INSTITUTIONAL FOUNDATIONS OF DEVELOPMENT OF THE AIR TRANSPORT SECTOR AND SUPPORTING INFRASTRUCTURE

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Annotation. This article deals with the author's view on the concept of development of air transport system, which can be the basis of the branch program documents. The author presented a preamble and the main directions of realization of the development strategy. The article identifies the main directions of institutional regulation of the sector development. Institutional mechanisms for regulating the development of the air transport sector and supporting infrastructure were outlined. In article also was considered the issues of creating new integrated cross-sector air-transport associations – strategic alliances.

Keywords: aviation transport, supporting infrastructure, integrating, the concept of development.

Formulation of problem. Ukraine's economy is demand by the transition from the crisis to the stages of progressive development. However, the processes of development by economy sectors are uneven, the crisis is continued in some industries and there is a decline in production. In the system of social and economic transformations, the exceptional place takes the problem of underdevelopment of the major sectors of economy to which belong the transport system, including air transport and all kinds of service for it, where the situation is difficult during to pandemic crisis.

Official statistics show that passenger turnover of air transport decreased by 67% in 2020 (Figure 1). Cargo turnover of air transport in 2020 increased by 7%, but it is not significant - it reaches only 316.2 mln.tkm.



Fig. 1. Passenger-kilometres performed, by air transport, mln.Pass.km [1]

The situation with the Ukrainian air transport sector and support infrastructure requires the development of strategy for interconnected transition of enterprises of the two spheres to new condition and development of the newly established system.

The problems of the air transport sector and support infrastructure have received considerable attention from scientists and practitioners, and the scientific and analytical articles have been dedicated to them [2-6]. In these studies, the problematic aspects of development of the air transport system have been considered.

State policy documents on the development of the air transport sector are constantly being developed and improved [7].

However, the problem can not be considered solved, because today there are new challenges that need to be solved for the development of air transport system and its infrastructure. Considering this, it is necessary to form a comprehensive view on the development of air transport sector and support infrastructure.

Research methods. This work was based on the analysis and synthesis of theoretical, methodological and practical aspects of the development of the air transport sector. The abstract-logical method was used to form the structure of the strategy of development of the sector, generalization of scientific provisions.

The work is based on the study of scientific publications, Internet resources, the authors' own observations.

The main objective of the article. In this article, the authors offer their own perspective on the concept of development of the air transport sector and support infrastructure, which can be the basis of branch program documents.

Exposition of the basic material. The experience of economic reform in the Ukrainian economy has shown that the reforms do not always give proper feedback because of inadequate

regulation of the problems at the state level, lack of the responsible owner, the legislation unadjusted to the reality of our economic and national outlook. Therefore, only science-based systematic and consistent approach to the economic problems of formation and development of domestic economy will enter the real nature of the problem of the one of the leading sectors of national economy – transport and its supporting infrastructure, taking into account the realities of their operation.

There are several good reasons for the need of simultaneous rise of the transport sector and its supporting infrastructure:

- First, the transport sector can't play its traditional role in the development of the economy, if not combined its human and material resources and not be developed workable national policy in the transport development;

- Second, with the development of the transport and support infrastructure, the processes of specialization and diversification activates, and that will ensure the competitiveness of domestic transport services;

- Third, there are sectors of the economy, which should not be left in isolation. Insufficient development of the transport sector leads to a future Ukraine's dependence on foreign carriers. Joint efforts of transport companies, their infrastructure, and the government is the basis for freedom of choice in the development of the economy. Accelerated scale use of the potential of transport sector in the near future would improve the situation not only in these industries, but also in the industries which use transport services, especially in foreign trade sphere.

1. General of the Concept for the development of the air transport sector.

The Concept must define ways to solve the problems of revival and further development of the air transport system and its supporting infrastructure, on the basis of the new challenges set before air transport companies in terms of pandemic crisis and process of international integration.

The development of the air transport sector and support infrastructure necessitates finding and implementing new strategies for the management of companies and the sector as a whole. The insufficient organizational and methodological assistance, the dynamic changes of conditions of markets and the risk of stagnation due to quarantine restrictions identified the lack of an integrated approach to the design and implementation of development strategies for the companies of air transport and support infrastructure.

The basis for the success of the reform of air transport sector should be well-functioning infrastructural base. It will implement communication between the participants and the components of the economic organism of the air transport sector. A reliable supporting infrastructure is central in the development and successful operation of air transport companies and a prerequisite of growth and stabilization of the economy of aviation transport. Therefore, the most important at the present stage of development of the air transport sector is the

establishment of a sound infrastructure base.

