Mechanism of Strategic Development of Maritime Transport and Regional Logistics

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Abstract. The article describes an approach to the development of a mechanism of strategic development of maritime transport and regional logistics based on the contemporary understanding of the strategy, strategizing, and strategic planning, and the need in such a combination of development determinants that would allow achieving a synergistic effect in the regional and sector-specific space. The author demonstrated that the strategic development mechanism must be intended to create a quality transport and logistics complex and contact groups and have a complex nature. A mechanism of strategic development of maritime transport and regional logistics as a functional target-oriented pattern of interaction of its elements can be divided into a target-oriented subsystem, a wide range of interconnected development instruments for organizational/institutional, economic, motivational, political/legal, sociocultural, and environmental components, and a resource base. This approach was adapted to maritime transport and logistics of the Republic of Crimea.

1. Introduction
The present-day developments of Crimea's integration into the Russian economic space substantiate scientific interest to the study of various aspects: participation of versatile economic complexes in the division of labor; development of an import replacement system in new geopolitical conditions and self-provision with several types of goods and services, primarily the ones traditionally produced in the peninsula; close economic partnering with commodity producers from the continental part of Russia and other countries, including industrial cooperation; use of regional determinants of development of the peninsula to improve quality of life; development of a comfortable social and ecological environment to ensure the possibility of short- and long-term sustainable development of the economic system.

2. Relevance, scholarly importance of the issue, brief literature review
Maritime transport and logistics of Crimea are interesting primarily from a practical standpoint. Resolution of the problem situation in this sphere (mismatch between the level of development of this sector and the needs of the peninsula and the level of development of maritime transport and logistics of the continental part of Russia and a wide range of coastal areas around the world) with the help of available instruments will allow demonstrating advantages of economic empiricism. However, scientific justification of resolution of practical problems comes first, because it activates enrichment of the scientific thought, helps to clarifies some definitions and new systematizations, and
development of a modern approach to the mechanism of strategic development of regional maritime transport. Such scientists as O.S. Vikhanskii, S.I. Glaziev, V.V. Ivanter, V.L. Kvint, A.D. Nekipelov gave considerable attention to the study of theoretical and methodological aspects of strategy development in their scientific economic publications [5, 9, 12]. The publications by M.K. Alimuradov, S.A. Bayzulalev, I.I. Vlasiuk, K.I. Gamalei, I.V. Gamalei, A.N. Gerasin, Z.H. Gergova, V.A. Doliatovskii, D.V. Doliatovskii, L.V. Doliatovskii, E.P. Smirnov, V.A. Tsybatov, I.S. Tsypin, Z.N. Iagumova [3, 4, 6, 7, 15, 20] etc. are dedicated to studies of the development strategizing in whole and the regional development strategizing in particular. A wide range of scientists, such as G.V. Baturova, G.K. Voitolovskii, A.M. Konovalov, N.A. Kosolapov, I.V. Kroialo, S.S. Kudriavtseva, D.V. Poletaev, M.A. Saltykova, V.P. Sinetskii, N.M. Fedorenko, etc. studied the strategy of development of various economic entities of maritime activities [13, 14, 18].

A.A. Kulman, I.S. Averina, A.E. Zubarev, I.V. Zhukova [2, 8, 11, 17, 19], etc. published studies of various approaches to the development of an economic mechanism of functioning and development of manufacturing complexes, E. Campbell, L.S. Abdokova, R.V. Soloshenko, etc. to the systematization of synergistic effects in the economy and ways to achieve them in different temporal and spatial economic conditions [1, 10, 16]. However, despite rather significant scientific studies of this issue, it is reasonable to clarify the categories related to the maritime transport and logistics development strategizing as such on the basis of the accumulated experience and elaborate on the approaches to development and improvement of the strategic development mechanism taking into account regional/sector-specific features.

