

ALTERNATIVE STRATEGIES FOR CONSTRUCTION OF THE ORGANIZATIONAL STRUCTURE OF MANAGEMENT OF THE MARINE INDUSTRY CLUSTER IN UKRAINE

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Abstract. The *purpose* of the paper is to elucidate the authors' attitude to the nature of clusters that have become widespread in marine economic activity, find out the motives that lead to their initiation, to demonstrate the variants of their organizational structure of management and the sources of funds needed to perform the delegated functions, in the context of current Ukrainian legislation. *Methodology.* Towards this goal the authors collected, systematized and analyzed a number of facts obtained from numerous publications in writing and electronic domestic and foreign publications. *Results.* Commodity diversity, which is so welcomed by consumers in developed countries, is the result of a strenuous competitive battle between suppliers at the market of alternative products and services. It is carried out not only among consumer goods producers, but also covers shipbuilding corporations and many related firms, among which there are medium and small ones in value creation chains. Often, they are concentrated in specific regions and in one way or another determine its industrial specialization. Competition does not bypass any country, although sometimes there is a sense that only those who keep marching the thorny paths of economic, political and social reforms are affected. For this reason, everyone is constantly looking for tools to reinforce their strengths over opponents in the fight for solvent purchasers. Clusters occupy a valid place among such tools, and it is generally recognized. In the countries of the European Union, clusterization has been raised to the level of public policy, strategies of behavior of entire industries and certain enterprises. In domestic areas, it is often that not everybody can clearly understand even the nature of clusters. *Practical implications.* The word "cluster" is etymologically derived from English and means "association" or "union". The Ukrainian legislator, while building the institutional basis for economic development, does not use this term, but outlines its varieties and formalizes procedures for starting unions. For this reason, domestic clusters are single and are rather examples of an initiative of the territorial communities. One of such initiatives can be considered an offer from a number of enterprises, organizations and authorities created in the Mykolaiv region. It is formalized in the form of the Mykolaiv maritime service cluster. *Value/originality.* Observing the first steps of the initiators shows that the enthusiasm of the pioneers is unlikely to be enough to solve all the tasks that have already been set up, and even more the tasks for the cluster to be solved in the future. Thus, there is nothing to do without creating at least a small administration. Since the top of the cluster is an unprofitable organization, according to the current legislation, it is most viewed by such organizational and legal forms as a cooperative (servicing) or a public union. If you consider them, you have an opportunity to create a budget and use the funds received for the implementation of approved plans, programs and projects.

Key words: economy, maritime industry, clusters, maritime clusters, management, organizational structure of management.

JEL Classification: M10, M11, M13

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1. Introduction

A market economy is based on competitive relations. This truth needs no proof because it is an axiom. Competition motivates the implementation of innovations (in the technological, product, management spheres). Through their agency, they create a unique offer from the manufacturers, meeting the most demanding needs of consumers. From this point of view, the benefits of competition are undeniable. Meanwhile, like for any "medal", competition has a "downside": competitiveness. And in its essence, it has to do with determining the winner and the loser.

Ideally, as in sporting contests, everyone has approximately equal options at the start, but only the best can use them with success. In an entrepreneurial environment, the slogan associated with the name of the baron Pierre de Coubertin, «the most important thing is not to win, but to take part», is not justified. According to the Statista portal (Statista, 2019), in the last three years, France has emerged as the record holder for corporate insolvency in the European continent. About 54 thousand of enterprises went bankrupt here in 2018 alone. In Germany this number was up to 19.5 thousand.

It is an open secret that shipbuilding also belongs to those segments of the planetary maritime industry where fierce competitive confrontations are taking place. They are complicated, in particular:

by the original imbalance of shipowners' demand and the offer of shipyards to the benefit of one side or the other;

by the problems with providing construction sites with skilled labor. And one should not think that only Ukrainian shipyards suffer from its shortage. Complaints about the need for staff (workers, engineers) are heard in Bulgaria, Estonia, Romania, Croatia, etc. According to "The Wall Street Journal" (Hinshaw, Ojewska, 2018), until recently, the Polish shipyards actively involved even South Koreans' workers to repair NATO submarines and warships. For example, in 2014-2016, they repaired a two-ton patrol ship of the Danish Navy. It is not difficult to imagine the fuss made when it was learned at the NATO's Headquarters;

by the justified requirements of governments and international organizations to improve the environmental "cleanliness" of ships. In recent years, they have become much safer, but they are still among the major environmental pollutants (in particular, ballast water, sulfur and nitrogen oxide emissions from the exhaust gases of the main and auxiliary engines);

by the protectionism which almost every coastal country resorts to in order to support a domestic producer¹. It is quite possible to understand those

who have power. The labor-intensive manufacturing, despite all attempts of its automatization, provides a lot of jobs. The European Commission is proud to announce that more than 150 large shipyards operate within its control. Thanks to the orders received, they attract more than 120 thousand of the employees. Their efforts generate annual revenue of up to €60 billion (Shipbuilding Sector, 2019). We must also add almost the same amount in related fields: from metallurgy to radio electronics. How can you not take care of "your people" here? But to put up with overprotection means to accept market distortions, to push competition to the "red line" by which it acquires signs of dishonesty, it is all contrary to international agreements.