All this determines the need for complex organizational, legal, economic, technical and technological measures directed to both the near- and long-term perspective that would ensure the development of the air-transport-integrated structures in the closest connection with the processes occurring in the global and domestic economy contributed to the development of productive forces of the country, social welfare of the population.

2. The goals and objectives of the Concept.

The concept has the following objectives:

- Creating conditions for further development of the air transport system and support infrastructure;

- Phased implementation of institutional reforms in the air transport sector and support infrastructure sectors of the economy by improving management, demarcation of functions of the state and economic management, the development of competition in the market of transport services;

- Accelerating the modernization of technical base of the air transport sector and support infrastructure, development of new approaches to innovation and investment policies aimed at achieving the objectives of the Concept, including raising capital in all forms, which are not prohibited by the legislation of Ukraine;

- Accelerate the integration of enterprises in the form of strategic air-transport alliances on the principles of mutual interests, adapting national legislation to the existence of the integrated structures, closer to international standards, specifications, technical performance and economic requirements in the area of air transport services.

The main tasks to achieve the objectives of the Concept should be:

- Creation of a common legal field of the air transport sector and support infrastructure businesses, taking into account national and international standards;

- The introduction of an effective system of the state regulation and control of the market of transport services to ensure the development of domestic air transport sector;

- Strengthening the coordinating role of the state in the development of integration of different modes of transport and supporting infrastructure, first of all of joint (international) value, increasing the efficiency of interaction with companies in other sectors of the economy;

- Create conditions for improving the competitiveness of domestic air transport enterprises in domestic and foreign markets by implementing a set of measures of the state support for the Ukrainian transport services;

- The effective functioning of national integrated institutions and consolidation into a unified system of the multi-transport complex, which taking advantage of the geographical location;

- Development and implementation of direct and indirect state financial support for the

infrastructure of air transport in accordance with the market economy mechanisms;

- The creation of a common information space of the transport complex on the basis of modern information and management systems, the development of databases;

- Development and intensification of the scientific potential of the aviation transport, the development of a forward-looking system of training and retraining for the air transport sector and the supporting infrastructure;

- Development and implementation of social policy in the air transport sphere as part of an overall policy of development of the transport sector.

The principles of the policy branch of protectionism in respect of the air transport system and supporting infrastructure should be the following:

- A policy of credit expansion and investment in respect of the air transport sector. A higher priority to fund the development process by means of domestic resources, so this policy should take into account the more favorable conditions for investing industry by the domestic owners of capital;

- Creating conditions to encourage internal competition of the sector, or eliminate the negative effects of the lack of competition. This is a necessary condition for the development of the industry. The experience of protectionism in some countries shows that in the absence of competition, the enterprises are losing incentives for development [8]. However, there is an alternative to creating an internal competition – legal, organizational and technological measures to form development incentives that will enhance the positive processes even in a non-competitive environment;

- Increasing specialization of transport and supporting enterprises;

- Increasing the level of organization and coordination of the interests of individual companies with the interests of the whole sector and the interests of the state.

3. The main lines of the Concept.

3.1. Improvement of the state regulation of the air transport sector and support infrastructure.

State regulation of the air transport sector and support infrastructure in the context of the modern market and present-day challenges must ensure a balance of national and corporate interests and be based on the allocation of responsibility for specific areas of activity of the air transport sector between the state and enterprises.

The competence of the state:

- The creation of the legal framework of air transport system and enforcement of legislation;

- The establishment and maintenance of a unified multi-transport space coupled with infrastructure;

- Financing of the air transport sector in an innovative direction of development;

- Quality and safety control of transport services and ensuring its social standards;

- Implementation of the non-discriminatory actions to protect the interests of the state and national companies in relation to the transport services;

- Promotion of investment in the air-transport associations.

The main forms of government regulation should be the laws of Ukraine and other normative-legal acts, the target program for the development of air transport sector and supporting infrastructure, mechanisms of standardization and control. The tax, credit and financial, customs and other economic levers are to be used for their effective action.

The priority areas of government regulation in the air transport complex should be the scope of such activities as the introduction of innovative and resource-saving technologies, complex automated systems of processes management and quality, development of information systems.

