

# Defining Factors of Nautical Tourism Ports Competitiveness in the Republic of Croatia

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## ABSTRACT

In the Republic of Croatia, over the last fifteen years, nautical tourism has been experiencing a strong expansion. Despite the general recession that prevails on the global market, nautical tourism in Croatia, according to the recent studies, has been recording high annual growth rates. In order to maintain competitive position on the market of the nautical port services which become highly dynamic and demanding, supply of such services should be continuously adapted to the increasing nautical tourists' demands as the main beneficiaries of the nautical port services. In order to enable optimal development of nautical tourism ports as the major accelerators of the nautical tourism prosperity, in this paper the factors that indicate the competitiveness of the nautical tourism ports have been determined and defined. Also, systematic analyses of elements which contribute to the overall competitiveness of the nautical tourism ports have been performed. Number of berths, price of berths, marinas' infrastructure and catering facilities are just some of the evaluated parameters. Such analysis is carried out with a goal dedicated to improvement of the long-term sustainability of the nautical services quality in the Croatian nautical tourism ports.

## KEY WORDS

competitiveness.

nautical tourism.

ports of nautical tourism.

nautical services.

## 1. INTRODUCTION

The east coast of Adriatic Sea is a favorable place to sail due to many islands and beautiful bays with suitable weather conditions. However, attractive geographical characteristics along with marina berth are no longer sufficient to satisfy constantly growing requirements of nautical tourists. Therefore, it is of the crucial importance to evaluate also other relevant parameters that influence the competitiveness of

nautical tourism ports. As regards to previous research on this topic, a competitiveness of Croatian nautical tourism study is worth of mentioning. In the paper [4] authors analyze nautical tourism supply, price competitiveness and nautical tourists' perceptions of competitiveness. According to the results obtained in the aforementioned study the natural resources are the strongest Croatian advantage, while infrastructure and services are on a lower standard level.

Another interesting study on the similar subject is an analysis of nautical tourism in

the Republic of Croatia in 2009. by means of system approach [9]. The following conclusion drawn by the authors is that the overall lack of complementary services in Croatian nautical tourism ports generates lower level of nautical tourist's satisfaction. According to our knowledge this is the first paper that considers comparative features of Croatian marinas. In this paper, competitive features like berth capacity, daily berth price, marinas' infrastructure and catering facilities are determined, quantified and eventually interpreted. Parameters covered by this analysis are measured for all five coastal Croatian Counties, more specifically: Istria County, Primorsko-goranska County, Zadarska County, Šibensko-kninska County, Splitsko-dalmatinska County and Dubrovačko-neretvanska County. Moreover, parameter average figures corresponding to particular County are graphically indicated and properly interpreted.

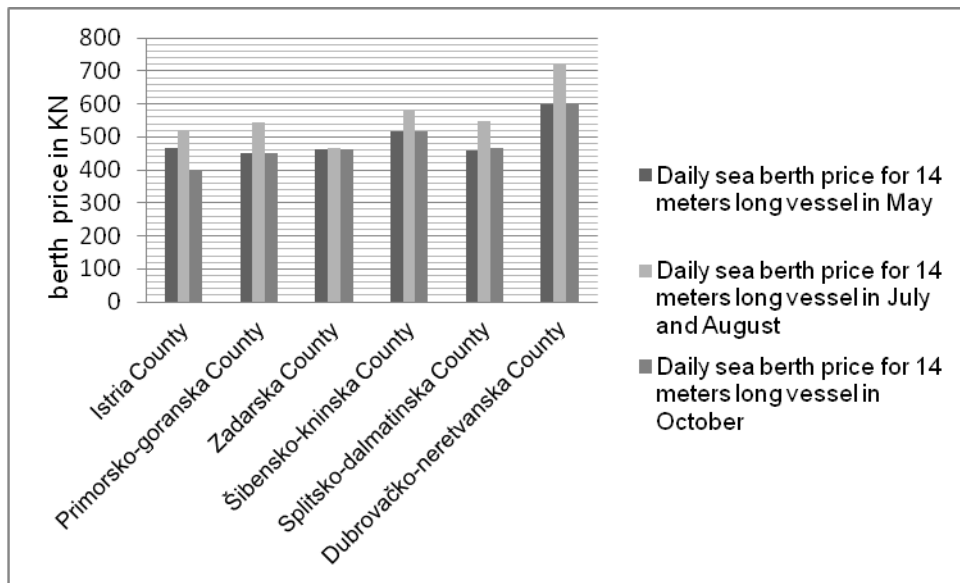
In Section 2, analysis of sea/dry berth daily prices is performed. Section 3 and 4 give information about number of sea and dry berths in Croatian marinas, respectively. Furthermore, Section 5 gives an overview of infrastructure equipment in Croatian marinas. Finally, in the Section 6, some concluding remarks are given.

