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Conceptual foundations for the formation of economically feasible costs in railway transport enterprises

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Abstract. The article deals with the need to improve the cost management system of the railway transport of Ukraine in current economic conditions. Diagnostics of the cost management system demonstrated that modern methods of cost optimization have not been fully used so far. Optimization is often considered as the reduction in the resource use; therefore, due to price increase of materials and other resources, it frequently leads to negative consequences. In addition, the cost management system itself and its diagnostic tools are aimed at analyzing the past, but not shaping future development, which reduces the efficiency of financial management. The article outlines a system of principles for the formation of economically feasible costs, including the requirements of two blocks. The first block is aimed at increasing the efficiency of the cost management system as an integral part of the enterprise management system. The second one is aimed at ensuring the practice of transparency and open interaction with key stakeholders. The authors substantiate the organizational and economic approach to the implementation of segment-oriented cost management. This approach is based on (1) regulatory framework in terms of composition and specification of the costs that are not taken into account in the regulation of price and tariffs; (2) ensuring the procedures for compliance of the nomenclature of income and expenses); (3) use of systemic and situational cost management tools for adaptation and enhancing of competition policy and reforms implementation. Cost management of various segments (freight, passenger transportation, ancillary activities, etc.) requires different management forms and techniques. The provisions of the suggested conceptual approach to cost management of railway enterprises should be implemented in close accordance with two key factors - (1) the strategic principles of the railway enterprise development and (2) its revenue management system.

Keywords. economically feasible costs, cost management, railway enterprises, principles

1. Introduction

The state of railway transport undergoes a long reform process caused by an ineffective financial system, outdated physical infrastructure, a lack of its own resources and the absence of funding from centralized sources. At the same time, alongside with the formation of JSC “Ukrzaliznytsia” in December 2015 and the introduction of corporate governance in the

activities of railway enterprises, changes in the forms and methods of management of activities and their components begin. After a loss-making period, the company began to make a profit in 2018-2019. Meanwhile, the sphere of passenger transportation remains unprofitable. At the end of 2019, the corporation allocated companies responsible for passenger, cargo transportation, and infrastructure. All these conditions lead to changes in various areas of activity, including in cost management.

The dominance of the growth rate of expenses over the growth rate of income remains a common feature of the railway enterprises business activities, and the total income is minimized due to the losses in passenger transportation - in the amount of up to UAH 12 billion a year. At the same time, the present-day theoretical, methodological and regulatory framework for the cost management system in the industry does not fully enable creating conditions for the effective operation of railway transport enterprises; therefore, such a financial system does not allow for the innovative and investment reproduction of the facilities and resources of enterprises.

The theory and practice of cost management is of particular interest with regard to the evolution of scientific thought and changes in approaches to the forms and techniques of such a process. The scientific basis for the study of the theoretical frameworks of the economy of railway transport and practical aspects of cost management are presented in the research publications of Ukrainian and foreign researchers, namely, A. Cherep, K. Karacharova, O. Kirdina, O. Kravchenko, N. Lisonkova, M. Potetiueva, L. Tsimbalyuk [1-7] and many others. Taking into account the achievements of scientists, modern challenges and reforms of the local economy, it is necessary to manage changes, including the formation of economically feasible costs at enterprises, which contribute to the adaptation of the railway industry to the market environment. These factors determined the choice of the research goal. The purpose of the article is to study the theoretical and methodological background of the formation and management of economically feasible costs in the companies within the railway industry.

2. Concept and Hypothesis Development

Cost management in work is considered to be a system for making and implementing decisions on the formation, coverage, regulation of costs in accordance with the development goals of a railway enterprise.

In such a system, an important system forming element, economically feasible costs, is conceptually formed. At the same time, cost management cannot be carried out separately. It is part of a holistic financial result management system based on the aligning of revenue and cost management systems, price regulation for rail transportation, compliance of these processes with the principles of consistency, transparency, controllability, balance, etc.

The structure of the cost management system in railway transport includes the management object (a purposeful decision-making process on the costs formation, coverage, regulation) and the management subject (centers of responsibility for costs by segments, types of activities, etc. It bears specific functions, target orientation and influence on tariff setting in the industry.