3. Problem setting
As long as we consider maritime transport and logistics of Crimea as a sphere the priority development whereof is objectively substantiated by the importance of the role of infrastructure in the economy and the economic geographic position of the peninsula, it requires adaptation of regional/sector-specific development models to the unique development conditions of Crimea on the modern stage and substantiates the need to develop a regional mechanism of strategic development of maritime transport and logistics.

4. Theory
Regarding categories of the strategy, V.L. Kvint asserted that "strategy is a system of search, formulation and development of a doctrine to ensure long-term success if implemented consistently and to the fullest extent" [9, p. 10] and thus focused attention on a long-term perspective of goal-setting and complex comprehensive approach to strategizing; according to this scientist, it is the time-saving law that is "the main law of strategy", and the key aspects are dynamic characteristics of the strategizing process, the need in a scenario approach and the choice of an optimal case scenario. At the same time the author calls planning, motivation and control the major functions of strategic management. They have to be thought through in detail when developing a mechanism of strategic development of maritime transport and regional logistics.

Following suit of A.N. Gerasin and I.S. Tsypin, who believe that the regional policy "involves the whole range of leverage opportunities and methods of influence available to regional authorities in the territory under their jurisdiction and directed at the development of the region as such" [6], we consider it necessary to use all the possibilities to affect maritime transport and logistics and extend the range of available leverage opportunities for developing a strategic development mechanism by putting forward drafts of pieces of legislation concerning benefits and preferences for the Republic of Crimea and the city of Sevastopol (especially the ones related to maritime activities) similar to the ones stipulated by Federal Law No. 473 of the Russian Federation for priority development areas due to the availability of the data proving their efficiency [19].

We support E.P. Smirnov's opinion that "strategizing, work with cognitive constructions, strategic projects and programs is becoming the primary mechanism of ensuring marketability" [15] of a
Given the general theoretical approach to the term "mechanism" as a specific driver of a system's functioning, we ought to mention its substantive characteristics, such as a focus on association, motivation, and communication. Within the framework of a systemic approach to the consideration of behavior of economic processes helps to rationally use this term in the sphere of economic studies and specify it for different regional/sector-specific subsystems of the macro- and metaenvironment.

Based on modern understanding of the conceptual framework and taking into account obtained significant results of studying practical aspects of the control mechanism for various economic entities by Russian and foreign scientists [5], it is reasonable to further clarify interpretation of this category and extend the scope of its use onto different levels of hierarchy of the state economic system and different forms of economic activities.

The term "strategic development mechanism" taking into account specific features of maritime transport and logistics ought to be structurized on the basis of studying genesis, identification of its substantive characteristics and presentation of typology.

Assuming that the development mechanism is purposeful and characterized by transformational focus of its impact on the object, it ought to develop on the basis of interaction and flexibility of the combination of legal, organizational, economic, motivational, social, and other components, which jointly reflect the integrative nature in order to ensure the conditions necessary to obtain a synergistic effect. The concept of synergism is actively studied by academic economists [10], because "the role of synergetis in improving efficiency of economic activities is growing in modern conditions" [16, p. 17]. At the same time please note that the modern scientific literature is focused on the fact that "synergy may be defined as a cooperation of a kind, interconnected and coordinated actions, which may manifest themselves in the form of strategic partnership, mutually beneficial cooperation, merger, and cooperative interaction, "joint mutually complementing and mutually dependent action of two or more factors in a specific direction" [1, p. 582], and "a synergistic effect is not just a favorable combination of resource, but also a coordinated behavior, connections, relations; in a few words, the whole set of parameters characterizing a complex developing system" [1, p. 584].

This is why it is reasonable to proceed from the need to develop a strategic development mechanism by integrating therein the possibility of combining such determinants that would allow using the synergistic effect to improve efficiency of maritime transport and logistics functioning.

The term "mechanism" introduced into the scope of academic economic research in the 1960s gave the possibility to define "economic mechanism" as a way of economic management with its inherent economic stimuli and legal norms and was further developed in the beginning of the 1990s. This was objectively substantiated by transformation of the study object - economic system of the post-Soviet space; this gave the science of economy a enormous corpus of empirical data for simulations, enriched the information base for studying various aspects of genesis (formation), development and transformation of the economic mechanism in whole and its basic subsystems in particular.

