

Integrated Logistics as a Competitive Advantage in Tourism Industry of Country

Olga Kol

*Saint-Petersburg State Economic
University*
Saint-Petersburg, Russia
kol.o@unecon.ru

Nataliia Zigern-Korn

*Institute of Earth Sciences
Saint-Petersburg State Economic
University*
Saint-Petersburg, Russia
n.zigern-korn@spbu.ru

Abstract—Today competition in the field of tourism has moved from the level of countries as tourist destinations to a new level - integration associations of countries, i.e. over-macro level. The initiative of the leader of the People's Republic of China Xi Jinping to create new Eurasian geopolitical projects - the Silk Road Economic Belt and Sea Silk Road during the 21st Century or the strategy "Belt and Road Initiative" ("BRI") - involves developing existing and creating new competitive advantages in various areas of economic activity, including tourism for participating countries. However, a practical mechanism for the implementation of the identified areas of tourism development in the framework of this mega-project does not yet exist.

The authors propose using the principles of integrated logistics in the formation of this mechanism. It is the methodology of integrated logistics that will allow to scientifically substantiate and form competitive advantages in the tourism sector at all levels of the hierarchy of this project. These include such as the ability to exchange information and resources between all business entities; lower costs due to the balance of operations, economies of scale; increase in tourist flow due to more informed forecasts, planning and prioritization, more efficient use of various types of resources; balanced tourist flow by season by integrating producer of travel services, tour operators, travel agents and customers into one logistics system; providing quality logistics services to tourists through the development of standardized business processes.

Using the example of the Russian Federation (RF) and the China, an algorithm is proposed for the formation of new and development of existing competitive advantages in the tourism sector within the framework of the BRI based on the use of program-oriented and design approaches. The authors give a conceptual scheme for creating and developing competitive advantages in the field of tourism in the Russian Federation and China within the framework of the mega-project of BRI on the principles of integrated logistics.

Keywords—integrated logistics, tourism, competitive advantages, digitalization, megaproject "Belt and Road Initiative".

I. INTRODUCTION

As known, the transition of modern society to the post-industrial stage of development has become one of the most important reasons for the beginning of the massive development of tourism in the 60-70s. XX century. As a result, tourism has turned into a pressing need for the modern man. As a result, at the beginning of the XXI century, the tourism industry has become one of the most competitive industries in

the world, which has led to a significant increase in competition in the global tourism market. At present, competition in tourism is moving from the level of countries as tourist destinations (macro-level) to the level of their integration groups (super macro-level). Therefore, today the issue of finding new tools for the development of existing competitive advantages in the tourism sector and the formation of new ones has become urgent.

In this regard, the "BRI", presented in September 2013 by the President of the People's Republic of China Xi Jinping in Kazakhstan, is the most relevant and promising in terms of searching for new mechanisms for both developing existing competitive advantages (CA) in the tourism sector and creating new ones - as it uses the existing potential of the tourism industry of various countries, included in this megaproject.

In 2014, the China's leader noted, that "it is necessary to develop special tourism in the context of the Great Silk Road region, to allow the development of cooperation and collaboration in the field of tourism and mutual communication, mutual connection".

According to some Russian scientists [2], the "BRI" megaproject is a concept of co-development and a mutually beneficial situation (win-win situation) for all participants and is aimed at creating the world's largest platform for economic cooperation, including political coordination, development of infrastructure and innovation, improvement of business climate in the region, the implementation of measures for more evenly distribution of factors of production, acceleration of the development of remote areas, reducing costs through the development of economic corridors and industrial parks, technological chains and supply chains, cooperation in finance and ITT, electric power and tourism, expansion of humanitarian cooperation and international exchanges. That is, the implementation of programs and projects in these areas will not only help to develop existing CAs to countries but also creating new ones that will allow them to compete confidently in world commodity and service markets.

In May 2017 a new stage in the "BRI" mega-project's development started, the beginning of which was a speech by President Xi Jinping with a proposal to consider the project, which includes five components: BARI as a "path of peace", "path of prosperity", "path of openness", "path of innovation" and "path of civilization".

It should be noted that despite the fact that 2015 was the thematic year of tourism - "Beautiful China - 2015 - Year of

Silk Road Tourism” [6], the problematic issues of tourism development in the context of the “BRI” began to be considered only after the publication of the document of China’s Committee on Reforms, Ministry of Foreign Affairs and Ministry of Commerce and Trade: “Vision and Actions on Jointly Building Silk Road Economic Belt and 21st-Century Maritime Silk Road”, on March 28, 2015 at the Boao Asian Forum.

