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DEVELOPMENT AND USE OF POWER PORTS OF UKRAINE ON AN INNOVATIVE BASIS

РОЗВИТОК ТА ВИКОРИСТАННЯ ПОТУЖНОСТЕЙ МОРСЬКИХ ПОРТІВ УКРАЇНИ НА ІННОВАЦІЙНІЙ ОСНОВІ

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Abstract. The current state and features of seaports development in Ukraine are analyzed. The necessity of reforming sea trade ports in the directions reflected in the complex strategic documents of the maritime policy of Ukraine is proved.

Key words: port complex reform, strategic approach, maritime doctrine

Seaports which entry into storage, transportation system of Ukraine are important for the national economy, economy and transport, including for sea and international transport.

According to the results of 2019, the seaports of Ukraine increased the volume of cargo transshipment by 18.4% and reached record highs for the whole history of existence (with the exception of ports located in the Crimea). For the first time, the volume of transshipment of 13 active ports exceeded 160 million tons (Fig. 1).

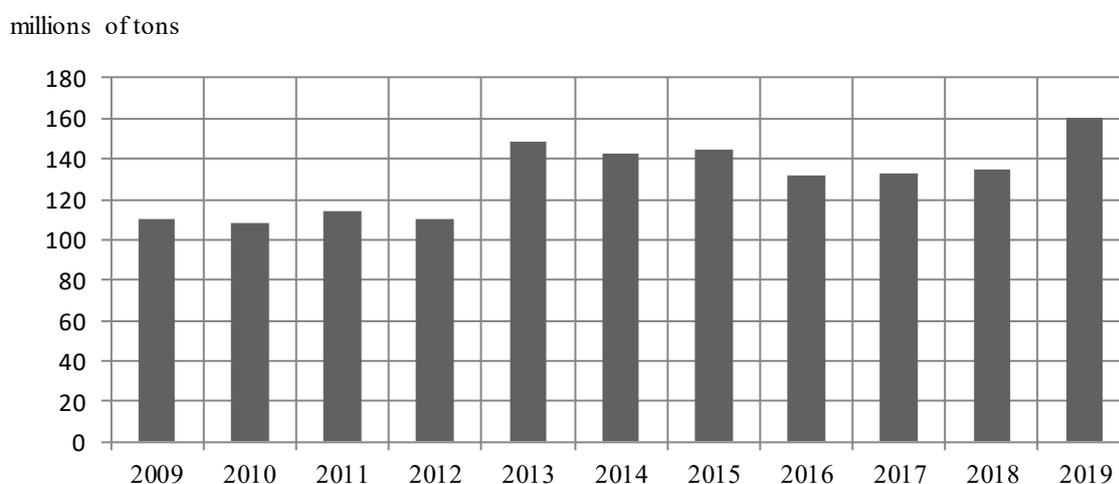


Figure 1 - Cargo turnover of seaports of Ukraine in 2009-2019 (million tons)

The largest contribution to the record transshipment was made by the Ukrainian agricultural sector. Bread cargoes and butter accounted for more than a third (37.7%) of the total cargo flow in Ukrainian ports. Grain transshipment increased by 32% to 54.6 million tons compared to 2018. Ore transshipment became the second largest - 37.3 million tons per year - more than 9 million tons (+ 33%) than in 2018. The top three cargo leaders in 2019 are containers - over 1 million TEU.

The growth of transshipment in 2019 was observed in all directions: export, import, transit, domestic transportation. But the most significant - by 22.2% to almost 121 million tons - was an increase in exports of Ukrainian producers. Imports

increased by 8.7% to 25.8 million tons. Transshipment of transit cargoes increased by almost 8% compared to last year to 11 million tons (Table 1).

In terms of cargo transshipment in 2019, four ports of the South are traditionally the leaders - 53.9 million tons (+ 26.1%), Mykolayiv - 33.4 million tons (+ 14.5%), Chornomorsk - 26.2 million tons (+ 21.4%), Odessa - 25.3 million tons (+ 16.8%).

Table 1

Processing of cargoes of the Ukrainian Ministry of Transport by types of communication (million tons / share in the total volume of cargo,%)

	2015	2016	2017	2018	2019
Total	144,6	131,7	132,6	135,2	160,0
Export	103,94/71,9	100,20/76,1	98,52/74,3	99,2/73,3	121,0/75,6
Imported	17,96/12,4	15,98/12,1	20,42/15,4	23,70/17,6	25,8/16,1
Transit	15,90/11,0	10,33/7,8	11,80/8,9	10,20/7,5	11,0/6,8
Internal	6,84/4,7	5,19/3,9	1,86/1,4	2,10/1,6	2,2/1,4

* Excluding the temporarily occupied territory of the Autonomous Republic of Crimea and Sevastopol.

