Challenges in developing integrated transport space over the world economic integration associations

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Abstract. Institutional, organisational, managerial, and financial problems typical for the development of transport systems of regional integration associations, major transport and logistics projects, such as EU or BRI, have been systematised by the author. The interrelation of the highlighted problems from the point of view of limitation of maximization of efficiency of transport and logistics processes and functioning of the unified transport system as a result of their influence is shown. Particular attention is paid to managerial, financial and economic problems in the sphere of transport integration. Key words: transport, integration, integrated transport space, integration associations

1 Introduction

For the development of virtually all transport systems of modern integration associations in the world economy, to a greater or lesser extent, some typical problems are characteristic which, in our opinion, have not been sufficiently systematically considered in the special literature.

Let us consider and systematise the main groups of problems that are, to varying degrees, characteristic of the transport systems of virtually all functioning and significantly affecting the effectiveness of the development of the transport complex of international integration associations, namely:

- 1. Institutional problems, the main ones of which, in our opinion, are:
- 1.1. Relatively high level of declarative character of plans and programmes of development of transport systems of integration formations, low degree of actual implementation of individual strategic provisions of such normative documents. The importance of this problem for the modern transport system of such a rather dynamically developing and transparent interstate integration formation as the EU is pointed out, in particular, by G. Diezen.

Indeed, a number of provisions of the EU strategic documents concerning various aspects of the development of the unified transport system of this integration formation, including those set out in the White Paper in the field of transport, are rather general, even formal, due to the following main reasons.

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- the declarative nature of the highlighted quantitative criteria for the development of the EU's unified transport system, particularly for the long term (up to 2030, 2050, etc.)
- insufficient definition of some institutional mechanisms of implementation of technical-technological transformations in the EU transport;
- not clearly defined composition and structure of financing sources for strategic transformations within the EU single transport system.

Regarding the legal documents of a strategic nature that regulate the processes of development of transport systems, especially in the CIS, the declarative nature of many provisions of such legislative acts prevails over their actual implementation.

- 1.2. Insufficient improvement of the public control institution over the development of the integration formation's transport system and its social, financial, and economic efficiency. This institutional problem is particularly characteristic of such integration formations as the Union of South American Nations, the Union of African States, and the League of Arab States, which are characterised by a rather low level of development of democratic mechanisms in their member countries.
- 1.3. Significant influence of the shadow, informal institution of corruption on the pace and proportions of development of the transport systems of the modern integration formations.
- 2. Management problems in the functioning of modern transport systems of integration formations, the most significant of which are
- 2.1 Lack of adaptability, strategic flexibility of processes, and organisational structures of transport systems development management of most modern international integration formations. The importance of this problem for the management of the EU transport system at the end of 2010 is pointed out, for example, by L. Ambrosio. According to V.P. Nekhoroshkov, the organisational structures of transport system management in the SCO and BRICS are not flexible enough, not quite receptive to changes in the external financial and economic environment.

In fact, this managerial problem has become quite apparent in the pandemic crisis of 2020-2022. At the first stage of this large-scale crisis situation, the transport systems of almost all the integrating entities of the world economy could not promptly adapt to the new socioeconomic conditions, including new sanitary and epidemiological safety standards, new needs of economic entities in formats and directions of cargo routing, etc. At the level of international integration entities, unlike at the level of national macroeconomic regulation, no effective measures have been formed to support entities of unified transport systems under the rather difficult financial and economic situation due to the prolonged impact of the pandemic crisis.

- 2.2 Inadequate efficiency of management processes for the formation, development and improvement of international transport corridors. The importance of this problem, especially in relation to ITC passing through the territories of the countries which are the subjects of various international integration formations, is pointed out, in particular, by the World Bank specialists.
- 2.3 The level of bureaucratisation that characterises the development, adoption and subsequent implementation of management decisions within some of the transport systems of modern international integration entities is quite significant. A.V. Yakimov, in particular, points out the importance of this problem, particularly for the level of management of transport processes within ASEAN and BRICS.
- 2.4 Not quite intensive and comprehensive use of modern digital economy tools (Bigdata, ICO, blockchain, cloud technologies, etc.) in the practice of managing the development of integrated transport systems of integration entities. This management problem in relation to the regulation of the processes of functioning of transport systems of integration entities is brought up to date by J. Odijo. According to his assessment, such

advanced digital tools are much more intensively and effectively used at the level of management of transport processes within individual corporations, including TNC, rather than at the level of interstate management of transport system development processes.