However, despite the fact that today tourism is regarded as the main driving force and one of the leading sectors of the “BRI” project, in our opinion, extremely insufficient attention is paid to many problems of methodological and practical importance in terms of developing scientifically-based and practice-oriented tools for developing competitive advantages in tourism in the context of this megaproject. At the same time, it is known, that tourism is a sector of the economy that has one of the most significant multiplier effects. According to estimates by the UNWTO and the World Tourism and Travel Council, the activities of enterprises in the tourism sector are either closely related or affect the development of 32 sectors of the national economy.

Due to the fact that over the past decade the active “logistization” of various areas of economic activity has been going on, which has also affected tourism, it can be assumed that effective logistics of the tourism sector in the context of the project will not only develop the existing CAs of member countries but will also create new ones at various hierarchical levels. Besides, the effective development of the tourism industry as part of the “BRI” mega-project can become a kind of “engine” for the development of related industries of national economies, given its multiplier effect.

Considering the above, the purpose of this article is to develop scientific and practical recommendations on the creation of CAs in the tourism sector of the countries participating in the megaproject - the Russian Federation and the People's Republic of China (PRC), using the theory and methodology of integrated logistics and supply chain management.

II. MATERIALS AND METHODS

Today, a lot of scientific literature is devoted to the problems of «logistic» in various areas of economic activity. Contribution to the development of the theory of logistics has been made by many foreign scientists, among whom should be noted the work on the management of integrated supply chains - D. Bowersox D.J., Kloss D.J. [1], Sloan R.E. [11], Waters D. [13] and others. Theory and methodology of supply chain management for researchers of such Russian scientists as Shcherbakov V.V., Gviliya N.A., Pustynnikova E.V., Shindina T.A. and others. For example, Borisova V.V., Dmitriev A.V., Shcherbakov V.V. [17]

Actual issues of the theory and methodology of development, regulation and improvement of the tourism management system, including the features of tourism logistics, were studied in the works of such scientists as A. Alexandrova, A. Zhukov, I. Zorin, G. Karpova, M. Morozov, Odintsova T.N., Skorobogatova T.N. and etc.

A detailed analysis of the political and economic aspects of the “BRI” mega-project, its essence and features are considered in the scientific studies of Chinese scientists - Wu Jianyin, Huang Yipin, Jin Lin, Su Ge, Shi Yan, Yuan Xintao

and others. Russian scientists are exploring various aspects of the relationship between Russia and China strategies, including through the prism of the development of Russian-Chinese cooperation in the implementation of the megaproject. [5]

The Chinese scientists Lin Xue [6], Yu Tian [18], Zhang Lingyun [15], Zhou Qiliang [16], Jean Baiming [16] and others studied the relationship between the mega-project of the “BRI” and the tourism industry. In the Russian scientific literature, the problems of tourism development within framework of the mega-project of “BRI” are not studied today.

Not many Russian and foreign researchers paid attention to the logistic aspects of the implementation of the “BRI” project. They mainly concerned the creation and development of a unified transport and logistics infrastructure for the project, the modernization and creation of new transport and economic corridors. [9]

III. RESULTS

As you know, logistics is the science, which studies flow control. With regard to tourism, we can say that this is the science of managing tourist flow. It is the tourist flow is material flow that generates the rest - information, financial, personnel, service (tourist services) and the flow of tourist services (transport, accommodation, meals, excursion services, etc.). It should be noted here that, depending on the type of tourism, the flow of tourist services may expand; for example, the flow of medical services, services provided as part of sports events, the flow of educational services, business services, etc.

Logistics covers all stages of the process of formation, promotion and sale of a tourist product (tour), as well as the process of servicing a tourist at the stage of consumption of tourist services. Therefore, in our opinion, the main objects of logistics management in the field of tourism are the tourist flow, service flow (tourist services) and flows of tourist services. At the same time, information and financial flows in tourism are accompanying.

Logistics of the tourism sector is aimed at optimizing the movement of all types of flows in order to increase the competitiveness of tourist destinations and meet the diverse needs of tourists in leisure and to gain positive experience from visiting it.

The size and direction of tourist flows depends on the supply and demand for tourist products (tourist services) offered by various tourist destinations. Therefore, the main task of logistics in the tourism sector is to determine the volume of tourist flow, i.e. the flow of tourists from their place of permanent residence to a tourist destination.