For instance, I.S. Averina [2] systematically reflected inherent to the economic mechanism subject-object interconnections, purposefulness and transformational focus on improving forms, methods and instruments of achieving goals set by the designing subject when formulating an economic mechanism. This is within the framework of the modern view on the economic mechanism as an integral system with the properties, forms and instruments of economic development inherent thereto.

Understanding the importance of developing innovative methods and leverage opportunities to improve the economic mechanism it is reasonable to allow for the possibility of efficient communications and a motivational component of participants in economic relations on the level of the state economic policy. This is being done via the Federal special-purpose programs and development strategies of different regions, sectors of economy and types of activity.

Complete coordination of functioning of all components of the economic system and provision of the possibility of sustainable development of the mesoeconomic space in the long term are possible if
conditions for obtaining and amplifying the synergistic effect of joint functioning of all subsystems in real time are created, i.e., it is necessary to develop a mechanism that would ensure fulfillment of long-term goals and use of effective transformation instruments. From the standpoint of induced changes, it is the development of a strategic development mechanism that is determinative in the context under study. Differentiation of elements of the strategic development mechanism by a range of criteria will allow focusing on those of them which will ensure growth of the strategic potential of the regional transport and logistics hub in the current conditions.

If we consider the basic criteria (purpose of formation (creation), fullness of the scope of control functions, essence of induced changes, targeted object and focus of activity) jointly, the mechanism of strategic development of a regional transport and logistics hub may be characterized as a control mechanism with a full scope of functions directed not only at formation of the focus and stability of economic processes and relations, but also at the detalization of business processes with activation of participation of subjects with different economic interests. It ought to be mentioned that one of the components of the development control mechanism - a regulation mechanism intended to arrange a corrective controlling impact on economic relations and processes - ought to be prioritized, in our opinion. This is dictated by the need in providing space to private initiatives and private capital in this sphere of relations without overregulating it.

We may divide a strategic development mechanism into components or functional blocks corresponding with a specific control function to work out a purposeful external impact in detail and actualize a purpose-oriented approach to the development of the study object to the fullest extent.

Thus, from the standpoint of the essence of induced changes, the strategic development mechanism ensures qualitatively new systemic signs of mechanism's object transformations in real time.

Dynamic nature of the environment of maritime transport and logistics predetermine the need to change their internal environment in response to a change of economic conditions; this substantiates the process of development and implementation of a set of measures to counteract current or potential decline in efficiency. Traditionally understood adaptation of a system requires focusing attention on substantiating the most efficient components of the development mechanism.

System's entropy increases and the process of harmonization of economic, social and environmental interests in the sphere of maritime transport and logistics becomes more complex when participants interact, especially when the number of economic subjects becomes larger. The balance thereof must be one of the criteria of assessing efficiency and effectiveness of a development mechanism.

5. Practical relevance, propositions
We propose defining a targeted object of the mechanism of strategic development of a regional maritime transport and logistics hub as an economic process of creating a transport and logistics product in the mesoeconomic space. Such a regional/sector-specific focus of the mechanism narrows the information context of its formation, yet anyway requires taking into account a considerable number of environmental factors, because from the standpoint of a systemic approach, a study must be based on the assumption of integrity of the entire economic system and account of interdependence of its elements.

Extraction of beneficial properties of objects of property comprising a unique combination in a specific region to ensure practical focus must be based on a wade range of search for development instruments. That is why the strategic development mechanism is rather multifaceted. This results in versatility of approaches to the structurization thereof. In other words, from the standpoint of the covered areas of activity, it is necessary to form a complex mechanism.

Structuring the strategic development mechanism by the functional feature, it is necessary to consider it a combination of primarily consistently interconnected functional subsystems, such as a target-oriented control subsystem, control (regulation) instruments and a resource base.