- 3. Financial problems in the functioning and development of transport systems in the integration formations of the modern world economy. Typical of such problems, according to the author of the article, are:
- 3.1. Inadequate use of the potential of bank lending, especially long-term lending, for the development of transport systems of modern integration formations of the world economy. Statistical data on the level of use of bank lending as part of financing the transport systems of the leading modern international integration formations is presented in the following Figure.

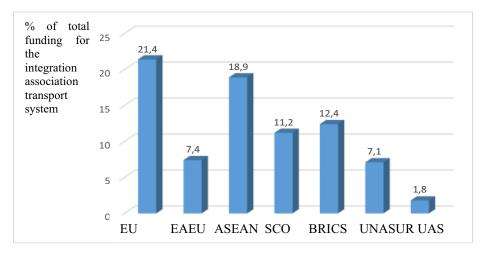


Fig. 1. Average share of long-term bank lending in the structure of financial support for the development of transport systems of the world's leading integrated economic entities, 2020. Source: compiled on the basis of [6].

Figure 14 shows that long-term bank lending as part of the financial management of transport system development projects and programmes is relatively active only within integration entities such as the EU and ASEAN (21.4% and 18.9% of total transport system financing, respectively). In some EAEU member states and in the post-Soviet space as a whole, mechanisms for long-term bank lending to legal entities (credit support for their development for a period exceeding 1 year) are traditionally used rather passively due to the increased risks of this type of lending for commercial banks and the lack of effective preferences for lending institutions actively developing this type of lending in the national law systems of some EAEU member states.

As for, for example, the Union of South American Nations (UNASUR), the underdevelopment of the institution of bank lending, including in terms of financing the development needs of transport systems in South America, is primarily due to fairly significant inflationary processes, typical of most Latin American states in 2010 - 2020. Under the same financial conditions, intensifying long-term bank lending processes for transport projects and programmes seems not only extremely risky, but even economically inefficient to a large extent. In contrast, in Central Africa (the integration formation of the African states), bank lending for transport infrastructure projects and businesses in general is virtually nonexistent in the modern sense: within this group of countries, lending processes are confined mainly to micro-financing of certain groups of people.

On the whole, insufficient use of the economic potential of long-term bank lending in the development of the transport systems of the majority of the modern world economic integration formations limits the intensity and efficiency of the latter due to the following main reasons

- limited possibilities for financial backing of the formation and development of largescale investment projects to modernise the transport infrastructure of integration formations
- Insufficient use of the financial leverage effect, known in the theory and practice of corporate finance management, i.e., increase in the efficiency of development of projects and programmes, including those relating to the transport complex, through an increase in the share of borrowed capital of an acceptable value in the total structure of financing sources
- the potential loss of efficiency in the management of projects and programmes to develop the transport systems of integration alliances, because in one of the common, in particular in the EU and the USA, mechanisms for bank lending (project lending) the commercial bank is taking a qualified part in the co-management of the relevant project.

In fact, the positive impact of enhancing the use of bank lending potential to improve the efficiency of development of transport systems of integration associations of the modern world economy can be confirmed statistically (Figure 2).

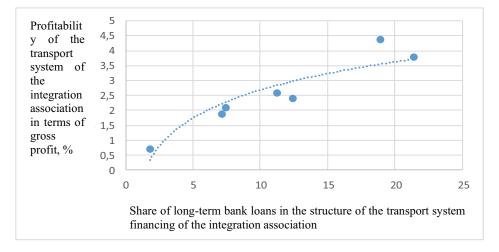


Fig. 2. Impact of long-term bank lending intensity on the average level of profitability of transport systems of the leading international integration alliances (EU, ASEAN, EAEU, SCO, BRICS, UNASUR, UAS), 2020. Source: compiled by the author on the basis of statistical information of EU, ASEAN, EAEU, SCO, BRICS, UNASUR, UAS.

According to Figure 2, the group of leading integration unions of the modern world economy under consideration was characterized by a statistically significant and direct influence of bank lending activity on the growth of transport systems functioning efficiency in 2020 on the parameter of average return on transport services provision.

3.2 Insufficient level of transparency (information transparency) in the management of financial flows of the development of transport systems of integration entities. G. Diezen points out the importance of this problem, among others, for the transport system of the European Union. The reasons for such insufficient transparency are both the previously highlighted corruption problems in the management of transport projects, to a certain extent characteristic even for the EU states, and the insufficiently high level of personnel management in the regulation of development of transport systems of modern integration formations, as well as imperfect financial control tools in the area in question.

