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# Improving the organization of maritime tourism: research studies of economic aspects with the tools of journalism

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## ABSTRACT

The sphere of sea tourism has massive potential for development; however, it requires the development of recommendations for effective organization. The primary research method is journalistic research, which allows for analysis of the subject of research from different angles and the use of additional data; in particular, the study results were based on official statistics, publications in reputable publishing houses, and the authors' surveys and observations. The purpose of the article is to develop recommendations for the effective organization of maritime tourism. To achieve the goal, the authors analyzed the leading indicators of world statistics of sea tourism (on the example of cruises), identified the main trends and made forecasts that showed the study's relevance. The authors also thoroughly conducted an analytical analysis of the subject of the study. They analyzed the global sea cruise industry market statistics, the prospects for the sea tourism market, and the impact of the COVID-19 pandemic on the cruise industry. The authors conducted a survey and analyzed the reasons and factors influencing the choice in favour of sea tourism. The study made it possible to propose a mechanism for the effective organization of sea tourism in the country, which was tested on the example of the Odessa region and proved to be effective.

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## 1 Introduction

Maritime tourism is the economic backbone of coastal areas, contributing to economic growth and employment [18; 24]. Sea cruise tourism can be considered one of the priority areas of socio-economic development and structural transformation of the economy of several countries and regions. The globalization of the modern cruise market, which is developing based on an increase in the passenger capacity of new generation ships and the development of new routes for cruise lines of shipping companies, requires the search for an effective mechanism for the functioning of the cruise tourism market in maritime regions. The world industry of maritime tourism (primarily cruise tourism), at first glance, shows growth (Fig. 1).

It is worthwhile to analyze the above indicators of sea tourism carefully. As indicated above, at first glance, it may seem that the industry is not in danger: all the leading indicators (number of cruise ships, number of beds, passenger capacity) are growing, and according to forecasts, they will continue to grow. The coefficient of determination for all three predictions is 98%, which proves their statistical significance and that the forecasts can be trusted.

However, for a deeper analysis, the authors have built a growth curve by years, which shows that over the past three years, growth has slowed down, and if the trend continues, then, according to the forecast, the industry is expected to fall as early as 2023. These indicators were primarily affected by the COVID-19 pandemic, but the war that began in Ukraine in 2022 may accelerate the further decline of the industry.

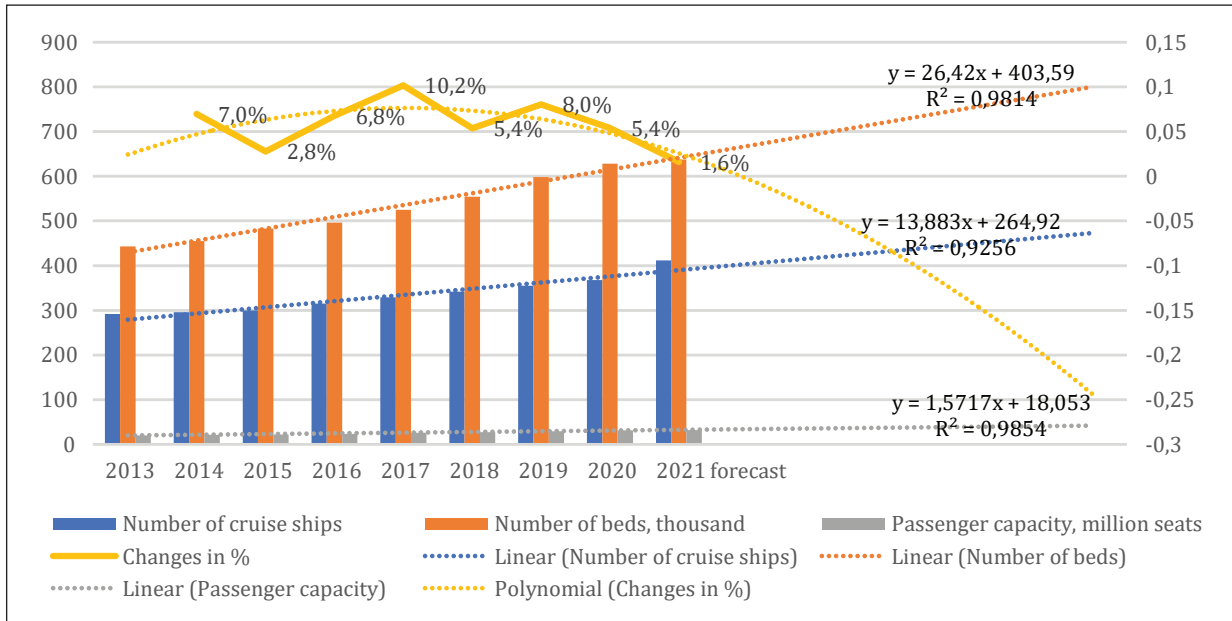


Figure 1 Cruise Industry Worldwide (compiled by the authors according to [12])