Sometimes it seems that a competition in the shipbuilding industry is selective and particularly our country has suffered most from it. However, to think in this way is to be wrong. We take it from the experience of the United States, which, after World War II, was the industry's absolute leader (Klein, 2015). Today, America is far from the first place in the world rating of commercial shipbuilding with a small fraction of its volume. Who knows what would happen, if there was no order from the military to maintain the combat readiness of the largest known naval armaments. The fact is that under the local laws the contracts on this matter must be concluded exclusively with domestic shipyards. However, similar projects abroad would be cheaper.

Shipbuilders in Europe are also facing strong competitive challenges. They are solved in several dimensions:

firstly, public protection with a focus on enhancing the innovative advantages of continental firms. Just one example from this series is the 2018 NAVIS Research and Innovation Program launched by the European Commission. The purpose of the novation is to increase the efficiency of marine engineering and flexibility in production networks;

secondly, the owners and management of the shipyards take a constructive initiative, invent methods and effective practices to strengthen their market positions by themselves. Clusters as the instrument for pooling the potential accumulated by individual organization were among the most productive (Parsiak, 2018). Speaking of industry, comparing them with other common forms of business combination has revealed a number of features:

- a) informal and flexible integration of large, medium and small businesses, technology centers, engineering firms that mutually benefit from collaborating within a common value creating chain;
- b) high innovation: a source of added benefits against key competitors focused in China, South Korea, Japan, and now Algeria, Bangladesh, Vietnam, India, Indonesia,

¹ One of the most common forms of the protectionism is an export subsidy. Export subsidies take the form of numerous government benefits: direct financial compensation of the difference between actual costs and prices setting in foreign markets, tax reliefs, aid for the development and implementation of new technologies, training and skills development of the staff, etc.

Malaysia, Singapore, the Philippines, etc. They prove themselves the best in the following segments:

- creation of engineering complex ships (ferries, specialized research vessels, the "Ro-Ro" vessels, chemical carriers, offshore service and supply vessels, seismic vessels);
- perfect meeting of the most demanding needs of customers of "Lexus-class" ships (cruise ships, ocean megayachts);
- construction of offshore wind parks; eco-friendly or "blue" vessels that reduce harmful emissions into the atmosphere and use bunker-saving technologies.

At the same time, we consider it necessary to emphasize the importance of a comprehensive and systematic approach to uplifting other businesses that, through their desire to use the resources of the oceans, constitute the phenomenon known in political, professional and public circles as "sea economy" or "blue economy".

2. Brief literature review

Seeking to achieve this goal, we have enthusiastically discovered an incredible number of extremely interesting publications of our colleagues in Ukraine and abroad. For some of them, a cluster is an integral part of real economic life. Therefore, they resort to generalizing the experience gained (Finnish Maritime Cluster, 2018; Finnish Maritime Cluster, 2019; Ffowcs-Williams, 2016), develop practical recommendations for those who take the first steps on the clusterization path (The role of Maritime Clusters, 2008; Porter, 1998; EThekwini Maritime, 2019; Cluster Maritime, 2019), showcase examples of building institutional foundations for the implementation of a cluster approach, which is raised to the level of public policy, for example, in the EU (Shipbuilding Sector, 2019; Maritime clusters unlock, 2015).

Not once or twice there has been coverage of examples of cluster application in the domestic territories (Voinarenko, Bohatchyk, 2014; Hridniev, 2018; Repp, 2018). Together with the positive effects, the authors of these publications openly analyze the problems faced by the initiators of the respective novations. But the "blue" topic is not mentioned in the discussions. This is all because we do have access to the Black and Azov seas, we do remember the glorious campaigns of the Ukrainian Cossacks to the walls of the Constantinople fortresses, the labor victories of the past generations of shipbuilders and naval navigators.

The purpose of the paper is to highlight our relationship to the nature of clusters, to demonstrate the organizational structure of maritime clusters and to find out the motives that lead to their initiation. In

order to get the desired one, the authors have collected, systematized and analyzed a number of domestic and foreign publications in writing and electronic concerning the views on the essence of clusters, the reasons for their dissemination in industries for the creation of complex engineering structures. We were particularly interested in the information about the features of management that is able to preserve the unity and coherence of the actions of the economically independent economic entities.

3. What is the meaning of "a cluster" category?

Firstly, let us clarify what term is called "a cluster" and how it differs from the other known types of business alliances. In search of the truth, we turn to the repositories of human wisdom: explanatory dictionaries. For obvious reasons, let us start with the English-language sources we need. The one created at Cambridge offers the following versions (Cambridge Dictionary, 2019):

1. Noun: "a group of similar things or people, which are close together, sometimes surrounding something. For example, there are mentioned a cluster of galaxies, a cluster of fans of a personality (film actor, politician, athlete), a cluster of high-tech enterprises in an industrial park (e.g. Cedar Crossing Industrial Park, Rotterdam Harbor, Yanbu Industrial City), a cluster of computers connected together to work as one powerful computer²". Further, thesaurus contains synonyms: ensemble, generation, subgroup, collection, dataset, anthology, and even sheaf. Why not? Especially when it comes to a bunch of stems of cereals of a certain kind (wheat, rye, oats, etc.), there are no closer.

