## SINGULARITIES OF THE PORT FEES COLLECTION IN PORTS OF THE WORLD

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Abstract: In this article it was reviewed and analyzed the existing systems of port fees collection in the world. The port fees are forming an important part of the ports' income and in the total income received by the ports, port fees can range from one to three quarters [15]. In many ports around the world the main source of income (35 - 50%) is the rent[14]. In the Russian ports as the main source of income are port fees. Port fees in the income structure of the Ukrainian ports range from 35% (Illichivsk) to 60% (Yuzhnyi). Except port charges levied on vessels and port customers the main cash flow of Port Authority is formed by fees for the use of territories (rent, concession fees, etc.), port basins, piers, driveways, heavy cargo handling equipment and other services. Port fees are classified according to charging conditions for: compulsory and optional. The same fees can be divided into two groups on the basis of the measurability of services: dues and And the division of port fees depending on its status for: state and regional/local.

Keywords: ports, port charges, the scheme of port fees levying, port fees concept

#### 1. FORMULATION OF THE PROBLEM

In this article it was reviewed and analyzed the existing systems of port fees collection in the world. In the total income received by the ports of the world, port fees can range from one to three quarters from total income amount [15]. In many ports around the world the main source of income (35 -50%) is the rent [14]. Thus, the main source of revenue at the port of Copenhagen - one of the three largest ports in Denmark is for services not related to the vessels' service (eg, the construction and upgrading of city district, located within the port area not used by itslef for port operations, as well as rent for leased port area). In the ports of Fredericia and Århus the main sources of port income are the port charges. In the first of which mainly the revenue is generated by the collection of ship dues, while the second by the cargo dues. On the example of Danish ports, you can assume that the presence of additional sources of income, including the non-traditional ones, can be a significant factor in the "value" of each call to port. The same factor is the freight fee charged to cargo owners. In the Russian ports as the main source of income are port fees. It is believed that these are the expenses of a foreign carrier, but the rate of freight, the transportation component of the price of the commodity costs already include these port charges.

Port fees in the income structure of the Ukrainian ports range from 35% (Illichivsk) to 60% (Yuzhnyi). In 2009, total revenues from port fees port Ilyichevsk was about 400 million UAH. And revenues as a whole - 1.2 billion UAH. While net profit - 285.6 million UAH. This means that if you withdraw the port fees from the income of the port, the result of Illichivsk

port in 2009 would reault in a 114.4 million UAH loss. Also, in other words, one might state that now the whole profit, which goes for now to the State Budget, is attributable to 60% of the port fees.

If you confiscate the proceeds of the Ukrainian ports from port charges, but they make up about 5 billion USD., they are all moving from highly profitable category in deeply unprofitable: 2.0 billion (net) - 5.0 billion (port charges) = - 3 bln. losses [14].

A comparative analysis of port dues systems in the world and Ukrainian ports will be driven, to identify the most appropriate for our country and to find ways to improve them.

# 2. A REVIEW OF RECENT RESEARCH AND PUBLICATIONS

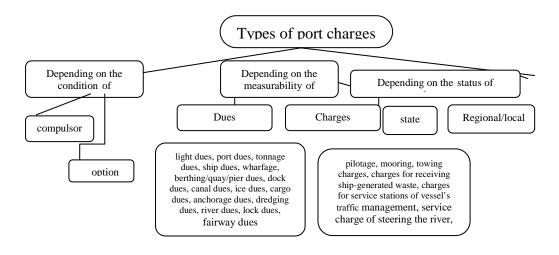
Issues of port dues and charges were dealt in works of Primachev NT [1] V. Vinnikov [2], Kryzhanivskyi SV [3], Kotlubay OM [4] O.M Kibik [5]

In the work [5] have been described by port charges, their functions and varieties but was not given a general classification, port charges in ports around the world.

### 3. THE MAIN STUDY MATERIAL

# 3.1 Types of Port Charges

The main cash flow of a Port Authority is formed by the port charges levied on vessels and port customers, fees for the use of territories (rent, concession fees, etc.), water areas, piers, driveways, heavy cargo handling equipment and other services. Considering the great diversity of existing port charges and dues, it is necessary first of all, to give them a clear classification (Fig. 1).



# 3.2 Charging Conditions

Port charges are classified according to charging conditions for:

- 1) Compulsory levied regardless of the vessel to provide specific services, but only due to the fact that it has entered the port:
- 2) Optional charged according to use of the services that are provided in the port.