The relevance of the study lies in the fact that it will identify promising areas for integrating the financial, industrial and intellectual capital of public and private enterprises in the maritime and tourism sectors of the economy to create attractiveness and develop a competitive cruise tourism market in coastal regions. Finding ways to improve the organization of maritime tourism is the purpose of the study. Achieving the goal involves the following steps:

- research of the world and Ukrainian market of sea tourism;
- study of the impact of COVID-19 on the industry;
- development of recommendations;
- approbation of the proposed recommendations.

To achieve the goal, the authors propose to use a comprehensive scientific and methodological approach, namely the combination of general scientific methods with specialized ones, such as journalistic research, peer reviews and surveys. Journalistic research tools will allow the authors to collect the most up-to-date and relevant information since tourism is an area where changes are far ahead of scientific research; survey methods and expert assessments will allow you to study the subject of research, both from the point of view of users and professional practitioners. The synergy of these methods will enable the authors to achieve the planned results.

## 2 Methodology-analytical basis of the study

The main research methods were investigative journalism, namely observation, interviews (opinion polls), work with documents, and the experiment. This approach made

it possible to penetrate “deep” into the phenomenon. This paper applies a qualitative research methodology and considers relevant sources of primary and secondary data, global maritime tourism statistics, reports from leading cruise companies and materials from reputable media, norms and laws of international law.

A feature of the study is the almost complete absence of a theoretical block since the study involves the development of a practical mechanism for the effective organization of sea tourism.

A separate block of research is the collection and analysis of analytical information. The authors actively used software products such as Microsoft Excel and Statistica 10 and mathematical and statistical models. Also, more familiar general scientific methods were used, such as structural-logical analysis – to build the structure and generalize the theoretical and practical provisions of the study; scientific abstraction, systematization, generalization, concretization and comparative analysis – in the analysis and inference of the developments of Ukrainian and foreign scientists on the issues of scientific research; methodological techniques for tabular and graphical presentation of research results, grouping, scaling – to assess the development of the industry, the impact of COVID-19; theoretical generalization – to form the conclusions of the study.

According to a Cruise Industry News report in 2015, the global maritime cruise market is shared by 20 specialized companies, which belong to 4 major groups.

The Carnival Corporation holds the list of the largest cruise companies. The fleet of the largest of its brands – Carnival Cruise Line, has more than 20 vessels and is constantly replenished with new ones. Royal Caribbean