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In total for 2019 seaports of Ukraine handled 11,850 vessels, only 196 vessels or 1.7% more than last year.

In 2019, the Seaport Authority of Ukraine plans to complete its commitments on five major infrastructure projects at five ports. The total investment of the AMPU and business for the whole period of their realization should amount to more than 16 billion UAH. AMPU has been invested in the development of the port infrastructure over UAH 3.5 billion: since 2015, investments have increased 3.3 times. AMPU has invested more than \$ 100 million in port development over the last two years. In the next few years, the Ukrainian port industry should attract \$ 926.65 million. The largest part of this amount is public-private partnership projects.

At the same time, Ukrainian port infrastructure is assessed by economic entities as more than mediocre. The positions of Ukraine's main competitors in the Black Sea-Azov basin are much higher in this rating.

The available congestion capacity of Ukraine's seaports is not fully secured by the appropriate capacity of the terrestrial infrastructure, so the modernization and creation of new capacities should be synchronized with the development of access routes to the seaports. The problem of insufficient capacity of port railway stations and poor railway connections is most acute in the seaports of Odessa, Nikolaev, Mariupol, Berdyansk and Reni. A similar situation is with the road infrastructure. This applies in particular to seaports located within cities.

In addition to the development of access roads and efficient utilization of available transshipment capacities, the issue of renewal of the port infrastructure of strategic importance - berths, canals, water areas and public infrastructure, including inland highways, crane tracks, railways, communication systems, is urgent.

The state enterprise «Administration of Seaports of Ukraine» initiated the issue of actualization of the provisions of the Strategy for the Development of Seaports of Ukraine for the period up to 2038 [1].

The reason for such an update was a number of factors, among which the main ones are:

- the completion of the short-term (until 2018) functioning and development of seaports;
- events connected with the annexation of Crimea and the closure of five seaports;
- geopolitical conflict in the eastern Ukraine;
- significant reorientation and loss of cargo flows, especially transit ones;
- bringing the norms of the updated Strategy to the main principles of the implementation of the National Transport Strategy by 2030 and a number of other reasons.

Within the framework of the updated Strategy, the analysis of existing cargo flows, the status of seaports, their main advantages and disadvantages, as well as the current forecast of cargo flows, in particular, based on the World Economic Outlook IMF reports, were analyzed (Fig. 2).

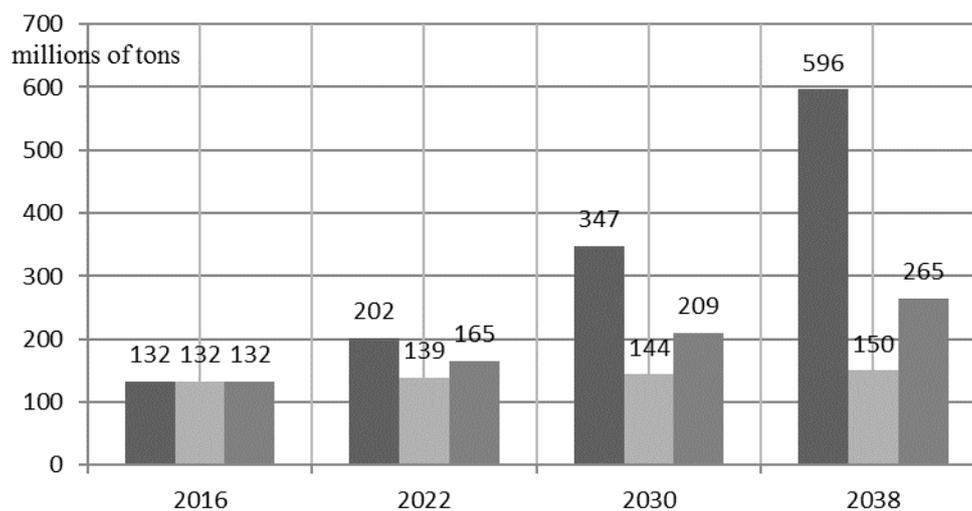


Figure 2 - Estimated values of cargo volumes in Ukrainian seaports by 2038 (million tons) in three scenarios - optimistic, pessimistic, probable.