2. Verb: to form a group of similar things or people, sometimes by surrounding something; to happen a lot in the same small area or in a small group of people. For example, grandchildren cluster their grandmother to listen to a fairy tale, students cluster around the department's noticeboard to read a message from a teacher about the results of a recent module academic performance rating.

Longman Dictionary of Contemporary English (Longman, 2019) reinforces the previous thought: a group of things of the same kind that are very close together. And further explanation: a cluster of low farm buildings, a cluster of teachers of small school providing curriculum support for each other. In the latter case, even the phrase "cooperative cluster" is used. We will still have the opportunity to recall this not accidental focus, as it turned out.

The Oxford Dictionary's authors adhere to the assumption that etymologically the word "cluster" is derived from the Old English "clot" (Lexico Dictionary, 2019). For example, a blood clot of clot of fallen leaves.

² A similar definition connected to the electronic computing machines is found in the Regulation "On the Register of Information, Telecommunication and Information and Telecommunication Systems of Executive Bodies, as well as Enterprises, Institutions and Organizations Related to Their Sphere of Their Management", approved by the Cabinet of Ministers of Ukraine in 2005 (Polozhennia, 2005)

Their "homogeneity" in the rainy autumn days, full of sadness, is obvious. Unless, of course, abstracting from the memories that are reminiscent of: once upon a time, each one of them that has fallen into a ragged wet pile in a remote corner of a city park was caressed by the light wind on the branches of trees of different breeds.

Thus, as we can see, formally the term "cluster" translates from English as "association", "union". In everyday perception the semantic charge of these words in the Ukrainian language has different shades. Association is something disordered, the agglomerate of something that uses their direction. The union, on the contrary, gives rise to the idea of an organized system of its components. Thus, the meaning of the term each time is determined by the contexts of use, the nature of the integrated objects and, finally, the tasks that the researchers are facing in course of a particular process or phenomenon.

This can probably explain that the national legislator, while forming the institutional basis for the development of the Ukrainian economy, has not mentioned the clusters yet. Instead, in Art. 120 of the Economic Code of Ukraine we find a section devoted to the definition of organizational and legal forms of associations in the business environment (Table 1). The analysis of the information provided and other provisions of the legislative act made it possible to determine the legal bases on which their creation is based:

a) Only legal entities may be sponsors and members of the association. All of them, even after the merger is created, retain the status and corresponding rights of the independent business entities;

b) the association acquires ownership of the capital (fixed assets and working capital) transferred by the initiators of creation to its balance sheet in accordance with the contract or charter, and to the property subsequently acquired as a result of economic activities. As a legal entity, the association is not responsible for the obligations of its members, and they, in turn, are not responsible for the obligations of the association;

c) function and powers in the centralized management of such, for example, fields as scientific and technical, industrial-economic, marketing, export-import, etc. agreed upon by the founding companies are delegated to the newly formed bodies of the association. The scope of these functions and powers should be enshrined in the agreement or charter of the association.

One would think that this can make it final. Meanwhile, we are convinced that such a decision will look premature. And here are the reasons:

firstly, in 2018, another economic interpretation of the cluster emerged in the Ukrainian institutional space. And it concerned not just any field, but the sea. It was contained in a new version of "the Maritime Doctrine of Ukraine for the period until 2035" approved by the Cabinet of Ministers. In the glossary, among the

Table 1

Organizational and legal forms of associations of enterprises

Form	Objective	Examples
Contracting		
Association	Ongoing coordination of the business activities of the merged enterprises, through the centralization of one or more production and management functions, the development of specialization and cooperation of production, the organization of joint productions based on the association of financial and material resources by the participants to meet mainly the economic needs of participants. The Association has no right to interfere in the economic activities of the participating companies, but may be authorized to represent their interests in relations with authorities, other enterprises and organizations.	1. Association of Shipbuilders of Ukraine "Ukrsudprom" 2. Association of International Road Carriers of Ukraine "AsMAP" 3. Association of Ports of Ukraine "Ukrport"
Corporative	Combining the production, scientific and commercial interests of the merging companies with the delegation of the individual powers of centralized regulation of the activities of each participant to the governance board of the corporation.	1. "Bogdan" 2. "Ceramist" 3. "Temp 21" 4. "Omex"
Statutory		
Consortium	Achievements by participants of a certain common economic objective (implementation of targeted programs, scientific and technical, construction projects, etc.). The consortium uses the funds provided by the participants, the centralized resources allocated for the financing of the respective program, as well as the funds coming from other sources, in the order specified by its charter. If the objective of its creation is reached, the consortium ceases to operate.	1. "ASTEK" 2. "Ecosorb" 3. "Ukrtransgaz" 4. "All-Ukrainian Sociological Consortium" 5. "GeoGelio-Astrophysics"
Concern	Centralization of the functions of scientific and technical and industrial development, investment, financial, foreign economic and other activities of the participating companies, as well as other organizations based on their financial dependence on one of them or a group of members of the association. Members of the concern give it (them) a part of their powers, including the right to represent interests in relations with authorities, other enterprises and organizations.	1. "Nuclear fuel" 2. "Zirka-Technologies" 3. "UkrOboronProm" 4. "Ukrpalyvo"