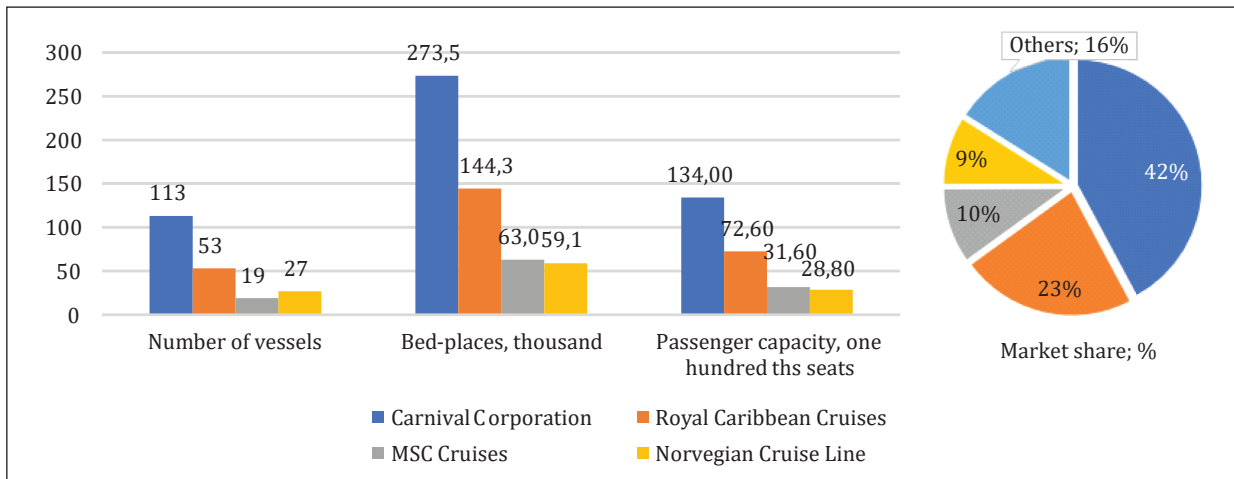


Figure 2 The world’s largest cruise companies in 2022 (compiled by the authors according to [12])

International follows it, and in third place is the company Norwegian Cruise Line (NCL). All of these carrier companies are based in the United States. Fourth in the ranking and the first cruise shipowner in Europe – MSC Cruises. Spanish Pullmantur closes the TOP-10 leading cruise companies in the world.

The Carnival holding companies control 44.8% of the global sea cruise market, and the six shipping companies that follow the Royal Caribbean Group share is 24.7%. Next, the three Norwegian Cruise Line companies account for 8.9% of the market, and MSC Cruises has 6.4%. The total cruise fleet of all operating operators in 2015 numbered 300 liners. For comparison, back in 2000, their total number was 237 courts. And by 2022, the world’s only “fleet” of cruise ships will include 342 liners.

Almost 40% of the world’s cruise line routes are in the Caribbean, followed by the Mediterranean (17%) and Asia-Pacific (10.4%). According to forecasts, by 2022, the

Carnival Corporation will account for 42.1% of the cruise market, and its fleet will be 113 ships; Royal Caribbean Cruises, respectively – 22.8% and 53 ships; MSC Cruises – 9.9% and 19 ships; Norwegian Cruise Line – 9% and 27 ships. Thus, these four companies will control 83.8% of the world cruise market, and their total fleet will be 212 ships (Fig. 2).

This analysis shows that MSC Cruises entered the TOP-3, displacing the Norwegian Cruise Line. It is necessary to dwell on this aspect in more detail. In 2015, the Cruises membership program was launched, which works with almost all cruise companies, but research has shown that the largest share of cruises is MSC Cruises, one factor increasing its market share.

The maritime tourism market is still promising [11; 12; 29], especially in Ukraine: the study of the Ukrainian people showed that only two per cent of the population has ever travelled on a cruise (Figure 3). The study was con-

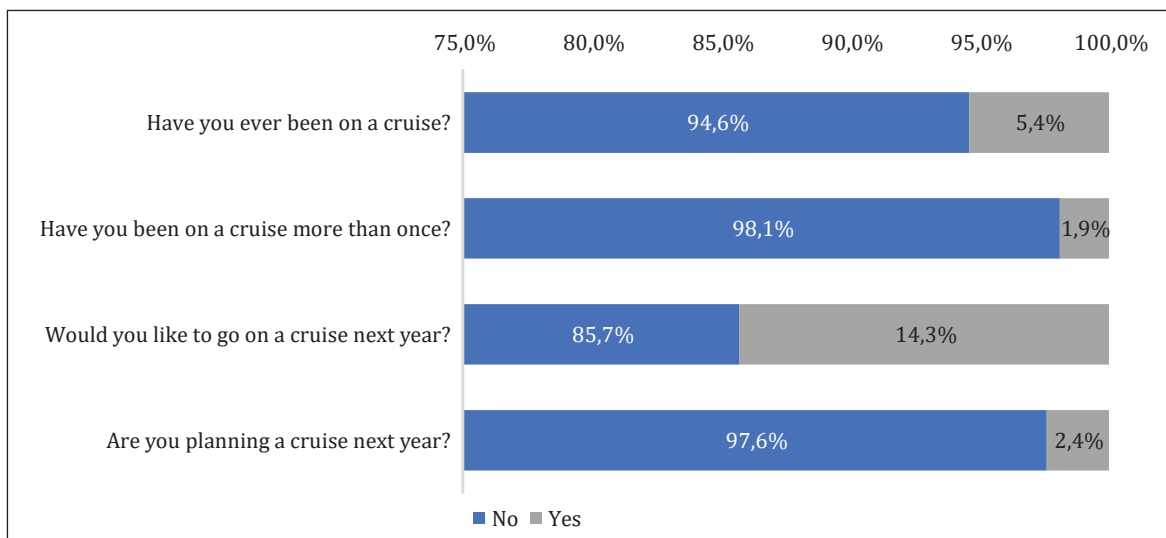


Figure 3 Study of the volume of the maritime tourism market (compiled by the authors based on a survey conducted in 2021)

