mostly oriented to the production of minerals and raw materials. The development of mineral resources in the Arctic territories requires identifying the main interrelationships of economic, institutional, and technological factors and the substantiation for their scientific and technological development [1, 2]. In this regard, it is important to assess the effectiveness of the State Program "Socio-economic development of the Arctic zone of the Russian Federation for the period up to 2020" in the context of the regulatory impact potential. This assessment should take into account the impact of almost all regulatory actions of the state [3].

In order to enhance the economic efficiency of the operation of Arctic industrial enterprises, it is necessary to pay closer attention to the formation of assets that correspond to specific conditions, as well as the mechanisms for their restructuring. An integral part of this work is devising a strategy for the utilization of noncore assets. The transfer of noncore assets for the purpose of creating service organizations, including those engaged in the development and implementation of innovative projects, can become the basis for the promotion of small innovative business [4].

The need for a structured, rational approach to the management of noncore assets was reflected in Presidential Executive Order No. 596 of May 7, 2012, "On Long-Term State Economic Policy" (item 2, subitem "c"), which requires that joint-stock companies with the state ownership exceeding 50% before December 1, 2012 develop and implement programs for the disposition of noncore assets (*hereinafter, the Program*) [5]. The list of these joint-stock companies was approved by the Government Resolution No. 91-r as of January 23, 2003 (revised as of September 29, 2017) and includes 48 companies, of which 12 have business divisions located in the Arctic.

According to the monitoring data of the RF Government, as of October 23, 2016, the relevant programs were fully implemented in six joint-stock companies and approved but not implemented in three companies. Eight companies did not develop programs due to the absence of noncore assets, while in three companies the programs were approved, but it was stipulated that noncore assets should be retained by the industrial enterprises [6].

When making decisions about the disposal of the noncore assets by industrial enterprises, it is important to take into account not so much the effect of reducing costs as the ability to concentrate efforts on core activities. There are different reasons why it is expedient for arctic enterprises to get rid of noncore assets, but the main ones are as follows:

- fundamental gap between noncore assets and core production;
- high cost price of noncore products as compared to the market value of the production;

- absence of positive dynamics in the economic efficiency of noncore activity;

- low production quality of noncore assets;

- significant investment required for the continued operation of noncore assets.

It would be wrong to assume that noncore assets are a negative factor in the economic activity of Arctic industrial enterprises. Under certain conditions, noncore assets can stabilize the financial condition of an enterprise providing a source of additional financial resources, increasing the capitalization and investment attractiveness. Even taking into account additional costs, the noncore assets of industrial enterprises can prove to be a reliable financial and economic instrument.

Classification of noncore assets. At present, there is no generally accepted classification of noncore assets, but the following criteria presented in the literature can be successfully applied:

- standard practice of financial and management accounting [7];

- the degree of liquidity, existing encumbrances, location, market value, and legal status [8];

- property holdings, type of noncore assets, restrictions on restructuring [9];

- the impact of the fact that the asset is noncore on the primary output and on the achievement of the main targets of the company's business and development strategy [10].

The existing different viewpoints on the classification criteria for noncore assets of industrial enterprises show that there is a significant difference between them, both in terms of economic content and management decisions made regarding the methods and mechanisms for their restructuring.

The classification of noncore assets of Arctic industrial enterprises requires studying the specifics of their functioning, e.g., features related to the extraction and processing of natural raw materials, transport systems, communication systems, logistics, and level of industrial service.

Types of noncore assets. Depending on the type of core business, noncore assets of Arctic industrial enterprises can be divided into the three main groups.

Auxiliary Assets. These may include the services of technological transport and security; construction and repair, as well as construction and assembly subdivisions; organizations of heat, water, and power supply; and departments of procurement, staffing, logistics, industrial service, and technological communications.

Social Assets. These may include residential complexes; objects of health service support, as well as housing and utilities infrastructure; educational, cultural, and sports institutions; and other nonproduction facilities. These facilities are part of the social infrastructure and restructuring them is a complex

process. Under the appropriate conditions, these facilities can be transferred to commercial operations.

Noncore (Proper) Assets. These assets have little to do with the primary activity. They mostly include trade organizations, media and financial structures, etc. Since the creation of these assets can be viewed as investment activity, the decision about their possible restructuring should be made after a comparative analysis of their profitability against profitability of other investment options.

Despite the variety of attributes and different approaches to classifying noncore assets, the main methods of restructuring them comes down to the following directions:

- inclusion in the process of basic economic activity;

- corporate spin-off;

- gratuitous transfer or sale to third parties;

- outsourcing the assets;

- termination of activity with temporary shutdown or sale of noncore assets.

Industrial outsourcing. Outsourcing is understood as transferring to a third-party organization certain tasks and business processes that are necessary for the full-fledged operation of production, but are not part of the core business of the enterprise [11].

Outsourcing of business processes allows industrial enterprises to concentrate their efforts on the key activities requiring attention and new directions in the development of innovative business in order to reduce the cost of services, works, and goods.