Source: systematized by the authors (*Hospodarskyi kodeks, 2019*)

key terms identified, we read: "Maritime cluster is an informal functional association of similar, related or additional entities of the maritime complex with active channels for business transactions, communications and dialogue that share specialized infrastructure, labor markets and services and share common opportunities or threats" (Sea Doctrine, 2018).

We do not consider it necessary to waste time and distract the attention of our dear readers to "showdown" with the authors of the above definition, since they have not so opened their eyes on the essence of the phenomenon, and in the result distorted the idea of the term by the chaotic agglomerate of the words such as "functional association", "active channels", "additional entities", "labor market", etc.;

secondly, almost a quarter of a century the pages of scientific periodicals, impressive monographs, statements of accredited institutions while discussing problems of regional development are pierced by the golden thread of the idea of clusterization. Therefore, there is an urgent need to continue the research.

In this regard, let us turn to the Academic Explanatory Dictionary of the Ukrainian Language. It clearly distinguishes the concepts that have come to our attention:

association is a whole formed on the basis of a connection, combination of anything. The organizing people based on a commonality of goals, objectives (Slovnyk, 1974). We state almost absolute harmony of views with the developers of the Economic Code of Ukraine;

assemblage is a large number of people, objects, and more collected in one place (Slovnyk, 1978). There is not even a hint of the inviolability of the ranks and the subordination of one will and a high correlation with the definitions of English colleagues. If the enterprises with related activities are added to the list of accumulated objects (which together form the value creating chain), then we will come close to solving the "secret".

M. Porter helps to put the end. It is the professor at the Department of Business Administration in the Harvard Business School who is considered by authors of the large number of publications to be the person who first attached attention to clusters (in the assemblage posture) as a tool to enhance the business competitiveness. We offer you to see his take (Porter, 1998), presented in outline and completed by the contextual illustrations:

1. Cluster is a geographical assemblage of firms in a particular industry. For example, shipbuilding companies, ports, mariculture farms, shipping companies.

2. Clusters, which in addition cover a number of enterprises of related industries and other entities capable of enhancing the competitiveness of the first group, to give new impetus to the development of regions. For example, suppliers of specific materials (shipbuilding),

components (main and auxiliary engines, navigation equipment, etc.), service providers (engineering, cable and electrical equipment mounting, etc.).

3. Clusters with the participation of dealers involved in the created distribution channels and end consumers of products. For example, offshore enterprises: oil and gas platforms, offshore wind parks, service firms that are responsible for building and maintaining their livelihoods.

4. Clusters with the participation of producers of educational programs on the formation of professional competences (universities: training of the students, who are the future employees of the relevant enterprises, upgrading the skills of personnel already admitted to work; colleges: assistance to those wishing to master vocational professions), technology developers (research centers), compliance agencies (classification societies).

5. Clusters that are of the interest for government institutions and local self-government authorities. They may be attracted by the increase in export of products produced by cluster enterprises, the prospect of job creation, increased economic capacity and, thus, the region's attractiveness to local residents or migrant workers.

Which of the five mentioned is the best? The answer to this question lies in the plane of measuring the competitiveness of each of those who are in the assemblage or find the benefits for themselves associated with joining it. It does not prevent the competition: the cluster is not a cartel. The benefits can rather arise from establishing cooperative relationships with all businesses capable of helping to start an innovative business quickly, at a moderate cost, in accordance with recognized quality standards.

Let us look at the structure of one of the clusters (with a total added value of \$ 24 billion) introduced in Norway (Table 2). Obviously, we have real confirmation of at least one of the formats outlined above.

The following example is The Finnish Maritime Cluster (FMC), which is believed by its founders to stand a good chance of becoming the new cornerstone of the economy, given its role as a key operator of trade and well-being in the Scandinavian country (Finnish Maritime Cluster, 2019). It is not surprising, since three thousand participating companies serve almost all segments of the global market (transportation of goods by all types of cargo and passenger ships, offshore oil, gas and energy production from renewable sources, the production of biological resources and their processing, etc.), and value creating chains consist of components already known to us: engineering, production, operation and service.