## **2. SEA BERTH DAILY PRICE AS A COMPETITIVENESS FACTOR**

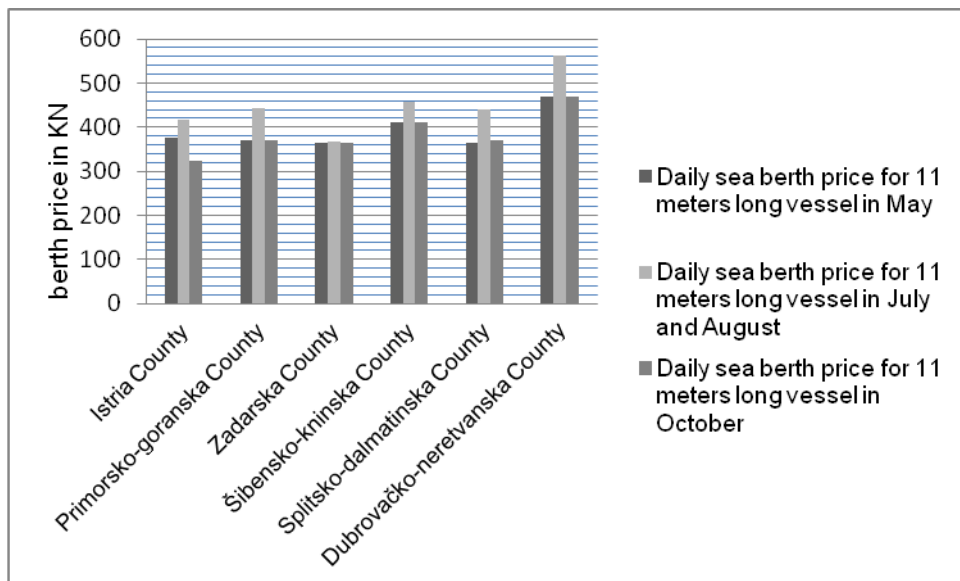
As far as competitiveness of nautical tourism ports is concerned, the berth price is definitely the one of the most important factors that should be taken into consideration. However, the favorable cost of berth is not the only element that attracts nautical tourist to call the nautical tourism port. In addition, the other important elements that participate in someone's decision to call the nautical tourism port are as follows: infrastructural equipment, security in marina, video-surveillance, an exchange office, laundry, nautical equipment shop, technical service, parking area, the petrol station, a WLAN Internet

system, entertainment facilities ect. In order to make a more precise and a more accurate analysis, 61 marina of Republic of Croatia are included into an examination. The majority of considered marinas are listed at the Ministry of Maritime Affairs, transport and infrastructure web site [23]. Marinas that are not included in the aforementioned list are added in the analysis in order to obtain a more comprehensive picture of the Croatian nautical tourism port offer. Therefore, Aci Piškera, marina Agana, marina Seget Baotić, marina Maslinica are added in calculation of average daily berth price for corresponding County. The Figure 1. indicates current situation as the daily berth prices are subject to change by the port management. In order to get the most accurate results, daily berth prices for vessels of 11 and 14 meters in length are taken as a point of reference in this study. Furthermore, the daily berth prices in the period of the month of May, July, August and October are the part of the analysis. The comparative analysis is made taking into consideration average berth price of each county during low and high nautical season. Namely, the prices that are taken into account relate to price for the period of May, July, August and October for the vessels of 11 and 14 meters long.

At the first glance it can be seen on the Figure 1. that the highest price is for the vessels of 14 meters in the period of high season (July, August) that call the nautical tourism ports in Dubrovačko-neretvanska County. While for the same characteristics Zadar County seems to be the most convenient area to visit from the financial aspect. Furthermore, in the month of May and period of beginning of the nautical season, the lowest average berth price is recorded in Primorsko-goranska County for the vessels of 14 meters length. Whereas for the same boat characteristics and same period of nautical season, the highest average price to pay for a berth is in a Dubrovačko-neretvanska County. With regards to the month of October and the end season period, the most favorable average berth price for the 14 meters long vessel is in Istarska County.