The study of how properties of the development mechanism itself change and substantiation of a system of indicators for objective rationality assessment, as well as development of a mechanism with...
predetermined parameters and properties are to be seen as two mutually conditioned spheres of theoretical/methodological and applied research activity.

See the generalized characterization of a mechanism of strategic development of maritime transport and regional logistics from the standpoint of composition and intended use in Figure 1.

**Figure 1.** Characterization of the mechanism of strategic development of maritime transport and regional logistics.
Using generalization of existing approaches and understanding the intended use of the mechanism of strategic development of maritime transport and regional logistics when developing a conceptual model thereof it is necessary to proceed from the need in priority development of this element of infrastructure, the need in environmentally responsible maritime use, and multiple levels of analysis thereof. This requires building a functional target-oriented pattern of interaction of a range of subsystems directed at ensuring achievement of control objectives. In the framework of this study, we deem it reasonable to consider the mechanism of strategic development of maritime transport and regional logistics as a combination of economic relations, principles, methods, instruments and forms of organization of maritime transport and logistics activity intended to develop a stable functioning and developing vertically integrated cycle for creating a quality transport and logistics product in the region with the help of the synergistic effect and achieving balance between development of the maritime transport and the associated externalia.

That is why functional purpose of a mechanism of strategic development of maritime transport and regional logistics seems to consist in creation of a quality transport and logistics product in the region with balanced interests of the transport and logistics hub and its contact groups as a result of coordinated actions to form and develop strategic potential of the regional maritime transport and logistics hub, priority development of the maritime transport and logistics infrastructure to achieve regional production and socioeconomic objectives, sustainable increase in the degree of satisfaction of the public needs, compensation of externalia of the maritime transport and logistics activity, and achievement of a synergistic effect.

In this study, we performed an expert evaluation of "maturity" of components of the Crimean mechanism of strategic development of maritime transport and logistics as of July 01, 2019, the graphic interpretation of results whereof is given in Figure 2.

On the basis of the evaluation results, we observed coordination of expert opinions, calculated the concordance and Pearson coefficients (0.927 and 69.525, respectively); their values allow concluding that expert opinions on this issue are consistent.

![Figure 2. Results of expert evaluation of "maturity" of components of the Crimean mechanism of strategic development of maritime transport and logistics as per July 01, 2019. Source: compiled by the author.](image-url)

Analysis of results of the evaluation demonstrates that the worst marks were given to the organizational/institutional component and the motivational component of the development mechanism; this means it is poorly developed ("immature"). We see the development of these development mechanism components in guaranteed institutional and informational/communicational
support of clusterization and implementation of world practice-tested public/private partnership patterns.

6. Conclusion
On the basis of results of this study, we deem it reasonable to consider the mechanism of strategic development of maritime transport and regional logistics as a combination of economic relations, principles, methods, instruments and forms of organization of maritime transport and logistics activity intended to develop a stable functioning and developing vertically integrated cycle for creating a quality transport and logistics product in the region with the help of the synergistic effect and achieving balance between development of the maritime transport and the associated externalia. We distinguished between the following components of a regional mechanism of strategic development of maritime transport and logistics: a target-oriented subsystem, a resource base and development instruments - legal, social, environmental, and cultural norms, methods, leverage opportunities, control forms, methods of influence (benefits and preferences, favored treatment) and a combination of types of economic activities, types of organization of joint activity and cooperation (clusterization and public-private partnership must be given a special place there). The expert evaluation of "maturity" of components of the Crimean mechanism of strategic development of maritime transport and logistics allows us to assert that it is poorly formed ("immature"), especially as regards its organizational/institutional and motivational components.