# 3.3 Measurability of Services

The same fees can be divided into two groups on the basis of the measurability of services:

- The first group of fees for which payment does not include explicit provision of the ship, measured quantitatively and qualitatively services. These fees are usually called dues and include light dues, port dues, tonnage dues, ship dues, wharf age, berthing/quay/pier dues, dock dues, canal dues, ice dues, cargo dues, anchorage dues, dredging dues, river dues, lock dues, fairway dues. Each of these dues is a charge for the use by vessels of various port facilities: ship dues, port dues, tonnage dues - for the use of hydraulic works and water area of the port where the vessel is guaranteed a safe depth and protection from sea waves during a stop at the pier; dock dues - for the use of docks (but ports are sometimes sheltered by nature - no tides in Black Sea, tidal protection is in ports like, Antwerp, Le Havre), channel, river, dredging dues - for the use of leading to the port channel and the channels to approach the port; berth dues - for the use of moorings; lock dues - for use gateways, Fairway, ice dues - for the use by of channels the ship, the use of fairways and port waters during winter. Of course, these fees are directed to those who are responsible for the maintenance in a proper manner and the construction of the above objects.

- The second group of fees- charges, the payment of which provides for a ship a specific service, measured quantitatively and qualitatively. These fees include pilotage, mooring, towing charges, charges for receiving ship-generated waste collection services for stations vessel traffic management, service charge of steering the river, etc. A characteristic feature of the services provided under the charges of the second group is their obligation of payment for the ship. Actually this fact allows them to refer to them as port charges. It is clear that these charges are sent to the organizations - state, municipal or private, which provide these services, incurring the costs.

Traditionally all kinds port fees in maritime transport are generalized and called port charges. So next in the article, by port charges it is understood all kinds of port fees.

# 3.4 State and local status of Port Charges

Port charges on its status can be divided into **state** and **local**. State port dues - are introduced and controlled by central authorities. Local dues - are introduced and controlled by local authorities or port authorities. The same port may charge both state and local dues. For example, in ports of Finland will be charged state Fairway dues and local port dues, in ports of Denmark will be charged - state ice charges and local vessel dues and cargo dues, in UK ports – to State dues refers lighthouse dues, and to local dues- ship, cargo, dock and mooring charges.

## 3.5 Port Charges Destination

The port charges destination is equal in the world ports, but governments and economists in various countries differ in their size and. In this regard, there are two concepts of pricing of port charges. Conventionally, they can be called the British and French concepts. The British concept states that ports must operate on the principles of sustainability. Accordingly, the value of port charges, as the main and sometimes sole source of funds should be based on actual costs and include a share of profits. According to this conception port charges are treated as payment for a service, and their value - the price of services, including all the costs of this service. In general, this concept is accepted in many countries (UK, Denmark, Poland, Finland, Ukraine, Russia,

Japan, in some ports of Portugal). Usually, it applies to ports that do not require large expenditures on its content, with stable freight traffic, operating with no or little competition from other ports. The use of British concept does not exclude the principle of financial state assistance in cases where it is required one-time large investments associated with the construction of capital facilities with very long payback period (eg, canals, sea walls, river dock type, port access roads, etc.). In particular, in UK, such assistance could be provided through public financing, deferred payments, direct subsidies, in Poland - by exempting the income received from port fees. from income tax; in Japan - through government grants and loans from local authorities which have established governing body of the ports. The French concept of pricing of port charges is considering ports as a link into a single transport process, whose main task is - meeting the needs of the country (regions adjacent to the port) in the transported goods. Economic activity in this case, of the port has more an auxiliary character, aimed at addressing the larger economic and social problems. It is assumed that the main economic effect should give economic agents operating within the port area in the surrounding economic region, a country whose income must cover the losses from port operations. The French concept provides only partial coverage of port costs through the port charges. This means that the amount of port charges can not include all costs associated with maintenance and development of the port. Arising in connection with this the shortfall must be compensated by the state (local) budget, that is, at the expense of taxpayers.

Thus, in contrast to the British concept, the French concept considers the state aid as a condition of the pricing of port charges. Usually, the French concept of pricing of port dues is used in ports, requiring large capital expensitures (investments), large expenditures for their maintenance (for example, because of the extended approach channels and fairways, the need for icebreaking in the winter, etc.), operating in tight competition with other ports that are important to the economy of the country or several countries, socio-economic situation in the surrounding region, city. In accordance with this concept port charges in some ports are shaped for example in Belgium (Antwerp, for construction of locks and tidal berths and deepening of river Scheldt), Germany (Hamburg – maintenance and deepening of Elbe river, Bremen), France (Marseille, Le Havre), Spain. Canada, Norway, USA, pilotage for posting on the Saimaa Canal to Finland.

According to UNCTAD research on the conditions of funding of ports, more than two-thirds of the requested ports are funded from its own sources. The remaining ports financing is provided with additional sources. The same study showed that only 10% of the port authorities in the formation of the port fees have the task of only covering the operating and maintenance costs, depreciation and interest payments on loans. In 90% of cases, the fees should cover also the challenge of port development and the return on equity (shareholders capital) [11]. Speaking about funding of ports, we must bear in mind that most of port authorities have a special taxation regime. Usually, they are completely or partially exempted from taxes which are levied on other businesses. This fact, along with direct governmental subsidies (national and local authorities, and in some cases, the European Community through regional development Fund or Cohesion Fund), as well as other obvious and hidden forms of participation of central and local government in the port expenditures affect the amount of port charges at ports.