**Figure 1.** Average daily price of sea berth in month of May, July, August and October for 14 meters long vessels



**Figure 2.** Average daily price of sea berth in month of May, July, August and October for 11 meters long vessels

As per results shown in the Figure 1. for the same boat characteristics and for the same nautical period, the most expensive ports are in Dubrovačko-neretvanska County. In the following paragraph the average berth prices will be examined per each nautical period whereas 11 meters

long vessels are taken into account. As far as high season is concerned, the lowest average berth price for 11 meters long vessels is in Zadaraska County, while the highest is in Dubrovacko-neretvanska County.

In terms of low season and month of May, it came up that the most favorable cost to be paid for a berth place is in marinas of Zadarska County, while the greatest amount to be paid for the berth is in Dubrovačko-neretvanska County for the same period.

As regards to the end season and month of October, the smallest amount to be paid for a berth of 11 meters vessel long is in Istria County, and Dubrovačko-neretvanska County records the highest costs to be covered for a berth place in the same season period.

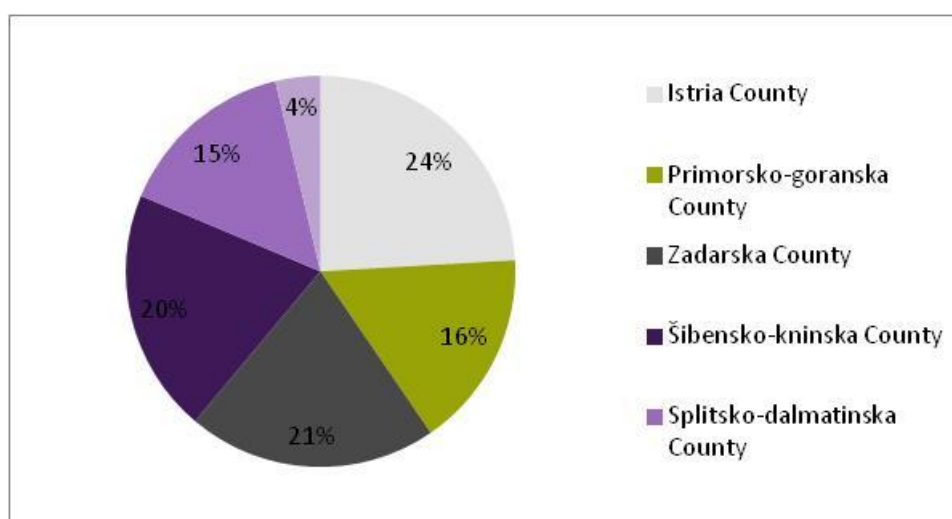
### 3. THE NUMBER OF DRY BERTHS AS A CAPACITY INDICATOR

For nautical tourism ports it is of utmost importance to secure optimal acceptance capacity along with other relevant services in order to fulfill nautical tourists' requirements. In the purpose of gaining the greatest possible marina revenue it is necessary marina to have larger and improved offer. However, according to previous research, the income derived through berth rent constitutes the largest proportion of total revenue.

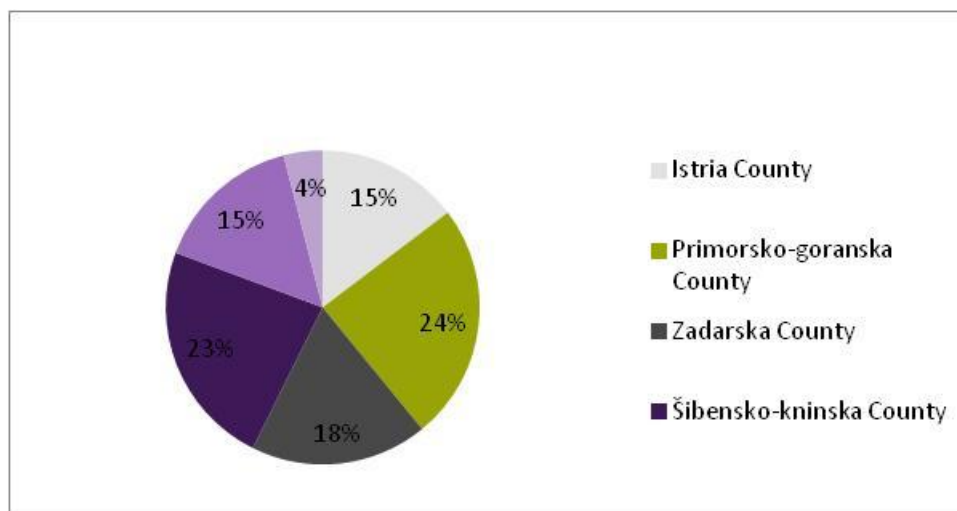
In the following section the total amount of dry berths and berths in the sea for each nautical tourism port were evaluated. As it can be seen from the Figure 3. Primorsko-goranska County disposes with the highest number of dry berths making 25% of the total dry berth supply. On the contrary, Dubrovačko-neretvanska County offers the lowest number of dry berths making only 4% of the total dry berth supply.