An example of successful industrial outsourcing performed by Arctic enterprises is, e.g., JSC Apatit and PJSC MMC Norilsk Nickel. OJSC Apatit outsourced the servicing of repair works and other activities using a service company with formally scheduled terms of work execution. The enterprise purchases special technological equipment with service and warranty from the manufacturer on an ongoing basis [12]. PJSC MMC Norilsk Nickel organizes industrial outsourcing for the maintenance and repair of the main production facilities, performing general construction works required for major equipment repairs and repair of miscellaneous buildings and structures. Since 2006, all these activities have been successfully carried out by a subsidiary company, LLC Norilsknickelremont. Currently, services provided by LLC Norilsknickelremont account for over 40% of the Norilsk industrial market. This subsidiary also provides repair works to other northern enterprises of the Krasnoyarsk krai [13].

An interesting system of industrial outsourcing for offshore exploration and development of oil and gas fields was proposed by JSC Arcticmorneftegazrazvedka for the services of the drilling vessel *Deep Venture* and a jackup floating drilling rig *Murmanskaya*. In this case, the technical operations of drilling rigs are not limited to possible mutually beneficial cooperation in drilling. The *Deep Venture* drilling vessel can

combine the function of a storage boat for procuring and supporting drilling in remote offshore fields with functioning as a rescue vessel, as well as equipment placement during hydraulic fracturing in offshore wells.

A case in point is cooperation between Arctic industrial enterprises PJSC *Gazprom*, OJSC *TNK-BP Holding*, PJSC *Lukoil*, PJSC *ALROSA* with LLC *Ural SPA Service*, which offers repair services for oil and gas equipment of any complexity: current, medium, and overhaul. This company is engaged in servicing drilling, compressor, and air separation plants as well as in repair and maintenance of pumping equipment. Services are provided in two forms, i.e., on the production platform of the company or as a site visit of relevant specialists to the facility.

Generally, the market of maintenance and services for industrial enterprises of the RF Arctic zone is primarily connected with the modernization of production, the use of new materials and innovative technologies, and the acceleration of scientific and technological progress. Importantly, small innovative enterprises are capable of providing more effective industrial service than industrial enterprises are through their high level of specialization of skills, technical and technological equipment, generalization, and analysis of the accumulated experience in various activities and for a variety of objects.

The foreign experience of organizing industrial services in mining shows that service companies can offer a wide range of goods and services to resource-extracting corporations [14]. For example, in Canada, there are many small service companies that cooperate with mining enterprises in performing geological exploration, ore mining and processing, in metallurgy, in the construction of buildings and structures, and land reclamation [15].

Outsourcing the functions of industrial service allows the Arctic industrial enterprises to enhance the efficiency of activities, including the following:

- increasing labor productivity;
- focusing on the development of new products and services;
- redirecting released resources to key aspects of the core business;
- accelerating the development of new technologies.

At the same time, there are a number of risks associated with the increasing costs of industrial enterprises, poor performance of works by service companies compared with the performance of similar work by the enterprises themselves, including

- difficulties in determining the economic efficiency of the operation of an industrial enterprise when recruiting service companies;
- difficulties of making a choice of service companies in the market;
- absence of legislative mechanisms for regulating partnership relations in outsourcing;

—need to increase access to currently classified information.

Algorithm of decision-making. The recommended algorithm of decision-making about the feasibility of outsourcing an industrial service to an industrial enterprise in the Arctic is as follows:

- identify the risks associated with the outsourcing of industrial services;
- carefully analyze the maintenance and service market;
- make decision about the outsourcing of industrial servicing;
- assess the released resources;
- determine the cumulative economic effect.

Graphically, the decision-making algorithm for outsourcing of noncore activities can be presented in the following form (Fig. 1) [16].

Researchers haven't noted two approaches to making decisions about outsourcing, i.e., single- and multicriterial [17]. The single-criterion approach involves assessing one criterion that, as a rule, is based on comparison of expenses of the enterprise with and without outsourcing. The multicriterial approach makes it possible to evaluate the influence of outsourcing on various factors of the enterprise's activity, as well as its interactions with the external environment. It should be noted that the theoretical and practical issues of an industrial enterprise contracting out a business process to another party (industrial outsourcing) requires further methodological consideration.

Market of industrial outsourcing. In recent years, the market of industrial outsourcing in the Russian Arctic have been dominated by foreign companies, which, in view of economic sanctions and unfavorable developments in the foreign policy can lead to negative processes. The situation is especially alarming in the market of industrial services for oil and gas enterprises, where over 65% of services are provided by foreign companies. Since the early 2000s to the present, the share of Western companies in the market of industrial services in the oil and gas sector has increased sixfold, and the volume of works performed by Russian service companies declined two and a half times [18].

Effective interaction of small enterprises and Arctic enterprises in the field of industrial outsourcing will require special state regulation, in particular the introduction of changes and additions to some legislative acts. State regulation in the field of industrial outsourcing should also promote the intensification of research and development aimed at devising innovative technologies and appropriate equipment for Arctic use.