3.3. Insufficiently intensive and effective processes of insuring financial and other business risks of transport systems development in the integration entities.

In general, professional risk management is relatively well developed within the framework of unified transport systems management in such integration entities as the EU, ASEAN and UNASUR, where financial, including insurance, markets are built on the basis of the Western model, based on extensive use of professional insurance tools for a significant range of business processes.

At the same time, in the Russian Federation and the People's Republic of China, which are, respectively, the key subjects of EAEU and SCO, the institution of professional insurance of business risks is extremely underdeveloped. For example, in the Russian economy in 2021 the share of entrepreneurial risk insurance for transport and logistics infrastructure projects in the total portfolio of domestic insurance companies was only 0.2%, which is at the level of statistical error. A similar situation of very little use of professional insurance capabilities, including in the implementation of transport system development projects and programmes, is accordingly typical of almost all other states that are members of SCO and EAEU integration structures.

Rather dynamically developing in 2010 - 2022 and effective both socially and financially is the transport system of such international integration formation as the European Union (EU). This thesis is confirmed statistically: in 2020, the share of the transport complex in total EU GDP will be 10.9%, which is 1.3 percentage points higher than the value of a similar macroeconomic indicator in 2010. It is also confirmed by the basic objective geopolitical, financial and economic conditions of the progressive development of the EU transport system, the subjective factors of its functioning, the institutional, managerial and information and communication conditions of effectiveness of the EU integration formation transport system which are typical for the period from 2010 to 2022.

It has been objectively proved that the social and financial efficiency of the transport system of the international integration formation in question is relatively high. The analysis shows that the impact of the EU real GDP change rate on the dynamics of the average level of profitability of the transport system of this integration formation for 2013 - 2021 is characterized by an average level of statistical stability, is increasing. This demonstrates the interconnection and positive effect of a unified transport system on EU GDP growth.

Separately, it should be said about the development of a common transport space also in the framework of major international transport and logistics projects and programmes and, in particular, the Belt and Road Initiative (BRI), initiated by the PRC leadership in 2012-2013 and quite intensively implemented in various regions of the world economy in 2013-2022. The main directions of this programme's implementation are: formation and development of international transport corridors (ITC) of predominantly Euro-Asian character, both land (Silk Road Economic Belt) and sea (Maritime Silk Road); creation and ensuring conditions for efficient development of modern, highly productive and diversified transport and logistics centres mainly within the framework of the BRI main ITCs discussed above; formation of potentially competitive Chinese or joint productions, mainly in end-user goods.

The specifics of the BRI (Belt and Road Initiative) elements as a special transport and logistics programme show its orientation towards using and expanding the economic potential of the transport systems of a wide range of states and several international integration formations (SCO, APEC, ASEAN, EAEU, EU, BRICS). Based on this kind of analysis, we can conclude that, among other things, the BRI programme is strategically orientated toward solving geopolitical problems of the development of various states of the world economy through the implementation of mutually beneficial transport and logistics initiatives.

Therefore, the author has systematised institutional, organisational, management, and financial problems typical of the development of transport systems, major transport and logistics projects, such as EU and BRI, as well as practically all modern integrations of the world economy. The interrelation of the highlighted problems from the point of view of limitation of maximisation of transport and logistics processes efficiency and functioning of the unified transport system as a result of their influence is shown.

References

- 1. V.P. Nekhoroshkov, *Internationalisation of the Transport Complex as a Factor in Russia's Integration into the World Economy: Ph.D. in Economics* (Moscow, 2015)
- 2. A.V. Yakimov, Management and Marketing in Russia 3, 129 (2022)
- 3. Russian statistical yearbook (Federal State Statistics Service Publishing House, Moscow, 2022)
- 4. L. Ambrosio, *Lectures on optimal transport* (Springler, NY, 2021)
- 5. Belt and Road Economics: Opportunities and Risks of Transport Corridors (World Bank edition, 2019)
- 6. G. Diesen, Europe as the Western Peninsula of Greater Eurasia: Geoeconomic Regions in a Multipolar World (Rowman&Littlefield Publishers, 2021)
- 7. G. Diesen, Europe as the Western Peninsula of Greater Eurasia: Geoeconomic Regions in a Multipolar World (Rowman & Littlefield Publishers, 2021)
- 8. J. Odiyo, *Green Economy in the Transport Sector* (Springler, NY, 2021)