The purpose of the updated Strategy is:

- definition of conceptual bases for forming the state policy of planning and development of the port industry, aimed at ensuring the needs of the country's foreign trade in high-quality maritime transportation;
- increase of efficiency of use of available capacities in sea ports and balanced development of new ones with sufficient capacity of ground infrastructure;
- improving service in seaports and ensuring optimal cargo logistics.

To achieve these goals, the following priority directions have been formed:

- ✓ priority direction 1. Balanced development and efficient use of port facilities on the innovative basis;

- ✓ priority direction 2. Providing competitive logistics and service improvement in seaports.
- ✓ priority direction 3. Optimization of the management system of the maritime ports sector.

One of the main tasks facing the AMPU and the sector in the framework of the implementation of the new Strategy will be the preparation of a General Port Development Portfolio, which will provide a clear definition of the development paths of the industry, and in particular seaports, both in the marine part and onshore (transshipment capacities, approaches, energy supply, etc.). This will provide the opportunity to develop a document that will reflect the overall picture of the development of the maritime complex.

In addition to the updated Strategy, expectations for the functioning and development of each seaport have been generated.

The Strategy pays special attention to the problem of balanced development and efficient use of port facilities.

Ukrainian port infrastructure is assessed more than mediocre by business entities. At the same time, the position of the main competitors of Ukraine in the Black Sea-Azov basin is much higher in this rating.

The existing transshipment capacity of Ukraine's seaports is not fully equipped with the corresponding capacity of ground infrastructure, therefore modernization and creation of new capacities should be synchronized with the development of access roads to seaports. The problem of inadequate capacity of port railway stations and unsatisfactory rail connections is most acute in the seaports of Odessa, Mykolayiv, Mariupol, Berdyansk and Reni. Today, the settlement of such a problem is achieved due to the low level of capacity utilization (135 million tons per year - almost 50 percent of the project capacity). However, such a settlement is temporary and does not correspond to the trend of development of Ukrainian seaports.

A similar situation exists with road infrastructure. In particular, this applies to seaports located within cities. The transport of freight vehicles by cities leads to the destruction of municipal roads, overpasses and bridges, the formation of congestion, and also worsens the ecological situation in settlements. The issue of motor transport infrastructure needs to be looked at more broadly, at the same time without giving up the measures of strict control of unscrupulous carriers. Due to the lack of opportunities for accumulation of freight transport prior to unloading at complexes and terminals, a long series of cars creates emergency situations at the entrances to the port.

In addition to the development of access roads and the efficient use of existing transshipment capacities, the issue of restoring the port infrastructure of strategic importance, such as berths, canals, water areas and public infrastructure, in particular, domestic road haulage, crane tracks, railways, communication systems, etc. is acute.

The results of the solution of the specified tasks should have the expected results:

- the general plan for the development of seaports, multimodal centers and clusters has been formed and approved;
- modernization and creation of additional transshipment terminals in seaports in

the medium and long term, with appropriate coordination with plans and further provision of development of access transport infrastructure;

- harmonized functioning and development of seaports taking into account perspective plans for the development of other modes of transport;

- formation of new deep-water anchorages (sites) and platforms for the accumulation of freight vehicles in approaches to and / or on the territory of sea ports;

- attracting at least \$ 500 million in the medium term from the private sector to redeploying the existing capacity of state-owned industry to meet current technology, in particular in the process of their privatization;

- creation and modernization of at least 15 additional deep-water berths (with a draft of 15 meters) for the reception of Panamax, Capesize, etc.;

- expansion and increase of the throughput of shipping channels;

- commissioning of new and upgraded transshipment complexes with a total volume of at least 100 million tons per year, which will provide a total throughput of seaports in the amount of about 300 million tons;

- increase of the minimum level of efficiency of use of transshipment complexes in seaports to 70 percent, which in the short term will provide a cargo turnover rate of at least 165 million tons per year;

- provision of state guarantees and protection of investors' rights.

References:

1. Strategy of development of seaports of Ukraine for the period up to 2038; http://publications.chamber.ua/2018/Infrastructure/Strategy_2038.pdf

***Анотація.** Проаналізовано сучасний стан та особливості розвитку морських портів в Україні. Доведено необхідність реформування морських торговельних портів в напрямках, що знайшли відображення у комплексних стратегічних документах морської політики України.*

***Ключові слова:** реформування портового комплексу, стратегічний підхід, морська доктрина.*

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