So, based on the foregoing, we can conclude that the main goal of logistics in tourism is to manage the demand for appropriate tourism products (tourist services) of tourist destinations and to provide quality tourist services. In our opinion, achieving this goal is possible if the principles of integrated logistics (IL) are used.

They will make it possible to combine the efforts of the state, regions and all enterprises involved in the formation, promotion and sale of tourist products (travel services)

destinations through end-to-end management of tourist flows at all levels and stages of the formation, promotion and sale of tourist products (travel services). [7]

The basic principles of IL in the creation of new and the development of existing competitive advantages in the tourism sector in the framework of the “BRI” project are the next ones:

- increase in tourist flow between countries and the maximum satisfaction of tourist needs should be based on cooperation regardless of the territorial location of all business entities - the state, regional governing bodies (provinces), business structures in the field of tourism and related industries;
- in the formation, sale and promotion of tourism products, competition should not take place with the supply chains sold by the participating countries of the “BRI” mega-project, but with tourism products and supply chains of countries, which not participate in this mega-project;
- digitalization of the processes of interaction between all hierarchical management structures participating in programs and projects related to the formation and development of competitive advantages in tourism.

The main CA formed on the basis of integrated logistics in tourism:

- exchange of information and resources between all business entities of a megaproject;
- lower costs received due to the balance of operations, economies of scale, elimination of activities for which time wasted or which did not add value;
- increase in tourist flow due to more accurate forecasts, better planning, more productive use of various types of resources, more justified setting of priorities;
- balanced tourist flow by season by integrating manufacturers of travel services, tour operators, travel agents and customers into a single logistics system;
- high-quality logistics services for tourists, associated with the fullest possible consideration of the needs of individual consumers;
- development of standardized business processes will eliminate duplication of transmitted information and operations performed during the planning of tourist flows and after-sales services for tourists.

It seems that this approach will maximize the use of logistics functionality in order to develop existing and create new competitive advantages in tourism within the framework of the “BRI” mega-project. In addition, as practice shows, the logistic approach has already been successfully using in developing competitive strategies at enterprises of various types of economic activity.

However, it should be borne in mind that this megaproject is a very complex hierarchical structure. Firstly, the interaction between the project participants does not imply the formation of an organizational form like unions, but looks like a free business project whose main task is to strengthen the functional strength and significance of the project participants,

but with a different degree of influence. Secondly, the project model is an improved version of the dominant participant model, according to which the PRC acts as the center from which development rays “diverge” directed to the West in the form of the Silk Road Economic Belt and to the East in the image of the Sea Silk Road. [14] Thirdly, the relationships within this model are based on the interest of participating countries in their own development.

As some Russian researchers note, if at first this project presented as an infrastructure one, today it is becoming an integration project, which implies "convergence of development programs, regulatory systems, improving mutual market access using trade and political tools." [12]

Moreover, the main condition for the effective implementation of this megaproject is to prevent competition between all its participants and other megaprojects, projects of individual countries, groupings of countries, including with the Eurasian Economic Union (EAEU). In the case of signing an agreement between the mega-project of the “BRI” and the EAEU, new competitive advantages will form in the development of tourism, including its digitalization.

So, the “BRI” mega-project in terms of logistics is a complex multi-level structure, including the inter-regional level (level of integration associations), the macro level (level of the country), the mesoscale (level of provinces in China and the subjects of the federation in Russia) and the micro level (enterprises). Therefore, the tourism sector within the framework of this megaproject is a complex multi-level system that combines in the process of formation, promotion and sale of tourism products (tourism services) many main and related flows that ensure the interaction of all business entities. Therefore, we should talk about the tourist logistics system of the “BRI” mega-project and the need to use the principles of IL in the implementation of the main directions of development of the CA of the participating countries - the Russian Federation and China. Moreover, the formation and development of competitive advantages occurs at all of the above logistic levels of organization of tourist flows.

IV. DISCUSSION

To date, the following objectives of development of the tourism industry in the context of the “BRI” project have been formulated:

1. infrastructure construction;
2. easing the visa regime;
3. new routes and tourist products; creation of an international tourist route;
4. cruise tourism;
5. development of international tourism on Hainan island. [8]

These objectives can be realized with various tools. These can be appropriate industry, inter-industry, and inter-regional investment projects, the formation of tourist clusters, including cross-border ones, free trading zones, etc. As it was noted earlier, the creation of new competitive advantages in the context of the above objectives of tourism development according to the “BRI” strategy should be based on the use of the principles of IL.