Cost management is a complex process that reflects the influence not only of the specifics of transport production, but also of the state and development of economic relations in the industry; it covers the relations of transport stakeholders - the state (government agencies), transport enterprises and other participants in the transport market, railway service consumers, numerous interested parties. Reasonably, the cost management system requires scientific research and development of conceptual foundations for the formation of economically feasible costs of railway enterprises on their basis.

In general, the economically feasible costs are the ones determined by the state and industry standards for the consumption of resources, the established taxes and fees rates, taking into account the conditions and factors of the economic activity of enterprises. Thus, the category reflects objective economic relations that characterize the process of providing transport services in modern conditions.

In order to establish the level of economically feasible costs, it is necessary to take into account not only the specifics of the organization of transport production, but also the need for investment renewal of the industry. That is, economically feasible costs must necessarily take into consideration the investment component.

So, economically feasible costs are the optimal amount of total costs expressed in monetary form, the structure and composition of which are determined by accounting standards, state and industry regulations, technical regulations and financial and economic requirements for the quality of work and services. Their value enables to compensate spendings on all types of production resources for the provision of the transport and accompanying process, the investment component for the development of the industry. Based on economically feasible costs, the calculation of flexible, reasonable, comprehensible for the client transport rates is carried out.

Although the goal of the cost management system is to provide the conditions necessary for the implementation of the goals set by the enterprise, the analysis of theory and practice in this area confirms the fragmentation of the methods used, the non-compliance of the cost management system with the development strategy of the industry, enterprise, and, especially, the business model of the enterprise. Cost management in down economy is most often perceived as cost cutting, even in those business processes that add value. Cost management continues to be based on retrospective analysis of activities and it is not sufficiently focused on the future and development of the organization.

In order to develop the foundations for improving the cost system, industry analysis is of great importance, the study of the peculiarities of the formation of economic relations, both within the organization and with stakeholders, taking into account positive international experience in resource management, etc.

So, when preparing a conceptual approach to managing the costs of railway transport enterprises, one should also consider: the scale and specifics of railway transport technology, the importance of forming resource reserves, the difficulty in their rapid reproduction (in particular, this applies to narrow-focused railway transport specialists), the impossibility of forming stocks of finished products, long duration of current reforms in the industry and, to a certain extent, their formality, it is advisable to pay special attention to market instability, environmental uncertainty and the presence of numerous risks, etc.

The objective need for the formation of economically feasible costs is caused by the need to ensure transparency, openness, scientific support for calculating costs as a basis for establishing fair tariffs for railway transportation of goods, passengers and related services. This requirement is reinforced by the need to ensure compliance with standards (international, industry, quality standards, etc.), an extremely important consideration for meeting the needs of investment development in railway transport enterprises, the need to comply the cost system with indicators of accounting and analysis of income, volumes, quality of work and services, reflection of the conditions and factors of activity, the need to align the system with other requirements of the participants in the cargo delivery of and passengers, balancing their economic interests.

Transparency and openness of interaction with key stakeholders is the basis for ensuring long-term partnership, creating favourable climate for investment development and, as a result, increasing the efficiency of the industry. In this sense, the apprehensibility, visibility and clarity

of the process of forming the costs of economic activity, the presentation of materials on planning costs in an accessible form that is understandable for stakeholders and a wide audience is important. Its reliability is equally important. Also, the possibility of verification, mainly in terms of compliance with indicators of other analytical groups.

Analysis of the factors and conditions for the development of economic processes in the industry made it possible to substantiate the system of principles for the formation of economically feasible costs (fig. 1), in particular, the basic requirements for the costs system are divided into two key blocks, the first of which is aimed at increasing the efficiency of the cost management system as an integral part of the enterprise management system (principles of consistency, consistency with the revenue management system, etc.), the second - includes principles aimed at ensuring the practice of transparency and open interaction with key stakeholders (orientation to international standards, clarity of the cost formation process, etc.).

Figure 1. Principles of formation of economically feasible costs of railway transport enterprises

This paper emphasizes the need to expand the capabilities of segmented cost management by applying a specific set of forms and methods to a specific segment.