Shipping companies (there are 26 of them; it makes an impression if you recall the size of the country on a geographical map) have 108 ships in the external communication only. About 700 vessels operate under the Finnish flag. Together with the other enterprises of

Table 2

Structure of the national maritime cluster

Sub-sectors	Scope of activities	Share in AV*, %
Shipping	Operation of ships and other floating offshore structures (drilling rigs, etc.)	54
Services (engineering, ship brokers, insurance companies, banks, classification societies)	Financial, legal, technological, port and logistics. Design of ships. Sale of component parts and ship equipment, ship agenting	21
Production of a ship equipment	Виготовлення усіх видів обладнання для суден та інших морських плавзасобів і споруд	18
Shipbuilding (shipyards and ship repairing yards and workshops)	Construction, maintenance, repair and modernization of ships and other floating offshore structures	7

*Explanation: AV – added value

Source: O sudostroenny, 2015

the maritime economic complex (in particular, ports and port operators), the shipping industry is a powerful generator of technological and environmental innovations. Including the reduction of harmful emissions into the environment, the observance of the applicable norms in this regard and those which are planned for the near future.

The Finnish Shipowners' Association, the Finnish Maritime Industries Federation, the Finnish Port Association and the Finnish Port Operators Association joined the development of FMC and the acceleration of "blue" growth. The efforts they make are coordinated by the Centrum Balticum Foundation and funded by the European Marine and Fisheries Fund and the National Center for Economic Development, Transport and the Environment.

The list of examples from other countries could be continued. Let us say more: in 2005, the creation of the European Network of Maritime Clusters (ENMC) was announced in Paris. In pursuance to the organizational and legal form, it is a confederation covering more than sixteen national maritime clusters (NMC): Sea Vision UK (United Kingdom), Dutch maritime cluster (Netherlands), Federazione del Mare (Italy), Bundesministerium fur Wirtschaft und Technologie (Germany), Cluster Maritime Francais (France), Marine Cluster Bulgaria (Bulgaria), etc.

From what we already know, we can make generalizations about the most common components of national clusters and the relationships among them (Figure 1). It is obvious that as soon as the prospect of enhancing its own competitive advantages emerges, business raises integration to a higher level.

4. Motives that encourage the creation of clusters

Observation of foreign economic practices revealed positive consequences of NMC activity:

reducing the costs associated with operating activities through the occurrence of the "economies of scale". For example, combining inbound orders opens the prospect of receiving it from suppliers with substantial volume discounts;

concentration of new knowledge and creative ideas that enhance the competitiveness of everyone, and at the same time, the whole group of participants together by distributing customized information sharing channels (for example, in foreign markets in the joint struggle for export orders). And the more they are involved in the endogenous data transfer system, the more information about markets, inventions and technologies becomes available to them;

separation into service cooperatives or release the units into the "free market floating" (for example,

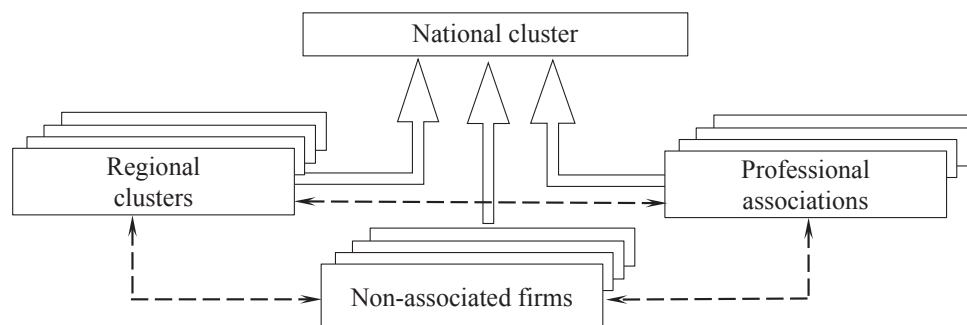


Figure 1. Structure of the national cluster

Source: formed by the authors

such as marketing, procurement, engineering); they are previously engaged in solving the same tasks, overburdening the corporate budget. The benefit is also for the participating companies to get rid of inefficient business processes through the use of the strengths of emerging partners through conducting the outsourcing contracts.

This is good news that the views expressed in this regard are in line with the views of the European Union Commissioner for the Environment, Maritime Affairs and Fisheries Vella K., which he made at one of the ENMC meetings: "Thanks to the clusters that are now all over Europe, businesses are able to network on innovation, create economies of scale, and cooperate with each other nationally and internationally" (Maritime clusters, 2015).

Meanwhile, other motives have been identified that fuel the interest in clusterization in the maritime economy:

1. There are conflicts related to the enterprises located in the coastal waters and territories (in addition to shipbuilding, there are also shipping, ports, fishery and fish-processing, mariculture, extraction of building materials, marine energy, recreational activity) connected with encroachment on limited marine space, especially when taking into account the growing technological power and technical equipment of producers.

In such circumstances, the integration of businesses within the clusters creates a favourable base for establishing effective maritime activities management, including the usage of spatial planning technologies. In this context, the mission of national maritime administrations (related to clusters) is important: the unbiased, competent arbitrators for whom the interests of the country and local territorial communities are an absolute priority over the interests of certain entrepreneurs and, moreover, their own needs.