This is due to the fact that from a logistics point of view, this project, which involves the creation of a partnership network in Eurasia based on the use of various types of tools - from political and diplomatic coordination to financial mechanisms, from trade and economic tools to the expansion of humanitarian cooperation - is a very complex object research. Besides, the “BRI” mega-project went beyond creating free trade zones and developing multilateral trade mechanisms, and is essentially a new mechanism for creating an environment for the integrated development of the Eurasian region. In addition, the megaproject departs from the concept of narrow interests, when the interests of China itself are the basis, and focuses on general construction and joint development. [4]

It seems that in order to successfully implement the above objectives, it is necessary to use the principles of IL in the context of developing an appropriate comprehensive program (CP) between the RF and the PRC for each of the areas of development in the tourism sector and the creation of new CAs in the global tourism market. Moreover, each CA should be structured by the hierarchical levels of tourism management in these countries. In order to specify the planned activities within the context of CP, it is also necessary to use the project approach.

Currently, we can distinguish the following CAs in the tourism sector of the RF and PRC, which are presented in table 1.

TABLE I. COMPETITIVE ADVANTAGES OF RUSSIA AND CHINA IN THE TOURISM SECTOR IN THE CONTEXT OF THE “BRI” PROJECT

Russian Federation	People's Republic of China
1. Geographical location: land and sea access to most key points of the Eurasian continent.	1. Favorable geographical position: land and sea access to the countries of South and Southeast Asia, the Middle East, East Africa, Australia and Oceania.
2. Availability of a large number of tourist and recreational resources that contribute to the development of various types of tourism: cultural, educational, environmental, medical, recreational, ethnic, event, geological, gastronomic, religious, beach, cruise, business tourism, etc.	2. Availability of a large number of tourist and recreational resources that contribute to the development of various types of tourism: cultural, educational, environmental, medical, recreational, ethnic, event, geological, gastronomic, religious, beach, cruise, business tourism, etc.
3. Transport and infrastructure connectivity throughout the country	3. Well-developed transport infrastructure
4. An opportunity to act as an attractive market and participate as an equal partner in regional socio-economic and infrastructure projects.	4. Relatively low prices for tourist products and tourist services.
5. Ensuring the safety of tourists both in their country and in other regions.	5. Active investment activities in the Eurasian region.
6. Extensive experience in training specialists for the tourism industry.	6. Active government policy on tourism development
	7. Rapid digitalization and technological development of the country

So, the further development of CA on the principles of IL should be carried out as follows.

At the state level, in order to enhance the tourist flow between the countries, the following measures should be implemented:

1. conclusion of a bilateral agreement on the development of tourism as one of the strategic directions for the implementation of the “BRI” mega-project;
2. expansion of visa-free space;
3. creation of a special body (for example, a committee) that regulates the development of tourism between countries within the framework of the project.

The Interstate Committee for Tourism Development is creating a development concept for the development in order to increase its competitiveness and create new CAs. In this document, the main objectives of tourism development between countries are defined; the main tourist regions are identified; a list of the most important joint projects (for example, inter-regional tourism projects), that are aimed at developing and creating new competitive advantages in the tourism industry of the two countries, is formulated; a mechanism for interaction on the development, implementation, and control of joint projects is defined; sources of investment resources, necessary for the implementation of projects, are determined.

Next, working groups for developing comprehensive development programs (CDP) for the identified types of tourism and tourist regions are created, as well as for monitoring their implementation. At the same time, each of the developed CDP should be “built” according to the project approach, i.e. include various investment projects for specific objects of economic activity in the field of tourism. Each project should be aimed, first of all, at solving the most urgent problems of CAs' development in the tourism sector in order to “turn” them into necessary ones. In our opinion, it will allow to interconnect projects of various hierarchical levels in order to achieve the planned tourist flow, to ensure the effective implementation of the principles of IL in the context of a specific project in terms of constructing both the main and associated flows at various hierarchical levels, as well as quality control over the expenditure of investment resources. The schematic diagram of integrated logistics' organization of CAs' development, in relation to the megaproject “BRI” for the RF and China in the tourism sector, is shown in picture 1.

It should be noted here that the development of new joint digital platforms in the tourism sector by the participating countries of the megaproject will significantly increase the level of competitiveness of this sphere in the global tourism market. Besides, the effective use of integrated logistics' principles in the implementation of the planned activities (investment projects) in the Russian Federation and China in the tourism sector is shown in Figure 1.