Since the market of industrial outsourcing has not been fully developed, industrial enterprises are wary of their choice of industrial service provider. The management of industrial enterprises should pay special

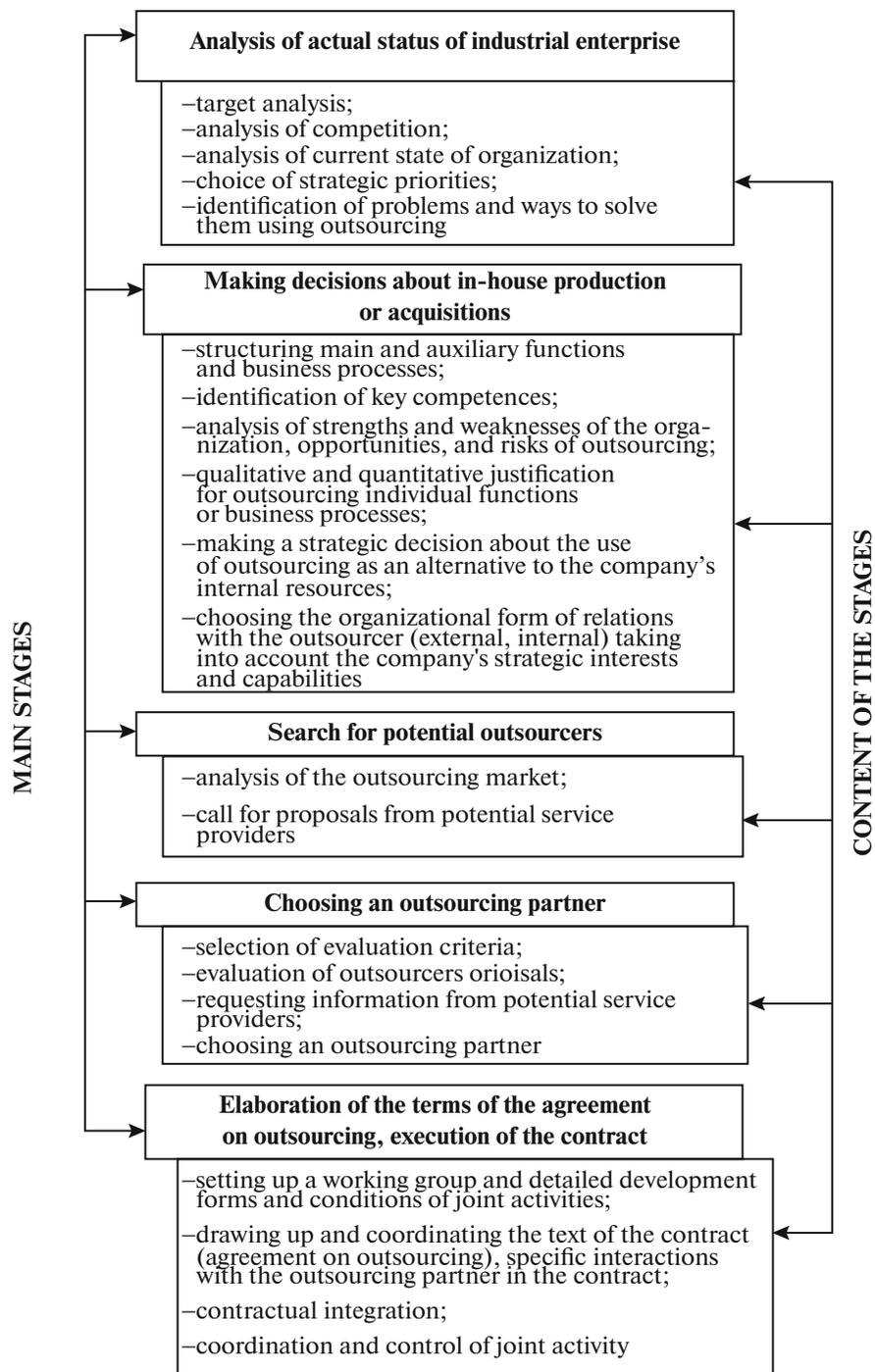


Fig. 1. Algorithm for making decisions about outsourcing noncore activities.

attention to the justifiability of the costs of industrial outsourcing and the effectiveness of its use.

At the same time, in order to increase their competitiveness and conclude long-term contracts, providers of industrial services, especially small enterprises, must offer a wide range of services with the possibility of combining them into an integrated package.

Due to the absence of universal methods and financial models for calculating the efficiency of using industrial outsourcing, the management of industrial enterprises is forced to make managerial decisions without necessary justifications, relying on existing practice and conventional recommendations. However, the relative brevity of practical experience in this field makes it impossible to guarantee a positive result

of this approach at the moment. The government should promote the comprehensive development of industrial outsourcing by attracting small businesses [19].

Conclusions. Thus, the growing demand for product quality, diversification, and the expansion of variety and competition in world markets seriously challenge the industrial enterprises of the Arctic for devising new forms of integration links. In this regard, introducing innovations using industrial outsourcing can contribute to the development of infrastructure, accelerate the implementation of investment projects, preserve and increase the number of jobs, increase tax revenues, and create a favorable business climate.

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