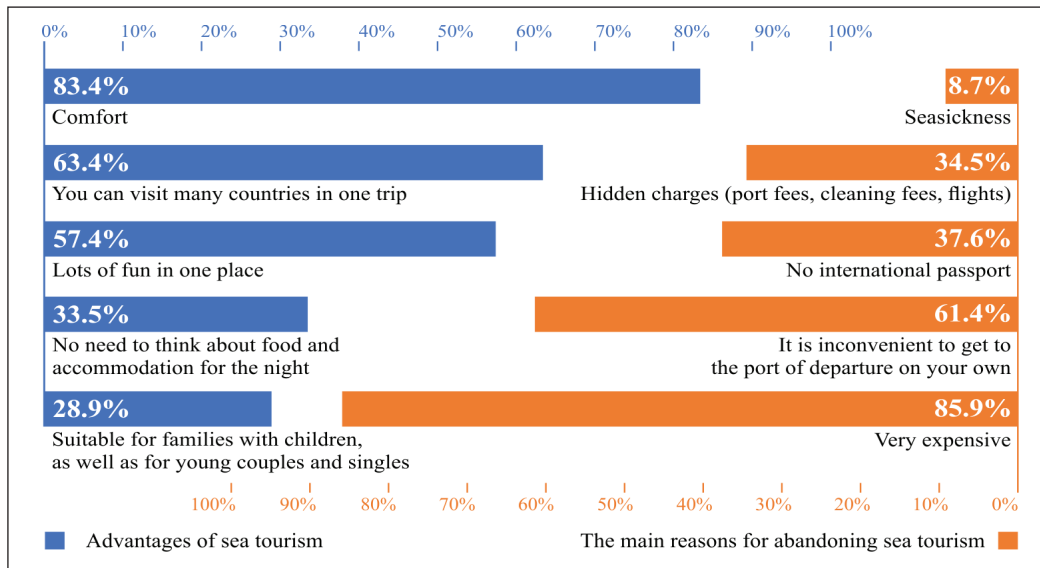


Figure 4 Survey on subjective opinion about the benefits of maritime tourism (compiled by the authors based on a survey conducted in 2021)

Table 1 Impact of the COVID-19 pandemic on the cruise industry (based on [12])

Direction	2019			2020 Projected (before COVID-19)			2020 Realized (post COVID-19)		
	Ships	Capacity	Share	Ships	Capacity	Share	Ships	Capacity	Share
Med	14	958556	40,3%	13	1091074	40,0%	3	178620	27,4%
Carib 7+	6	474020	19,9%	8	534580	19,7%	6	172900	26,4%
NW Europe	6	260938	11,0%	4	284000	10,4%	0	0	0,0%
South America	5	242820	10,2%	7	264450	9,7%	5	165850	25,5%
Asia/Pacific	1	184800	7,8%	2	241500	8,8%	1	23100	3,5%
Africa	2	99450	4,2%	4	118000	4,3%	1	43350	6,6%
Ind/Red Sea	3	86600	3,6%	3	115350	4,2%	2	57000	8,7%
Transatlantic	9	45350	19,0%	10	44990	1,6%	1	3300	0,5%
Canada/NE	1	13500	0,6%	1	9000	0,3%	0	0	0,0%
Canaries	1	9500	0,4%	3	23940	0,9%	1	6480	1,0%
World	1	2550	0,1%	1	2550	0,1%	1	2550	0,4%

ducted over four months, from February to May 2021, on-line (86% of respondents) and through personal interviews (14%). A total of 178 people took part in the survey, of which 97% of the questionnaires were relevant.

The survey showed that the main reasons why people refuse sea travel, in particular cruises, are “costly”, “it is inconvenient to get to the port of departure on your own”, and “international passport.

Media reports emphasize that international airports cannot cope with passenger traffic since many people are tired of the pandemic and want to travel at the first opportunity, and airports have not yet restored the staff, which was reduced [14; 21]. It can be argued that the same situation awaits maritime tourism.