Of course, this algorithm requires further clarification and refinement, since each objective in the development of tourism in the countries participating in the “BRI” mega-project has its own specifics.

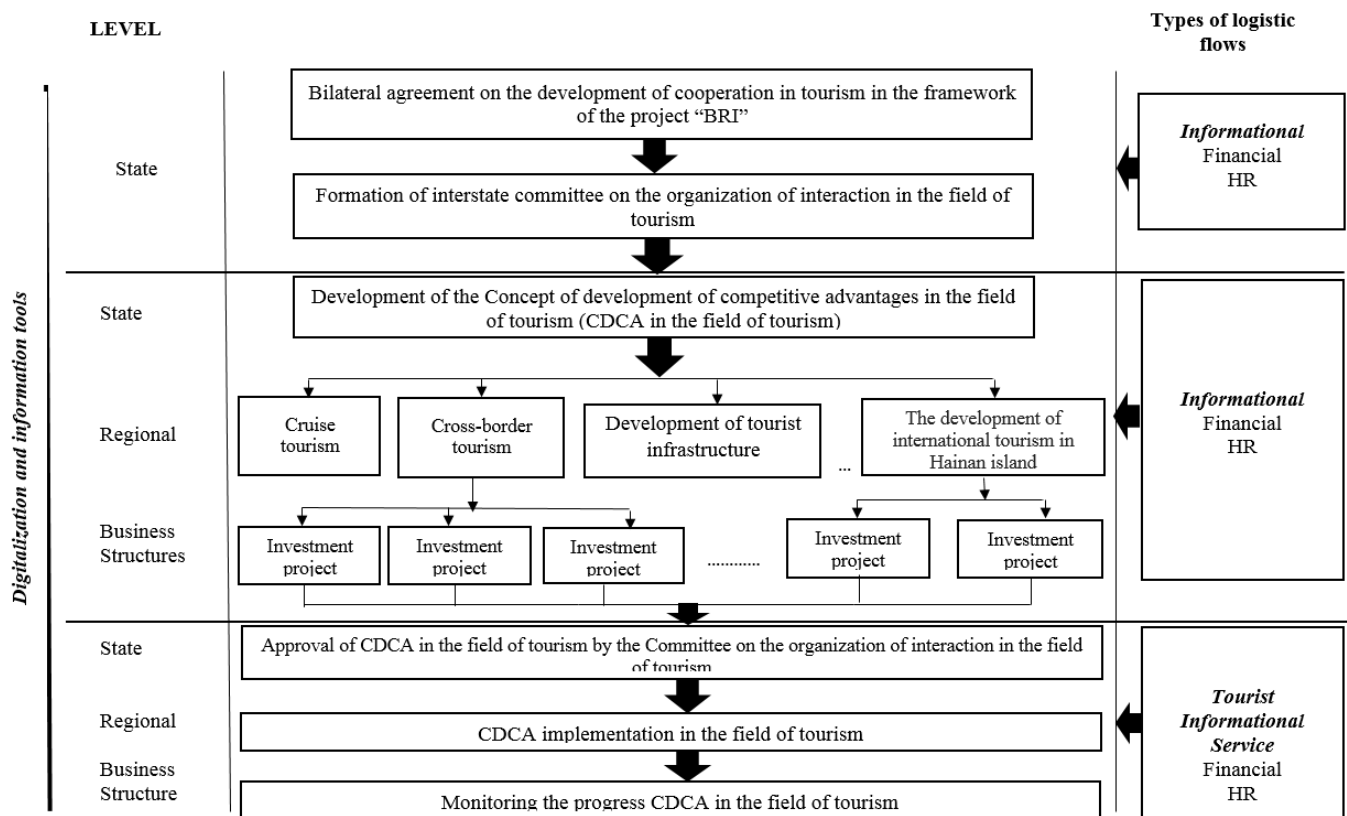


Fig. 1. Algorithm for implementing the principles of integrated logistics in the creation and development of competitive advantages in the field of tourism of RF and PRC within framework of the "BRI" mega-project.

V. CONCLUSION

So, based on the foregoing, we can draw the following conclusions.

Firstly, the "BRI" mega-project creates the necessary objective conditions for all participating countries to create new and develop existing competitive advantages in the field of tourism and related industries

Secondly, the theory and methodology of integrated logistics in the field of tourism and its relationship with the formation and development of competitive advantages at various hierarchical levels is at the initial stage of study and research.

Thirdly, the development of competitive advantages in the tourism sector within the framework of the mega-project of "BRI" using the principles of integrated logistics requires the development of a scientifically-based mechanism for implementing this process.