### 4. THE NUMBER OF SEA BERTHS AS A CAPACITY INDICATOR

Data related to sea berth availability of particular marina are gathered based on pilot guide' reports and by direct phone contact with marina's employees. With regards to the number of berths in the sea, Figure 3. clearly shows the advantage of Istria County that is making 24% of the total berths availability in the sea. Furthermore, only 4% of the total sea berth offer belongs to Dubrovačko-neretvanska County. High unit berth price in Dubrovacko-neretvanska County can be explained with lower overture of (dry/sea) berths in this county.



**Figure 3.** Sea berth share of particular County among the total sea berth supply



**Figure 4.** Dry berth share of particular County among the total dry berth supply

Obtained results are presented on Figure 4 relating to comparative analysis of dry berth capacity. As per analysis performed it turns out that Primorsko-goranska County disposes with the highest number of dry berths making 25% of the total dry berth supply. Moreover, Dubrovačko-neretvanska County constitutes only 4% of the total dry berth offer.

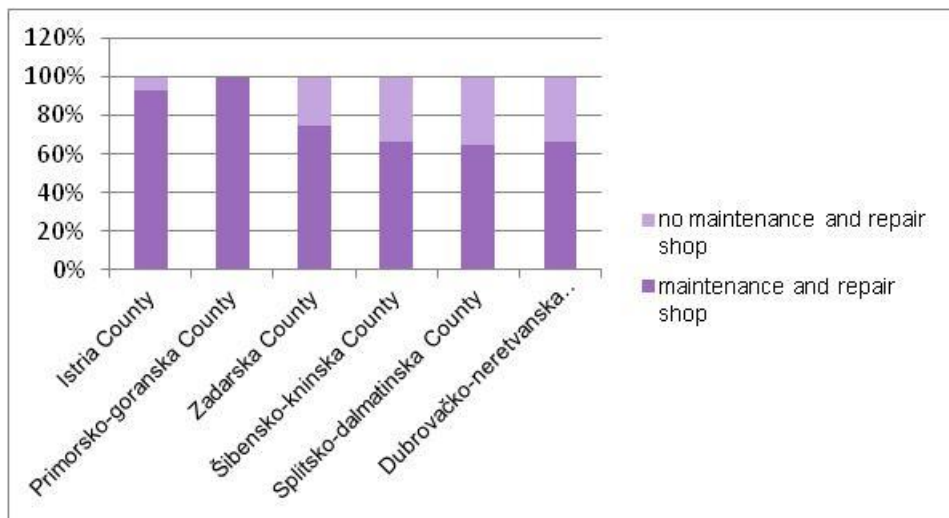
## 5. COMPARATIVE ANALYSIS OF INFRASTRUCTURE EQUIPMENT

According to the collected data, all marinas that are included in this analysis have water/power supply and toilet facilities except Marina Zirona on Drvenik Veliki Island which is under construction in the moment of writing.

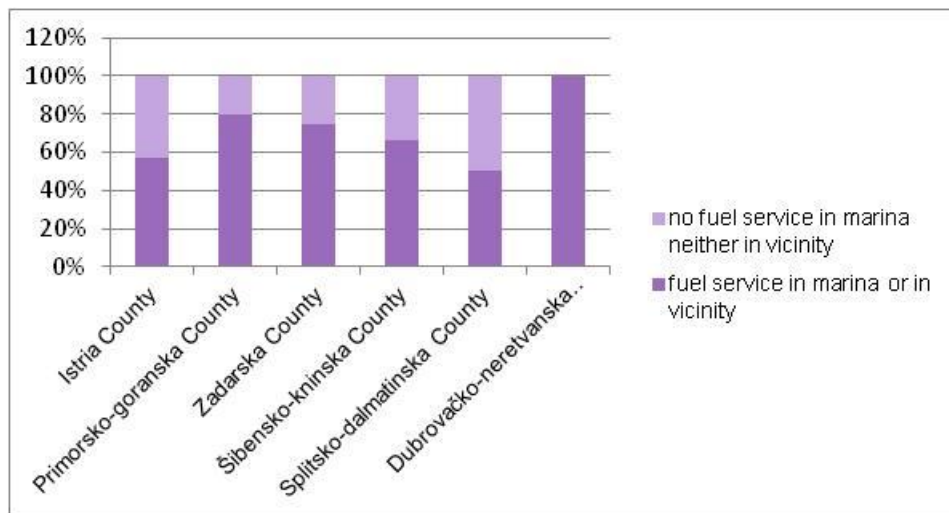
When referring to existence of maintenance and repair shop in marina presented in Figure 5, it can be seen that in Istria County 94% of marinas are offering this kind of nautical facility. In the Primorsko-goranska County, there is a possibility for a vessel to be repaired in all analyzed marinas or in their nearby area. Furthermore, 75% of marinas located in Zadarska County offers maintenance and