2. The cluster is a tool for protecting important economic values. As far as the EU is concerned, this includes 25% of the world's maritime trade, 40% of the world's fleet, dominance in the offshore renewable energy sector, the fantastic rise of cruise tourism, etc. (The role of Maritime Clusters, 2008). These properties of the previous generations of the continent's inhabitants must be preserved and multiplied. The same applies to the regions of our country that are on the shores of the Black, Azov Seas and the Kerch Strait.

3. For socially responsible business, clusters open the prospect of consciously combining purely economic interests with generally recognized social values and concern for the environmental health of the oceans (to ensure its sustainable development, preserve resources for the benefit of future generations of the planet) for their participants. To this end, the innovations that require considerable investment are inevitable. Once again, integration provides benefits.

With pride for our countrymen we state that the first sprouts of clusterization had their effect on the domestic shipbuilding. The corresponding initiatives were made by scientists, businessmen, shipyard management and engineering centres in Mykolaiv. Firstly, most of them are in the most productive phase of their own life cycles, with enough energy and authority to instill the enthusiasm of colleagues, formulate relevant objectives and determine the best methods for solving them.

Secondly, we are dealing with the "bottom-up" development technology, which shows a great demand for clusterization. And, true to form, it comes from enterprises in the real sector of the economy. The city authorities, as well as reputable international financial organizations, were in favour of the idea, particularly, the European Bank for Reconstruction and Development. With its support, a series of regional roundtables were held with the involvement of experts, academics, and practitioners in 2018.

It is characteristic that when starting the discussion with the issue of small ship design, creation the infrastructure, needed for their maintenance (especially during the off-navigation period), ship repair, the participants expanded their ideas about the subject of discussion, became aware of the pressing problems of the industry. As a result, in the spring of 2019 during the European Maritime Day event signed a memorandum on the creation of a maritime service cluster by nine entities.

The idea is practical, because as of the end of 2019, the southern territories of the region are located at least six shipyards and ship repairing yards, nine ports, load/unload complexes and terminals, seven shipbuilding engineering-related offices, a number of educational institutions (from professional lyceums and colleges to the world-famous Admiral Makarov National University of Shipbuilding). It is quite enough for the first time to take the world experience (Figure 2).

This truth is needed to be realized necessarily by all the current and potential participants to get down to business quickly, because nobody except us will help us become successful. A competent staff (workers, engineers, managers) is necessary for reaching this goal: it is a matter of educational institutions and their direct interest. The availability of innovative, knowledge-intensive jobs can at least reduce the dangerous traffic of young people from abroad, increase the number of applicants in student audiences, strengthen the economic security of educational centres, reduce their humiliating dependence on the whims of political elites in power.

Business will grow and new investors will be attracted to the cluster if the region differs in a proper business environment: security, modern infrastructure in all its multiversity (industrial, social). Here the local authority has to say its word, although, not only the local one. There is much depends on the favourable legal climate in the country as a whole. It is characterized, in particular, by such features as the business security (from raiding,

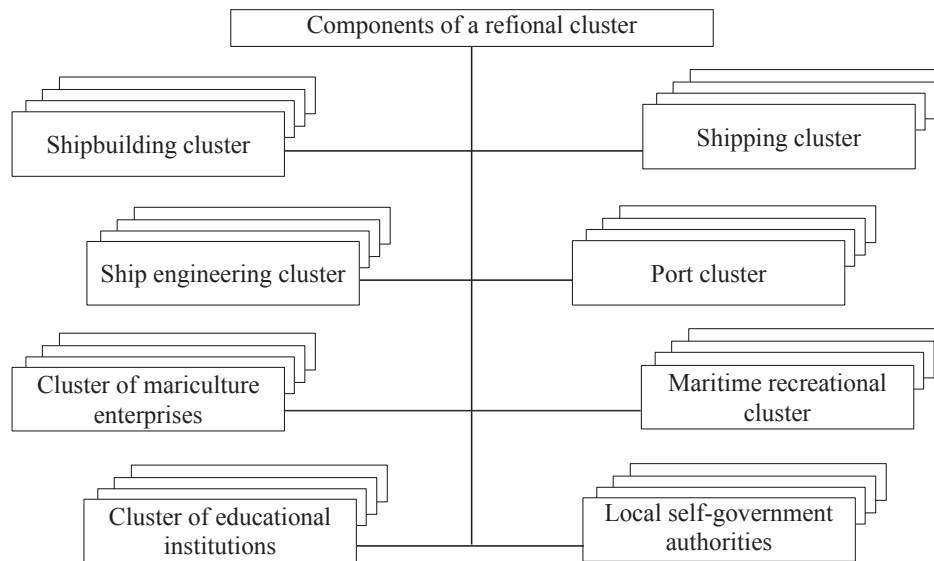


Figure 2. Perspective design of a maritime service cluster

Source: formed by the authors

criminal trespassing, scrupulous state control), equal rights in fair competition, impartiality of the judicial system. So, the motivational circle is closed. At least it is so from theoretical perspective. And all this is based on good will, without any external coercion.