The conceptual foundations for the development of the railway transport cost management system are based on (1) state support in the legislation field, (2) preventing from forced non-interference in the key business processes of JSC *Ukrzaliznytsia* by eliminating unacceptable moratoriums on price growth, ensuring the implementation of only subsidized passenger traffic, on the other hand.

Clarification of the essence and content of the principles of cost management creates the basis for the formation of a conceptual approach, the key aspects of which are presented in fig. 2.

Figure 2. Conceptual approach to the formation of economically feasible costs for railway transport

The approach demonstrated in fig. 2 correlates with the structure and content of the segments of activity identified in society and the requirements for their functioning based on the validity, usefulness (return) and commercialization in accordance with the needs and objectives of the enterprise development strategy.

The cost management system in case of using the principles of this approach is aimed at the formation of economically feasible costs stemmed from the needs of establishing fair tariffs, as well as making a profit, the use of which will contribute to the development of transport production.

The conceptual conditions of the formation of costs in railway transport also include such economic components as: prerequisites, factors and the mechanism of cost management.

It is advisable to analyze the prerequisites for the formation of economically feasible costs of railway enterprises as general, relevant conditions and features of the development of enterprises: economic, globalization, etc. It is also important to take into account the

contradictions of development since their solution allows you to qualitatively change the economic situation.

In general, the contradictions are associated with: (1) the peculiarity and essence of the economic category "costs" (difficulty in accounting, diagnostics, planning), the need to develop economically feasible cost rates, updating standards, improving cost accounting by segments and industries) and (2) regulatory - methodological support (lack of direct comparison of income and expenses, fragmented use of budgeting and cost controlling tools, orientation of the cost system towards retrospective, the need to settle the costs of redistribution, costs that form the expense part of the tariff, costs attributed to the cost of transportation, etc.).

To implement a systematic approach to cost management, it is advisable to analyze internal factors that affect the operational and supporting activities of railways and external factors that characterize environmental changes and have a general impact on the cost formation system. Taking into account such a combination of factors makes it possible to determine and implement the direction of cost management in current economic development.

In practice, a systematic approach to cost management is implemented by using cost control at railway transport enterprises, which is a process of information support, planning and monitoring of business activities. Controlling is aimed at transferring the focus of management from controlling the past to the analysis of the future (diagnostics of changes in the internal and external environment, changes in the value of an economic object, etc.). The economic category includes not only accounting and control, but also a system of managerial decisions. Such decisions deal with costs optimization.

In the implementation of the conceptual framework, a mechanism for managing costs in railway transport is of great importance. It contains a element-by-element (sequential) components for planning costs and adaptive adjustment of management procedures, establishes a relationship with centers responsible for a certain element of the system. In the mechanism structure, it is important to coordinate the elements of cost management with the principles of strategic development of the industry and the revenue management system. At the same time, for each successive element of the mechanism, its procedure and responsible executors are assigned. Such a mechanism is implemented on the basis of NOT a retrospective cost analysis, but is aimed at strategic development (changes dictated by the market situation, marketing research, development of business processes that provide additional value, liberalization of pricing in potentially competitive activities).

It is also reasonable to implement the assessment of change feasibility in cost management. At the same time, it is advisable to evaluate the efficiency of cost management in two directions: 1) in accordance with the level and nature of achieving the set goals (current and strategic nature, changes in the value of economic objects, etc.); 2) taking into consideration the compliance of the cost management system with the income and profit management systems, and, therefore, taking into account the indicators of obtaining positive outcomes from the implementation of certain types of expenses.

3. Conclusion and Suggestion

The analysis of the conditions and factors of cost management in railway transport made it possible to substantiate a conceptual approach to the formation of economically feasible costs, which is based on a combination of the advantages of two types of cost management - segment-oriented (for each of the 5 business segments, certain forms, methods and management tools are used) and system-situational (cost management is inseparable from the income management process, while situationality provides for adaptation by making reasonable adjustments to the system, in particular, for the most part in the process of making decisions on the formation,

spending and control over expenses in accordance with the changing situation (economic, political, etc.).

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