References
[1] Abdokova L Z 2016 Synergetic effect as a result of effective management *Fundamental research* **10-3** pp 581-584 URL: http://fundamental-research.ru/ru/article/view?id=40899
[2] Averina I S 2012 Evolution and classification of the phenomenon of “economic mechanism” *Bulletin of the Volgograd State University, Ser. 3, Econ. Ecol.* **2(21)** pp 12-16
[3] Alimuradov M K, Vlaysuk L I 2017 Strategy - a new area of professional knowledge *Management Consultin* **11(107)** URL: https://cyberleninka.ru/article/n/strategirovanie-novaya-oblast-professionalnyh-znanii
[4] Bayzulaev S A, Yagumova Z N, Gergova Z Kh 2018 Strategic planning for the development of a regional industrial complex *ANI: Economics and Management* **4(25)** URL: https://cyberleninka.ru/article/n/strategicheskoe-planirovanie-razvitiya-regionalnogo-promyshlennogo-kompleksa
[5] Vikhansky O S 1998 Strategic Management: A Textbook 2nd ed. *Revised. and add.* (M.: Gardarika) 296 p
[6] Gerasin A N, Tsypin I S 2013 Formation of the development strategy of the regions of Russia *Economics. Taxes. Right.* **6** URL: https://cyberleninka.ru/article/n/formirovanie-strategii-razvitiya-regionov-rossii
[7] Dolyatovsky V A, Dolyatovsky L V, Gamaley Y V, Dolyatovsky D V, Gamaley K Yu 2017 Methods of strategic planning for the development of the region *Bulletin of the expert council* **2(9)** URL: https://cyberleninka.ru/article/n/metodika-strategicheskogo-planirovaniya-razvitiya-regiona
[8] Zubarev A E, Zhukova I V 2011 Formation of an adaptive organizational and economic mechanism for managing a mining enterprise *Bulletin of the Pacific State University* **3(22)** pp 147-156
[9] Quint Century L 2017 To the origins of the theory of strategy 200th anniversary of the theoretical work of General Jomini (Spb.: CPI SIZU) *phil. RANEPA* 52 p
[10] Campbell A 2004 Strategic synergies: How a cumulative positive effect (2 + 2 = 5) is created Andrew Campbell (St. Petersburg: OOO Type True 1906) 414 p
[11] Kulman A A 1993 Economic mechanisms under the total. edited by N I Khrustaleva (M.: Progress) 92 p
[12] Nekipelov A D, Ivanter V V, Glazyev S Yu 2013 Priorities of long-term socio-economic
development Economic and social changes: facts, trends, forecast 6(30) URL: https://cyberleninka.ru/article/n/prioritetydolgosrochnogo-sotsialno-ekonomicheskogo-razvitiya

[13] Approaches to strategic forecasting Theory and practice of marine activities (issue 16) (M.: SOPS) 262 p

[14] Saltykov M A 2011 The cluster development strategy of the maritime transport and logistics complex Customs policy of Russia in the Far East 1(54) pp 38-46

[15] Smirnov Ye P Regional development strategy: theory, practice, new approaches URL: http://bre.ru/risk/30532.html

[16] Soloshenko R V 2014 Systematization of synergistic effects in the economy Bulletin of the Kursk State Agricultural Academy 1 URL: https://cyberleninka.ru/article/n/sistematizatsiya-sinergeticheskikh-effektov-v-ekonomike

[17] The development strategy of the maritime activities of the Russian Federation until 2030 (approved by the order of the Government of the Russian Federation of December 8, 2010 N 2205-r (Moscow) https://rg.ru/2010/12/21/mordeyatelnost-site-dok.html

[18] 2005 Strategy: impulses for development Theory and practice of marine activities issue 9 (M.: SOPS) 137 p

[19] The Federal Law "On Territories of Advancement of Socio-Economic Development in the Russian Federation" dated December 29, 2014 N 473-ФЗ " http://www.consultant.ru/document/cons_doc_LAW_172962/

[20] Tsybatov V A 2015 Regional development strategy: methods, models, information technologies Regional Economics: theory and practice 27(402) pp 36-52 URL: https://cyberleninka.ru/article/n/strategirovanie-regionalnogo-razvitiya-metody-modeli-informatsionnye-tehnologii