3.2. The main objectives of the development strategy of the air transport sector and support infrastructure must be:

- Actions to increase profitability in the short term and in the future;

- Actions in response to changing conditions in the transport sector (changing tax environment, air cargo tariffs and rules, fuel prices, etc.);

- The application of efforts to build links between the transport, industrial, trading and supplies structures;

- Efforts to integration in the transport-logistic chain;

- Precautions against external threats;

- Steps in the formation of corporate diversification strategy;

- To improve the quality of transport services;

- Actions to the maximum possible use of the potential of transport and support enterprises;

- Building relationships between the partners on a mutually beneficial basis;

- Measures to improve the technology of transportation services;

- The integration of science in the air transport sector.

The economy of air transport requires forming a consciously differentiated approach to the quality of services in order to achieve harmony of the existing resource base with the transport technologies in the context of its further development. In other words, with the implementation of the strategy should be created a dynamic complex that provides today and in the future production of competitive services in the geographical conditions of the Ukraine.

3.3. Organization forms of the development of integrated air-transport association.

In modern conditions for the development of integration structure of air transport sector and support infrastructure this kind of integration organization as a strategic alliance makes it easier to solve the problem of achieving the strategic objectives of the domestic air transport

sector.

The air transport alliance is a single economic complex, which has the character of a network composed of airlines, airport operators, airport on-site enterprises (restaurants and retail), aircraft manufacturers, and air navigation service providers, research, design and other businesses.

Creation of such a union can realize the benefits of scale effect. The effect of scale of integration reduces the so-called interaction costs, which include the costs of searching for information on a constant exchange of information with partners, monitoring the actions of competitors and develop on this basis the objectives, strategies and tactics [9]. Added to this is the possibility of more centralized control over the activities of the structure. Integration enhances synergies in the implementation of various activities of the alliance members, which leads to increased efficiency of the system.

The increase in the scale of economic units provides enhanced commitment to our partners, so it is necessary to provide for a close relationship between the parties that would enable mutual control. Alliances between major companies should have close ties in the form of mutual shareholding. Enterprises in addition to the basic operation activities use the goods and services of each other. Combining at the expense of the companies that are part of it, may acquire other businesses. But at the same time, these businesses have a certain degree of independence.

The structure of air-transport alliance clearly defined as a network in which all the constituent objects are on equal cost-organizational settings, meaning they can enter into contracts and exchange values (ideas, technologies, know-how) on mutually voluntary basis. The collective basis of alliance management on equal footing is due to cross shareholdings of the members of the alliance and cooperation of production.

Governance structure of the alliance depends on the size and structure of the enterprise. Creating mutually beneficial peer interactions in the air-transport alliances will be ensured through the establishment of the main control center or organization network coordinator. Therefore, the coordinator assigned operational functions.

Strategic decisions must be implemented by the Council of alliance, which consists of the directors and presidents of companies and firms. The Council will promote the strengthening of ties, exchange of information, identifying areas of mutual interest and ways to achieve them.

The effectively developed complex as a single autonomous operating system, which integrates and balances the needs and interests in the process of transport service, will direct the alliance for the development of the scope and quality.

The main role of the proposed air-transport alliance is to overcome non-winning positions in the work of enterprises in the market conditions.

Strategic alliances can solve a number of problems:

- The problem of ensuring the necessary resources;

- The problem of balancing the needs and obligations between the alliance members;

- The formation of the alliance creates the conditions for increasing the productivity of labor and the quality;

- The problem of implementation of a comprehensive quality management system and the economical use of resources;

- To ensure the sector of professional staff and the high level of employment. Stable wages and high production are formed by part of the distributable profits;

- Better financial opportunities of the alliance, which allow to focus significant resources to ensuring that the investment attractiveness of the sector.

The system of alliance management in our view should include a special structure for the coordination of all business associations. This structure is designed to provide advice to companies for a variety of operational and management issues, such as: strategy and tactics competition, market research, preparation and examination of business plans, evaluation of investment and marketing activities, etc.

The principles of air-transport alliances:

1. The first and fundamental principle of the alliance is to operate a framework of real resources. This means that the alliance should provide not only a quantitative relationship between their units, but also to strive for compliance with the specific use of production assets, which are part of the alliance. That is, links of the alliance must make the most of their specific resources and capabilities in solving their problems and challenges, as well as the problems and challenges of the alliance.

2. The second important principle that should guide the activities of air-transport alliance is economic independence, which provides systems and economic responsibility for their performance. Economic independence provides for freedom of disposal of own and borrowed funds by units of the alliance and by the association in general, free choice of industrial relations, the disposal of income. The entire risk from operating activities of the alliance, each subject must assume in part defined in accordance with the principle of risk-sharing by financial capacity of participants.