5. Organization of cluster management

The cluster is a surprisingly democratic system. It does not in any way limit the desire of each participant to achieve an advantage over the other, but at the same time, it gives the opportunity to establish long-term partnerships based on mutual trust. It is just like an elite club of key interest: increasing productivity and efficiency. The main forms of cooperative are: meetings (seminars, conferences, roundtables), exchange of information, lessons learned, best practices, policy initiatives, research findings.

"These are not so difficult events": that is how everyone thinks who has never participated in them, and, moreover, has never been in the organizing committee. Oh, how wrong you are, ladies and gentlemen! As this issue is beyond the scope of our research, we illustrate with clarity the key stages of the preparation and conduction of the event: the choice of the appropriate (according to size, decoration, equipment) premises, its division into zones (conference room, buffet, meeting room), the media (sending invitations, press release), selection and preparation of speakers, moderator, support staff, preparation and sending the invitations to participants, approval of the event program and control over its implementation, preparation and distribution of final documents, etc.

All this and many other really important things someone, somewhere and someday has to do. And beyond that:

- to create and maintain an official cluster site;

- to publish periodic newsletters, brochures, to participate in fairs, exhibitions, presentations;

- to conduct educational events, to establish links with academic centers on this subject;

- to arrange meetings with foreign cluster visitors, representatives of public and academic circles, business, media;

- to support joint research projects, to establish relationships with grantmakers and donors.

The conclusion is obvious: the cluster needs "management". We deliberately put this word in quotation marks because, in fact, it is not about management, but about delegating functions and allocating funds for the organizational support of the discussion and decision-making processes that are on the agenda. It is futile to hope that the case will be "pulled out" by individual enthusiasts. Their passion is useful to keep the fire engaged, but keeping its appropriate intensity involves teams of professionals.

Logic and intuition suggest images for this facilitation to likely manifest itself, such as:

- firstly, the cluster management functions are assumed by the cluster participants on an agreed basis (from project to project or for a specific period: quarter, half-year, year);

- secondly, the involvement of competent persons in a newly created unit at one of the cluster participating companies with the obligation for others to enter into agreements to obtain, for example, consulting services from the partner, to offset the costs we have mentioned;
- thirdly, the integration of cluster management into the structure of the local Chamber of Commerce and Industry.

The peculiarity of these three options is that access to each of them prevents the emergence of another

legal entity. At the same time, there is an effect of double subordination of the employees of the cluster management body, eliminating them from the disposal of financial resources, which can provoke serious confusion and complications in communications. Let us not forget about the taxes:

additional expenses;

fourthly, the creation of a cluster management apparatus in an organizational and legal form that complies with the current legislation in the country. The analysis showed that a correlative benefit can be found:

in the Law of Ukraine "On Civil Associations" (Pro hromadski obiednannia, 2019). It opens the prospect of a public union: a species of a public association founded by legal entities under private law. Both legal entities of private law and individuals may be involved as members (participants);

if it is guided by the provisions of the Law of Ukraine "On Cooperation" (Pro kooperatsiiu, 2019), it is likely to be a matter of service cooperative. It is formed by interested legal entities to provide them with services related to conducting business activities. It may happen that the cooperative (with the permission of the board) will be able to provide the relevant services to other persons, but their volumes should not exceed 20% of the total turnover. With regard to "internal" clients, it is necessary to determine what services they will receive, figuratively speaking, for free, and for which it should be charged a reasonable fee.

It is obvious that we are dealing with a legal entity, with all the relevant attributes: an independent balance, stamp, current and other accounts in commercial banks. Confirmation of the full reality of these latter alternatives has been found in the coastal regions of European countries as well as far away: in the Republic of South Africa (EThekwin Maritime Cluster, 2019). There in the city of Durban, the maritime cluster was set up precisely as a non-profit organization with a mandate to support and promote maritime businesses, to overcome the non-conformities between the government's industrial policy and private enterprise. It is characteristic that, like Mykolaiv, Durban plays an important role in the region

as a transit region, and the geographical location of RSA, by analogy with Ukraine, creates favorable prospects for the rise of trade and other types of maritime economic activity.

The organizational structure for managing a cooperative (public union) may look like as shown in Figure 3. We think that there is no need to convince anyone: the number and quality of staff of a cooperative is determined by the satisficing principle. That is, it depends on the structure and complexity of the functions delegated to it. We found out that there are only three employees in the administration of the Luxembourg Maritime Cluster: the Chairman, the Managing Director and the Assistant Manager (Cluster Maritime Luxembourgais, 2019).

It is as obvious as the desire to involve in the board the persons with impeccable reputation, the only names of whom confirm the justification of the idea (Ffowcs-Williams, 2016). Their generally recognized virtues, enthusiasm, constructive initiative must make a positive impression on officials, on probable philanthropists, and on the wider public, including the media, to be the key to realizing the intended effect: increasing the competitiveness and efficiency of the case set up. And this is the most important thing for business owners involved in the cluster.