The maritime tourism industry has begun to recover, but the pace of recovery is slow. Although the 96% year-

on-year increase sounds positive, it is still not close to a pandemic level. In 2021, only 13.9 million passengers went on a cruise, which is 53% less than before the 2019 pandemic [11; 15]. There is probably no other industry that has been significantly affected by the COVID-19 pandemic (Table 1).

In fig. 5-6 will present how planning in the industry actually differs from accurate data.

Thus, it can be seen that absolutely all areas in terms of aggregate indicators have fallen significantly (by an average of 65%). In addition, the largest outbreak of COVID-19 outside mainland China was on a cruise ship, which damaged the cruise industry’s reputation and caused falling stock prices [6; 8; 10; 25].

Thus, the study showed that despite the positive dynamics of growth over the past three years, COVID-19 and

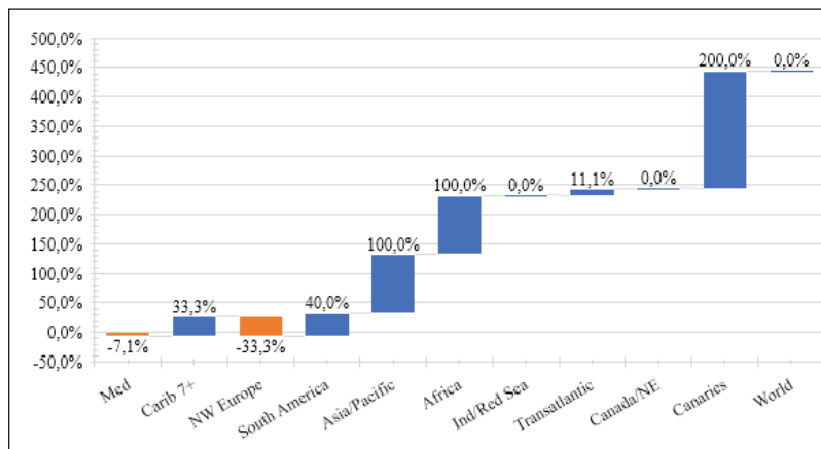


Figure 5 Industry Development Plan (before the COVID-19 pandemic) (compiled by the authors)

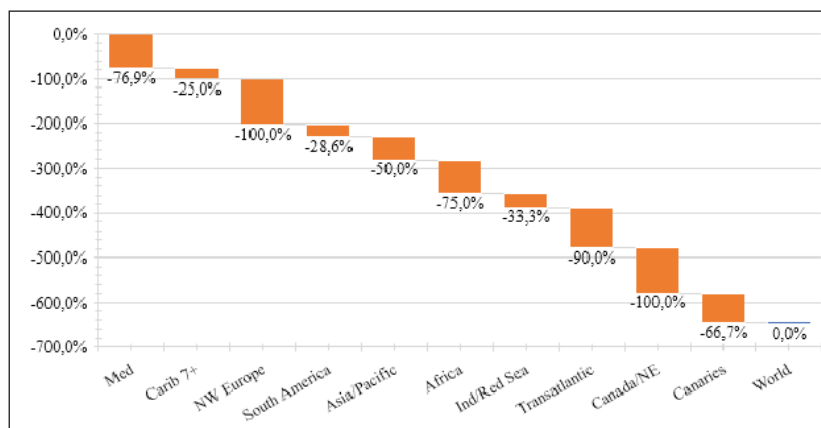


Figure 6 Realities of the industry (during the COVID-19 pandemic) (compiled by the authors)

the war in Ukraine require the development of comprehensive recommendations for the organization of maritime tourism to curb the presentation of the development and ensure positive dynamics of the industry.

### 3 Results

The authors believe that the industry needs a mechanism that will allow more efficient organization of maritime tourism in the region (Fig. 7). The authors will develop this mechanism in the example of Ukraine and will test it in the instance of the Odesa region.