3. The third principle is that the alliance relationships with partners are as normal market relations. Production activity of the alliance is carried out primarily on the basis of market criteria of profitability, risk and liquidity.

4. The fourth principle – regulation of the alliance can be carried out only by indirect methods. Alliance Council defines only the "rules of the game" for the links, but does not have the possibility of direct regulation.

Joining forces on the basis of integration means strengthening of linkages in the formation and development of transport sector. Ukraine should get as much benefit from national and regional advantages, so the development of the transport sector is indisputably within the scope of the current economic policy.

Conclusions. The main ideas in the development of a strategic vision and mission of the future of the air transport sector and support infrastructure are defined as companies' cooperation for the joint use of technical and technological capacity, joint research, exchange and harmonization of processes, promotion of the services created by the combined efforts in the market. Such formations will achieve synergies, enhance joint capabilities of all parts of the Ukrainian air transport sector and support infrastructure in the creation of competitive cervices. This vision defines the mission and future sector.

The emphasis in this case should be made to:

- Creation of missing links in the economic chain (vertical integration);

- A flexible range policy (diversification strategy);

- Support and expansion of investment activity by attracting domestic and foreign investment.

The air transport sector has its own characteristics and requires specific approaches and methods. To develop a strategy of vertical integration in order to create a strategic air-transport alliance, which would cover the entire process chain, you need to meet new specific objectives:

1. The definition and nature of vertical integration in the air transport sector as an objective need for development.

2. Substantiation requirements for the development the sector and use of technologies.

3. Substantiation and elaboration of the development models.

4. Determination of the development stages of the air transport sector.

5. Formation of the mechanism for implementation of the program for development of the integrated structures.

References:

[1] State Statistics Service of Ukraine. URL: https://ukrstat.org

[2] Kyrylenko O.M., Novak V.O., Razumova E.M., Mostenska T.L. Transport development trends Aviation in Ukraine. Economy. Finances. Right. 2020. 1. 1 /2. 46-52.

[3] Novak V., Marchenko V., Perederii V. Scientific basis of management of transport companies' interaction. Airtransport. 2016. 1 (11). 31-36.

[4] Savych O., Shkoda T. Trends of air transportation market development in Ukraine. Innovative Marketing, 2020. 16(2), 29-42. doi:10.21511/im.16(2).2020.03

[5] Dimitriou, D., Sartzetaki, M. Assessing air transport socio-economic footprint. International Journal of Transportation Science and Technology, 2018 7(4), 283-290.

[6] Zhavoronkova, G., Sadlovska, I., Shkoda, T., & Zhavoronkov, V. Stratehichne upravlinnia aviatransportnykh pidpryiemstv. Strategic management of air transportation enterprises. 2012. Kyiv: Kondor-Publishing. (In Ukrainian)

[7] On approval of the National Transport Strategy of Ukraine for the period up to 2030. URL: https://zakon.rada.gov.ua/laws/show/430-2018-%D1%.

[8] Capitalism in Denmark / O.Yu. Abashkina. Brazil: formation of an "open" economy. /
I.A. Bunegina. – M.: Znaniye, 1992. – 80 c. - (New in life, science, technology. Series "Economy";
#2-3)

[9] Sokolenko S.I. Production systems of globalization: Networks. Alliances. Partnership. Clusters: Ukrainian context. Kiev: Logos, 2002. 645p. [in Ukrainian]



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ანოტაცია. წინამდებარე სტატია ეხება ავტორის შეხედულებას საჰაერო ტრანსპორტის სისტემის განვითარების კონცეფციის შესახებ. ავტორმა წარმოადგინა პრეამბულა და განვითარების სტრატეგიის განხორციელების მირითადი მიმართულებები. სტატიაში განსაზღვრულია სექტორის განვითარების ინსტიტუციური რეგულირების მირითადი მიმართულებები. გამოიკვეთა საჰაერო ტრანსპორტის სექტორის განვითარების მარეგულირებელი ინსტიტუციური მექანიზმები და დამხმარე ინფრასტრუქტურა. სტატიაში ასევე განხილული იყო ახალი ინტეგრირებული საერთაშორისო საჰაერო ტრანსპორტის ასოციაციების - სტრატეგიული ალიანსების შექმნის საკითხები.

საკვანმო სიტყვები: საავიაციო ტრანსპორტი, დამხმარე ინფრასტრუქტურა, ინტეგრირება, განვითარების კონცეფცია.