repair services. While for Šibensko-kninska County this percentage is a little bit lower and amounts 67%, for Splitsko-dalmatinska County this percentage is slightly lower and amounts 64%. Finally, 67% of marinas in Dubrovačko-neretvanska County offers maintenance and repair services as a part of their nautical offer.

Moreover, fuel service is one of the most important factors that enriches nautical tourism port offer. Therefore, this parameter is considered as well. However, fuel service that is in the area of one kilometer from the marina is also included in this analysis. Consequently, in the Istria County, 57% of the considered, marinas offer fuel service to the nautical tourists or a fuel station is located in the marina vicinity. Furthermore, 80% of marinas that are considered in the Primorsko-goranska County dispose with fuel facilities. In the Zadarska County 75% of marinas offer this type of service. In the Šibensko-kninska County, this share is 67%, while in the Splitsko-dalmatinska County is slightly lower and amounts 50%. All three marinas that are analyzed in Dubrovacko-neretvanska County dispose with above stated service.



**Figure 5.** The proportions of marinas with maintenance and repair shop per each county

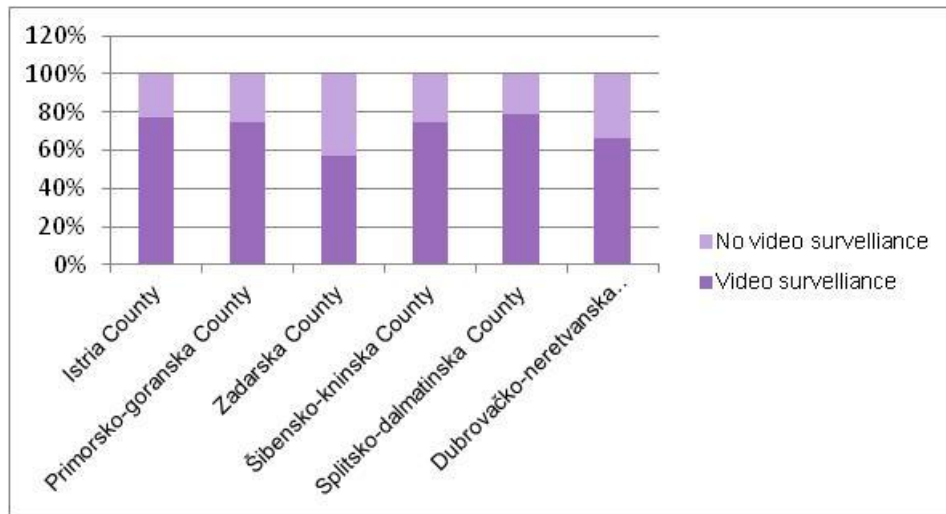


**Figure 6.** The proportions of marinas with fuel service in marina or in vicinity per each county

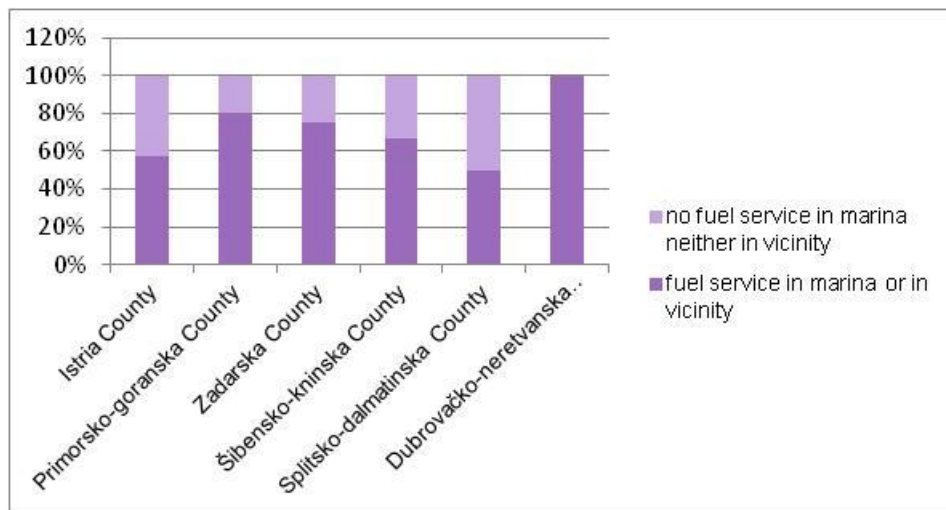
Marina management should provide nautical tourists with the feel of personal safety as well as with the protection of their property. In order to enable this sort of safety, many marinas have installed video surveillance equipment. Therefore, the current situation relating this issue is observed. As it can be seen in Figure 6, the Splitsko-dalmatinska County is in advantage relating to the video surveillance coverage in marinas. Aforementioned County is followed with the Istria County having 77% of marinas that have video surveillance. Moreover, in 75% of marinas in the Primorsko-goranska County and Šibensko-kninska County, video

surveillance facilities are set up, while in the Zadarska County this percentage is on a lower level and amounts 57%. Furthermore, in the Dubrovačko-neretvanska County it came up that 67% from considered marinas are equipped by this kind of secure facility.

Due to nautical tourism development catering industry had an opportunity for expansion and specialization. In order to meet “boater’s requirements” small restaurants offering famous delicacies were developed on the islands and coast as well [3]. All marinas included in the analysis have catering facilities or this sort of service is provided in nearby area.



**Figure 6.** The proportions of marinas with video surveillance per each county



**Figure 7.** The proportions of marinas with crane or travel lift facility per each county

Among other supply, marinas should be equipped with cranes and travel lifts having appropriate carrying capacity. In that way, marina matches one aspect of boater's demand related to technical support. The present situation in terms of port cranes and travel lift availability is shown in the above Figure 7.