Let us dwell in more detail on some points that, due to the limitations of the figure, the authors have not painted in detail:

The essential component of the mechanism is to determine the main factors influencing marine tourism development. Analyzing the achievements of scientists and practitioners [1; 2; 4; 5; 7; 9; 13; 16; 17; 19; 20; 22; 23; 26; 28; 30], the authors propose the following 15 factors:

1. the presence of physical and geographical conditions, sea areas, inland waterways and climatic

conditions conducive to the development of this type of tourism;

2. availability of historical, cultural, natural and other tourist resources that can be used to create cruise programs;
3. availability of federal and regional cruise operators (companies), ship owners of the cruise fleet;
4. availability of a regulatory legal framework that promotes the development of cruise tourism in the region, a developed system of environmental management;
5. use of administrative and financial mechanisms that support the development of cruise tourism (tax and non-tax incentives, subsidies and subventions, a system of grants, concessional lending, leasing, etc.);
6. stable socio-economic state of the region, the availability of highly qualified personnel: scientists, engineers, representatives of working professions that contribute to the development of shipbuilding in the area, the presence of shipbuilding (ship repair) companies, shipyards, etc.;

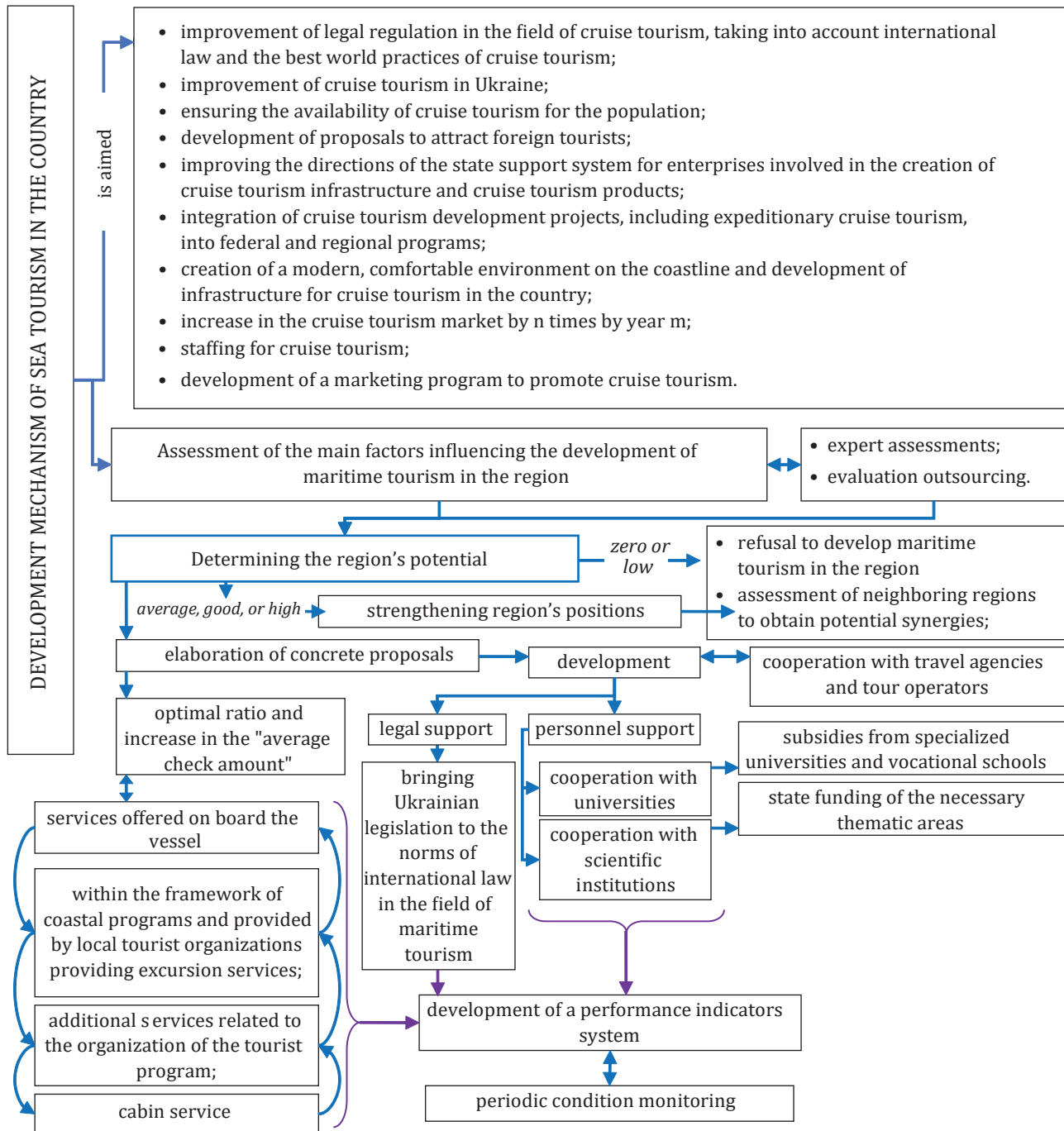


Figure 7 Mechanism for the effective organization of maritime tourism in the country (author's development)