# 3.6 ECC White Paper

The artificial port cost reduction for the vessel calls in ports has been criticized by EEC Commission, which studied the annual costs for maintenance and operation of transport infrastructure in the second half of the 90th. The EEC Commission came to the conclusion that the allowance of such external factors, such as government subsidies, distort

competition in the European freight and passenger traffic. The White Paper "Fair press for infrastructure use: a differentiated concept of transport rates for the EEC" (1998), presents the commission's position on the competition equality of all European ports. The achievement of such equality would promote a common tariff policy of the European ports. One of the basic principles of this policy by commission's opinion, is the provision of the same basic rules for all modes of transport, the linking of the tariffs directly to the cost of customer service, reimbursement of expenses for maintenance and development of facilities at the expense of their users. In Commission's opinion, the rates of port charges should be focused on the social marginal costs, to which production costs are considered to be related, depreciation of infrastructure, damage caused by environmental pollution and accidents and a number of other items of expenditures. EEC Commission's recommendations have caused heated debates. It is believed that their practical implementation in the medium terms is unlikely. [16]

#### 3.7 Basic schemes of Port Charges collection

Regardless of what the concept of pricing of port charges is taken in a given port, there are four basic schemes of port charges collection, with different variations implemented in ports around the world.

- The first scheme. Port charges are levied and spent by the port administration, which has overall responsibility for the maintenance in operational condition and development of port facilities and security systems. In this case the expenditure part of the financial plans of the port administrations may require a mandatory approval in the central governmental authority or local government. Such a scheme is implemented in the ports of Great Britain (mostly private ports or run as a Trust) (except for light dues), Denmark, Poland, Russia and Ukraine in the major ports of Portugal and France.
- The second scheme. Port charges are levied by local (city, municipal and district) authorities to the local budget. In this case, the local authorities are free to determine the level of charged port fees, the direction and order of their use, bearing the whole responsibility for the port. This scheme is implemented in the port of Hamburg, in some ports of Portugal and Denmark.
- The third scheme. Any port dues are charged in favor of a national fund or the national organization. This approach is implemented in the UK in respect of the light dues which are transferred to the special fund from which the funding of lighthouses and other systems are being ensured navigation safety along the coast of UK and on the approaches to ports, in the U.S. the cargo dues are forwarded to federal fund, of which are funded dredging and navigation support on the approaches to ports.
- The fourth scheme. Port charges are levied by the state to the state budget. The revenue from the collection of charges is fixed as separately revenue in the state budget. In expenditure part of state budget are separately allocated the costs associated with support functions (works), for which the funding fee is charged. In case of excess expenditure over income, state compensates the missing part from other sources. Such a scheme is implemented in Finland in the collection of Fairway, pilotage charges and for outside port pilotage, in Denmark in the collection of icebreaking dues.

It should be noted that often different schemes apply for respective Port Charges within one port. E.g. in Antwerp, pilotage is charged by the Pilot Association to fund the expenditures of pilotage, and Harbour Dues are charged by the Antwerp Port Authority.

Case: French Ports. A detailed look at the system of levying port charges in France shows that the rates of port charges, except for passenger dues, are elaborated localy. In the

autonomous ports (Marseille, Le Havre, Dunkerque, Bordeaux, Nantes, Saint Nazaire), this elaboration is implemented by the Administrative Council, in the non-autonomous ports – by a body chosen for this purpose, department and municipal ports – by local authority or state institution designed for this purpose. Elaborated port charges come into force after their approval by corresponding higher state bodies. For autonomous ports such authority is the Ministry of Transport. Similarly, the rates on pilot services, tugs mooring are approved. In the autonomous ports they may be submitted for approval to the Ministry of Transport with the consent of the Administrative Council of the port.

All port charges, with the exception of passenger dues collection, are used to finance the work in the port associated with maintaining it in good working order and its development. The income from fees for use of equipment of fish ports are only used for fish ports interests. After covering all port expenses the formed surplus goes to a special territorial or state fund, from where they can be directed later to the development of ports. In France, a concept of port charges pricing is implemented, according to which the ports get state financial aid. Ports are exempted from taxes, get subsidies direct from government (departments. municipalities). Major ports could also subsided by the European Community (mostly Regional Development Fund). Each year an annual budget of the Autonomous Port of Marseilles is formed with the obligatory participation of the state and local municipal and regional authorities. The state participates in decisions on the definition of the strategic port development and finances 80% of the cost of port infrastructure and 50% of the port superstructure. Case: Danish Ports. Attention should be paid to port charges in Denmark, as in this state where coexist ports of all types of property (state, municipal, public utility, private). State ports fees are established by the Minister of Transport or his authorized representative. In other ports the size of port charges are determined independently by each individual port. However, under certain circumstances, the State may establish their upper and lower limits, to exclude cases of monopoly or dumping. The fee for pilotage services is regulated by the civil service - pilot agency. The system of charges in the ports of Denmark consists of two types of fees:

- dues (charges) from ships (ship's dues);

- dues (charges) of goods (freight dues).