As it can be seen from the Figure 7., all marinas considered in the analysis in both, Istria County and Primorsko-goranska County dispose with crane or travel lift. Furthermore, in Zadarska and Šibensko-

kninska County 75% of all considered marinas offer this sort of technical support. As far as Splitsko-dalmatinska County is concerned, this proportion of marinas amounts to 57%. Finally, in Dubrovačko-neretvanska County 67% of considered marinas dispose crane or travel lift as a technical support.

## 6. CONCLUSION

In order to meet growing nautical tourists' demands the analysis of factors influencing competitiveness of nautical tourism ports is elaborated in this paper. In this context, a sustainable solution is the improvement of the nautical tourism port infrastructure, price competitiveness and service enrichment as well.

According to the analysis performed, where daily sea berth for 11 meters long vessels are taken into account, it turns out that the Zadarska County is in the most convenient position in relation to the other counties at the beginning of the nautical season and in high season period. The same thing applies for Istra County in the end season period.

On the other side, the most favorable County to be visited when taking berth costs into consideration relates to Zadarska County for vessels of 14 meters length, for the period of high season. As per analysis examined in a paper, it came up that Istria County offers the most favorable average berth daily price in the period of October and Primorsko-goranska in the month of May.

According to the results obtained it came up to the conclusion that the most expensive berths are in Dubrovačko-neretvanska County for all periods of nautical season.

The following conclusions can be drawn on the above stated: due to scarce sea berth offer, the increased demand could not be covered, therefore marinas in Dubrovačko-neretvanska County are able to keep high costs of sea berths.

According to the results obtained upon comparative analysis of dry/sea berth capacity it turns out that Primorsko-goranska County disposes with the highest number of dry berths making 25% of the total dry berth supply. While, Istarska County is making 24% of the total sea berths availability.

Furthermore, in Primorsko-goranska County there is a possibility for a vessel to be repaired in all analyzed marinas or in their nearby area. Comparative analysis referring to video surveillance facility indicates that the major part of marinas in Splitsko-dalmatinska County disposes with that sort of facility. The same thing applies for Istria and Primorsko-goranska County when cranes and travel lift availability is concerned.

The important tasks of nautical tourist port management are continuous follow-ups of nautical market trends and prompt adjustments to nautical tourists' needs. The competitiveness of nautical tourism port depends upon development of their infrastructure and superstructure as well as the service quality in the nautical port.

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