7. availability of a cruising fleet from regional cruise operators (companies), ship owners or the possibility of using a cruising fleet under the flag of foreign states in the sea area or on the inland waterways of the region (availability of an appropriate regulatory framework, interest of the regional administration in the development of this type of tourism, etc.);
8. availability of developed coastal infrastructure for receiving cruise ships of various classes (sea and (or) river ports, passenger terminals, including

- those with equipped border crossing points across the state border of Ukraine, berths, etc.), equipped with coastal and floating navigation aids;
9. availability of dispatching and hydrometeorological services, a developed plan for dredging, emergency response services in emergencies, etc.;
10. well-established system of promotion and sale of the cruise tourism product;
11. availability of a developed system of training (re-training) of personnel for cruise tourism (crew and



shore services, cruise hotel and restaurant management, guides and escort guides, transport and communications ashore, expedition leaders);

12. availability of infrastructure and trained personnel in places of tourist display for organizing excursion programs, including the use of excursion buses and active coastal programs;
13. implementation of measures to improve the sustainability of tourist display areas to recreational load;
14. the presence of historical traditions of the development of shipping in the region;
15. the presence of a solvent segment of consumers of cruise programs.

*Regarding cooperation with travel agencies and operators:* the distribution of packages formed by the cruise company can be carried out independently, through travel agencies or local tour operators. The latter, in this case, performs, as a rule, not only agency functions but also supplements the cruise package with the following services:

- booking air or railway tickets to the city of departure of the cruise ship and from the town at the end of the cruise;
- transfer from the airport or from the railway station to the place of boarding the ship and from the site of disembarkation of passengers after the end of cruises to the airport (railway station), if such a service is not included in the price of the cruise package;
- visa support;
- insurance services;
- organization of additional tourist programs before or after the end of the cruise (excursion, beach).

- Let's reveal in more detail some points of *the optimal selection of services* that may be included in the cruise product as a set of services and which can increase the average check amount:
- services offered onboard the ship (services included in the cruise package and additional services);
- services purchased by tourists within the framework of coastal programs and provided by local tourist organizations providing excursion services;
- additional services related to the organization of the tourist program;
- cabin service, which includes daily cleaning of the cabin and change of bed linen and towels (in addition, food delivery services to the cabin may be provided).

#### 4 Approbation and discussion

Due to the limited presentation of the results, the authors will test the most crucial part of the mechanism – an assessment of the region's potential for the development of sea tourism.

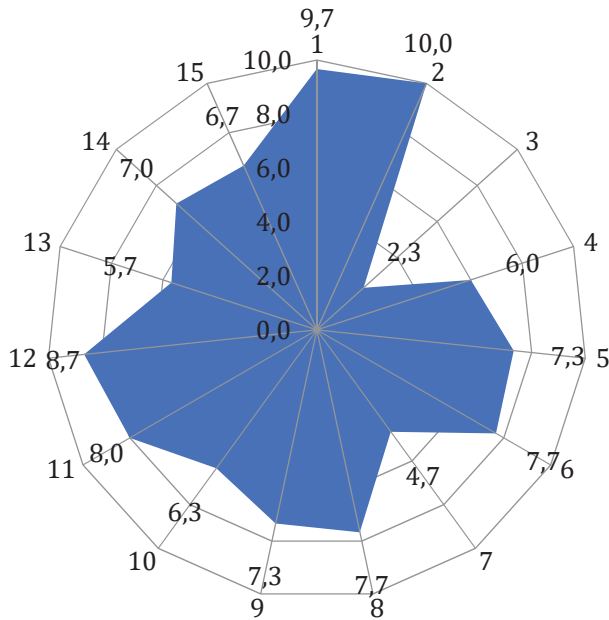
Let us analyze the state of these factors in Ukraine with the help of expert assessments [3]. The authors turned to 5 experts, two of which are world scientists dealing with tourism issues (1 Ukrainian, 1 foreign), and two are directly related to the cruise industry (1 – National director at InCruises; 1 – Head of cruises at a travel company); the fifth person is a representative of the “Odesa 5T” project, responsible for the fifth T – tourism.