Fourth, the proposed algorithm for the development of competitive advantages based on integrated logistics needs to be clarified and developed taking into account the specifics of certain areas of tourism development between the RF and China within the framework of the "BRI" mega-project.

Fifth, it seems that the mutual inbound tourist flow between the countries - the RF and China - as a result of the implementation of the proposed algorithm and the mechanism developed in the future and implemented will increase significantly, which will increase revenue in the budgets of countries, as well as increase the level of competitiveness of their tourism industry in the world tourist market.

And, finally, sixth, the joint activities of the RF and the PRC on the problem of introducing digital technologies in the tourism sector will create new competitive advantages in the global tourism market.

REFERENCES

- [1] Borisova J.M. China politics in the post-Soviet space. The "One Belt - One Way" Initiative // Problems of the Post-Soviet Space, 2017; 4(3):202-209 DOI: 10.24975/2313-8920-2017-4-3-202-209.
- [2] Bowersox D.J., Kloss D.J. Logistics: Integrated Supply Chain. - 2nd ed. / Per. from English M.: CJSC Olymp-Business, 2006. 640 p.
- [3] Denisov I.E. Heaven is looking to the West // Contours of global transformations. Issue 6, Volume 9, 2016 - p. 26 (p. 20-40) DOI: 10.23932/2542-0240-2016-9-6-20-40.
- [4] Götting G. The integration function of logistics in the production division of labor with an interdisciplinary spectrum / G. Götting. - M.: Creative economy, 2007. - 136 p.
- [5] Kireeva A.A. "Belt and Path Initiative": content, goals and meaning. // Comparative policy. - 2018. - № 2. - p. 61-74. DOI: 10.18611/2221-3279-2018-9-3-61-74.
- [6] Kol O. Features of using integrated logistics in the management of tourist destinations// Logistics and supply chain management. 2 (15). Sankt-Petersburg, 2018. - 103-109 p.
- [7] Lin Xue. The relationship of the strategy "One belt, one way" and the sphere of tourism // "Studies of Economic Development" 2016, part 11. - p.173-174.
- [8] Problems and challenges of Chinese tourism in the framework of the strategy "One belt - one way" 28.07.2015 //http://www.tripvivid.com/articles/2645.
- [9] Rachkovskaya I., Jiao Weijia. Logistic aspects of the project "One belt, one way" // Logistics, 2017, №10 - p. 22-25.
- [10] Shcherbakov V.V. Logistics in the fifth technological mode: parity of interests of science and network organization of business // Integration potential of logistics in the global economy: Materials of the

- international scientific and practical conference September 25, 2014 / Editor-in-chief, Doctor of Economics, prof. V.V. Shcherbakov. - SPb.: Publishing house of SPbGEU, 2014. - p. 5-8.
- [11] Skorobogatova T.N. Logistics in tourism is in the focus of new logistics areas // *Service in Russia and abroad*, 2016, №1. - p. 124-135.
- [12] Sloan R.E. New ideas in supply chain management / R.E. Sloane, J.P. Ditman, D.T. Mentser, per. from English - M.: Alpina Publisher, 2015, - 230 p.
- [13] Spartak A.N. (2017). Metamorphoses of the regionalization process: from regional trade agreements to mega-regional projects. // *Outlines of global transformations: politics, economics, law*, 10 (4), p.13-37.
- [14] Waters D. Logistics. Supply Chain Management / Per. from English - M.: UNITY-DANA, 2003.
- [15] Yu Tian. New trends in the development of Chinese tourism in the framework of the state strategy "One belt, one way" // "Journal of the Guangzhou Maritime Institute", t.24, №2, June 2016. - p. 62-64.
- [16] Zhang Lingyun. Notes on the Development of Tourism in China: "One Belt and One Way" and the Development of the Tourism Industry of China (II) // *Tourist Tribune*, vol. 27 №6, 2017. - p. 1-3.
- [17] Zhou Qiliang, Jean Baiming. The potential of China in the field of trade between countries along the belt and the road // *Western Forum*, vol. 27 №5, September 2017. - p. 111-124. CLC Number: F752.68 Document Code: A Article Code: 1674-8131 (2017) 05-0111-14.
- [18] Zhang Wanting. Forms and directions of integration cooperation of the EAEU countries in the context of hyper-competition. / Thesis for the degree of candidate of economic sciences. Specialty 08.00.14 - "World Economy". St. Petersburg, 2017, - 159 p.