Charges from vessels in Denmark include shipping dues and ice dues. Ship fee is charged and collected locally by port for the use of port waters, buildings and equipment. It includes services for receiving waste from ships, polluted water. Ice dues are state dues and are charged by the ports on behalf of the State to ensure the winter navigation.

Cargo dues in ports of Denmark will be charged for each ton of overloaded cargo. And in some ports it is in all cases be paid by the shipper or the consignee, in other ports in some cases it can be paid by ship, or in others by consignor or consignee. VAT on dues paid by ships engaged in international transport will be charged. In the coastal shipping, VAT is charged.

## 3.8 Port Charges in Ukraine

The dimensions of port charges in Ukraine are defined in the Law on port dues, approved by the Decree of Cabinet of Ministers of Ukraine № 1544 from 12.10.2000. In 2010, the Ministry of Economy of Ukraine took the initiative to modify the rates of port dues. To make changes to the above Decree of the Ministry of Economy of Ukraine has drafted a new Decree. (Table 1). The main purpose of the changes is the reduce of the rates of port charges for any and all groups of vessels of foreign and domestic (coastal) navigation. On average, proposed by the Ministry of Economy, the reduction rates are about 30%. Thus, port fees are proposed to be reduced by nearly one-third.

Table 1
Ratio of current rates of port charges and project port chatges in the draft Decree of the Ministry of Infrastructure of Ukraine

Type of dues (units)		Ilyichevsk Sea Trade Port, Tax rate for foreign-going vessels (for \$ /1m ³ volume of the vessel)  Current Project		Odessa Sea Trade Port , Tax rate for foreign-going vessels (for \$/ 1m ³ volume of the vessel)  Current Project		Yuzhnyi Sea Trade Port , Tax rate for foreign- going vessels (for \$/ 1m ³ volume of the vessel)  Current Project	
	Ship dues *	0,174	0,122	0,174	0,122	0,363	0,254
* - For \$/ 1m 3 volume of the vessel	Canal dues*	0,032	0,022	0,017	0,012	0,1169	0,082
	Light dues *	0,046	0,032	0,046	0,032	0,046	0,032
** - For \$/ 1m ³, at a call	Berthing dues **	0,035	0,025	0,035	0,025	0,035	0,025
	Administrative dues **	0,022	0,015	0,022	0,015	0,022	0,015
	Anchorage dues	0,0043	0,003	0,0043	0,003	0,0043	0,003
*** - \$/ 1m <sup>3</sup> per day	Sanitary dues	0,022	0,015	0,022	0,015	0,022	0,015

According to the draft Decree the decrease affects the following port charges: Ship dues, Canal dues, light dues, Berthing dues, Anchorage dues, administrative dues, sanitary dues.

Unfortunately, it is worth noting that this project to reduce port charges is not yet implemented, but rather the amount of fees has increased in connection with the decree of January 31, 2011 № 230. This regulation states: "The amount of port fees charged value added tax in accordance with law." Not long time after that on **06.08.2011 this decree was canceled.** 

#### 4. CONCLUSIONS

In accordance with the accepted classification in the article, port charges in Ukrainian ports belong to the British concept of port charges. The use of English concept does not exclude the principle of financial Governmental assistance in cases when one-off large investments are required, connected with the construction of capital facilities with a long payback period. But such financial assistance provided to the port does not exist in Ukraine.

At the moment, port charges in Ukrainian ports are not competitive. This is due to complete state control over port

charges. Profile institution SE "UkrNIIMF" proposes to establish a National Commission on Transport (NCT), which will monitor, analyze, design and set the tariffs for transportation, including rates for the cargo handling, and charges in ports. Such an approach would establish a level of port charges, which most would be consistent with the needs of the economy.

In Europe in general Port Charges are used for: 1) covering operational costs (harbor master, maintenance, and 2) investments. However in Ukraine, all profits of the port go to the State Coffers, and the ports cannot deploy it for development. If ports would be more autonomous (not direct wiring of profits to the State), that could have 2 effects: 1) port charges could be lowered to competitive level and 2) ports would build up funds for investments in port infrastructure. In other countries the State maintains under such scheme still control, since the major investments need approval from the Supervisory board of the port or even Ministry, and this Supervisory board consists of representatives of local and/or national government.

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