The results of expert assessments are presented in Table 2.

**Table 2** Expert assessment of factors influencing the development of sea tourism (on the example of the Odessa region) (author's development)

Factors	Ratings (0 – bad, 10 – perfect)					Average rating
	Expert 1	Expert 2	Expert 3	Expert 4	Expert 5	
1	9	9	10	10	10	9,7
2	10	9	10	10	10	10,0
3	2	3	1	2	3	2,3
4	5	7	5	6	7	6,0
5	5	8	7	7	8	7,3
6	6	8	9	8	7	7,7
7	4	6	4	5	5	4,7
8	8	6	7	8	8	7,7
9	6	7	8	7	8	7,3
10	6	6	7	7	6	6,3
11	9	8	8	7	8	8,0
12	8	9	9	9	8	8,7
13	5	6	6	6	5	5,7
14	7	6	8	7	7	7,0
15	7	6	8	6	7	6,7

\* the average score was obtained by calculating the arithmetic mean of the median values (the maximum and minimum scores are not taken into account, i.e. for 1 factor:  $(9 + 10 + 10)/3 = 9.7$  (score 9 was not taken into account as a minimum, 10 – as a maximum))



**Figure 8** Radar diagram of the potential for the development of sea tourism in the Odessa region (author’s development)

It should be noted that the study was conducted in the pre-war period. The authors will show the results using a radar chart compared to the reference one (Fig. 8).

Let’s calculate the area of a polygon using the Excel program through the sum of the areas of triangles:

$$S_n = \sum_m^1 \frac{1}{2} * a * b * \sin\left(\frac{180}{m}\right) = 148.2 \tag{1}$$

where *a* and *b* are the value of the triangle’s vertices; *m* is the number of axes.

For evaluation, the authors propose the following scale, the range of segments of which is calculated according to the Sturges formula [27]:

$$h = \frac{x_{max} - x_{min}}{n} \tag{2}$$

where:

- $X_{max}$  – the maximum value;
- $X_{min}$  – the minimum value;
- n* – the number of intervals.

The authors adapt the formula for our experiment: the maximum value in our case is getting 10 points for all 15 indicators, respectively, and the area of such a triangle, calculated by the formula (1) will be 305.05; to simplify the calculations, the authors will accept as 300; the authors believe that the optimal number of intervals is 5: a smaller value will not allow reflecting the variety of potential states; more – will create chaos in the calculations and presentation of results.

Accordingly, get a step equal to

$$h = \frac{300 - 0}{5} = 60 \tag{3}$$

Thus, get the following intervals

*0 – 59 – zero development potential:* it is more expedient to consider another region;

*60 – 119 – low development potential:* it is necessary to evaluate neighbouring areas to obtain a potential synergistic effect;

*120 – 179 – medium potential:* it is required to consider in more detail the factors that lead to a decrease in the assessment and develop ways to improve them;

*180 – 239 – good potential:* all aspects should be strengthened;

*240 – 300 – excellent potential:* constant monitoring of the state of factors and maintaining existing ones.

In our example (Odessa region), the polygon area is 148.12, i.e. falls into the sector of average potential and requires a further detailed analysis of the factors that reduce the final result.

The further steps described in the mechanism (Fig. 7) are, in essence, precisely the tools that level out the shortcomings and increase the advantages of the factors inherent in the region.

### 5 Conclusion

The trend of the modern economy is the rapid pace of development of such an industry as tourism. One of the most dynamically developing types of tourism globally is sea cruise tourism. However, the COVID-19 pandemic has significantly impacted this industry, and effective mechanisms will be needed to restore it. At the same time, crises always open up new opportunities, in particular, for other regions to join the global maritime tourism industry.

Ukraine has the necessary potential for developing cruise tourism as a host and organizer of cruises. Therefore, the issue of the revival of cruise shipping and the prospects for the formation and development of maritime tourism in our country will become topical.

The scale of the study did not allow us to fully disclose all aspects of increasing the efficiency of the organization of sea tourism; therefore, it is seen the development of potential management strategies for the intervals proposed by us and the calculation of the multiplier effect of cruise tourism, taking into account related sectors of the economy, including in the hotel business, as further research paths: retail trade, the museum sector, the development and support of the activities of related modes of transport, the manufacturing sector (shipbuilding, metallurgy, etc.), as well as the creation and preservation of jobs in coastal regions.

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