Their efforts are enhanced by the impeccable management of the Executive directorate. Together, they open the way to new technologies, products, markets, and the explosion of maritime economic activity in the region. The cluster is not a business add-on. It works as an accelerator and is expedient only if this mission is fulfilled.

Concerning the budget of the cooperative (public union), its revenue side, according to the norms of national legislation, is formed from sources that can be seen in Tab. 3. The analysis of the European experience shows that the list mentioned can be expanded with the help of private funds or donations from those who stand with the goals that the cluster aims to achieve in this way. They receive significant assistance (almost 50%)

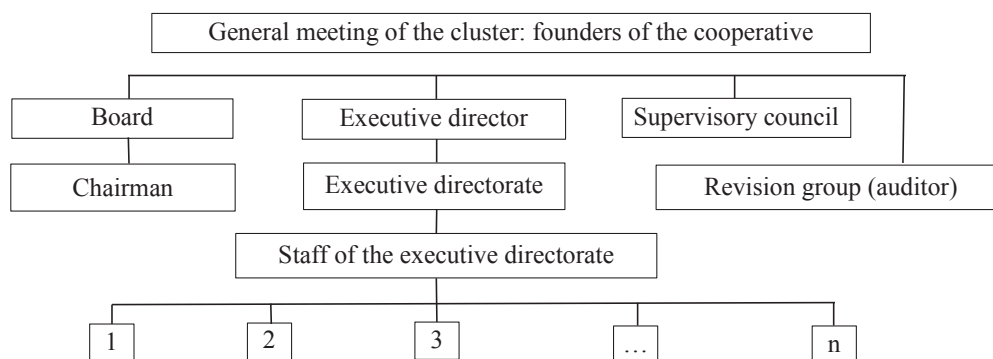


Figure 3. Structure of the cluster maintenance cooperative

Source: systematized by the authors (Pro kooperatsiiu, 2019)

Table 3

Budget sources of the cooperative

Subject	Characteristic property
Joining fee	Cash or other asset non-refundable contribution paid by the entrant
Membership fee	Monetary non-refundable contribution periodically paid by a cooperative member to support the ongoing activities of the association
Target contribution	Monetary or other asset contribution of a cooperative member to the dedicated fund for the specific tasks of the cooperative
Share	Asset refundable contribution of the cooperative member (associate member) in the creation and development of the organization. At the physical level it can be property, money, property rights, land;
Additional share	Voluntary monetary or other refundable asset share of a member (an associate member) of the cooperative made over the share in the share fund of the cooperative

Source: systematized by the authors 9 (*Pro kooperatsiiu*, 2019)

from their countries and the EU funds (for example, European Structural and Investment Funds, Horizon 2020): grants, technical assistance, export consultancy, educational programs, monitoring and evaluation of activities, infrastructure development, startup financing, promoting environmental efficiency, building a new cluster management organization, co-financing business projects on the basis of public-private partnerships, etc. (Cluster programmes in Europe, 2008).

This is not "philanthropy" of officials at the expense of taxpayers, which we see somewhere in Ukraine. It is about motivating the most recognized development areas: innovation, research and development, balancing regional industrial systems, accelerating the high-tech or export-oriented businesses, enhancing the chances of small and medium-sized enterprises, key competences and upgrading human capital, etc. Of course, the respective priorities vary from country to country, region to region, from the time period in question.

6. Conclusions

"Cluster" is one of the most used terms in modern management. Someone applies it consciously, understanding the nature and purpose of the phenomenon. Someone is paying tribute to fashion and, rather, moving downstream than actually realizing the beneficial consequences of using regional clusterization in practice. For this reason, we have frequent examples of too long period of time between generating a relevant initiative and organizing a cluster of businesses that are in fact linked to the value creating chain. And,

unfortunately, sometimes the intentions do not develop from the decorations. Therefore, the authors hope that this material will fulfill at least its informational and educational mission. In turn, awareness of the subject matter of the research subject will open up for clusters the prospects for the benefit of regional economies.

The topic of clusterization is of particular importance in the context of the increasing role of the blue economy in solving the problem of providing humanity with the resources necessary to meet its needs. This assertion is brilliantly proven by the experience of the enterprises in the European countries that are directly related to maritime business. The clusters they have created intensify innovation, save on operating costs, strengthen the position of continental commodity producers in the highly competitive global shipbuilding markets and related industries. The accumulated experience is a model for imitation for the enterprises, state authorities and local self-government.

The organization of regional clusters should not be delayed, at least, in order to look contemporary in the eyes of foreign partners. No matter what one says, but first you judge how nice. Meanwhile, too forced rush would be a mistake. The bureaucratic component of the association should not cause concern for the participating companies. Moreover, the cost of its maintaining should return positive results, some of which were have been introduced in the article. And that will depend on the person who will be invited to the positions of manager and staff-executors. Continuing the folk wisdom, let us remind you: then you judge how wise!

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