

Dr. sc. Mirjana Kovačić, Ph.D.
Primorsko-goranska županija
Odjel za pomorstvo, promet i veze
Adamićeva 10, 51000 Rijeka

Dr. sc. Srećko Favro, Ph.D.
Jobova 28, 21000 Split
Hrvatska / Croatia

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MOGUĆNOSTI RAZVOJA NAUTIČKOG TURIZMA NA PODRUČJU ZADARSKE ŽUPANIJE

DEVELOPMENT POSSIBILITIES OF NAUTICAL TOURISM WITHIN THE ZADAR COUNTY

SAŽETAK

Nautički turizam dio je općeg turističkog fenomena koji posljednjih godina znatno mijenja strukturu i karakter turističkog prometa. Kao poseban oblik rekreacije, nautički turizam označuje široko područje aktivnosti. Nautičar, osim zadovoljavanja osobnih potreba, najčešće traži i potpunu uslugu za svoje plovilo. Nadalje, sve veća potražnja za stalnim vezom i broj tranzitnih plovila pred Hrvatsku postavlja nove izazove.

Svrha rada je ukazati na važnost ravnomjernog regionalnog razvoja kao temelja gospodarskog razvoja Hrvatske. Cilj rada je utvrditi razvojne mogućnosti Zadarske županije za ravnomjeran razvoj nautičkog turizma izgradnjom luka nautičkog turizma na novim lokacijama posebno na otocima, a uvažavajući prirodne i ostale preduvjete za njegov razvoj.

Autori analiziraju dosegnuti stupanj razvoja nautičkog turizma na području Županije te daju prikaz planiranih lokacija. Nadalje, predlažu višekriterijski pristup u izboru novih lokacija luka nautičkog turizma, te obrazlažu primjenu odgovarajućih kriterija u fazi planiranja novih lokacija čime se omogućuje ravnomjerni razvoj regije.

Ključne riječi: *ravnomjerni razvoj, izbor lokacije, luke nautičkog turizma, višekriterijska analiza, Zadarska županija*

SUMMARY

Nautical tourism is a part of the general tourist phenomenon that has been significantly changing the structure and the characteristics of the tourist industry for several years now. As a form of recreation, nautical tourism denotes a wide area of activities. Apart from satisfying their personal needs, boaters are often asking for a full and comprehensive service for their crafts. Moreover, the growing demand for permanent berths and the number of transiting crafts pose new challenges for Croatia.

The purpose of this paper is to point out the importance of the regional development as the basis for the economic development of Croatia. The aim of this paper is to define the development possibilities of nautical tourism on new locations within the Zadar County, especially on the islands, taking into consideration natural and other preconditions important for its development.

The authors have analysed the reached level of development of nautical tourism within the Zadar County and have presented a survey of the planned location.

They have proposed a multi-criteria approach in selecting a location for nautical tourism ports and have explained in details the application of suitable criteria while planning a new location. This is important for a balanced economic development and uniform spatial planning of the Zadar County.

Key words: *uniform development, selection of a location, nautical tourism ports, multi-criteria analysis, the Zadar County*

1. UVOD

Zadarska županija drži turizam jednom od svojih strateških odrednica razvoja. No i pored toga još uvijek skromno koristi svoj turistički potencijal i resurse: izuzetno atraktivno obalno područje (plaže, sidrišta,...), velike površine zaštićene prirodne baštine (Velebit, Telašćica,...), kulturna baština (gradovi Zadar, Nin, Pag,...), ljekovita blata (Pag, Nin, Karin, Posedarje,...) i geografski položaj relativno blizu najznačajnijim turističkim emitivnim područjima.

Nautički turizam ima sve veću ulogu u turističkom razvoju Hrvatske. Međutim, odabir lokacije i gradnju luka nautičkog turizma kompleksno je pitanje koje obuhvaća geografsko područje, gospodarstvo područja na kojem će se luka graditi, te pretpostavlja značajan utjecaj na život i rad lokalnog stanovništva. Namjera autora je potaknuti regionalnu i lokalnu samoupravu na suradnju sa znanstvenim institucijama i stručnjacima u procesu odlučivanja o izboru lokacija luka nautičkog turizma, kako bi regionalni razvoj bio što ravnomjerniji.

2. PROBLEMATIKA REGIONALNOG RAZVOJA I SMJEŠTAJA LUKA NAUTIČKOG TURIZMA

Današnji gospodarski razvoj utječe na društveno-ekonomsku strukturu zajednice, a ovisi o nizu čimbenika koji određuju njegovu efikasnost i intenzitet. Poradi toga razmještaj luka nautičkog turizma važan je element razvoja, a usmjeravanje razvoja dio je opće politike razvoja. Za politiku razvoja važno je utvrditi smjernice koje uvažavaju[4, 179]:

- prostorno-ekonomski aspekt razvoja
- regionalni aspekt.

Oba ova aspekta imaju za krajnji cilj uravnoteženi gospodarski i ravnomjerni prostorni razvoj. U suvremenim uvjetima smještaj novih djelatnosti jedan je od značajnih čimbenika koji utječu na promjenu u pogledu prostornog razmještaja stanovnika te omogućuju prednosti u vidu gospodarskih učinaka. Pri tome se prednosti izgradnje luke nautičkog turizma očituju u razvoju područja na kojem se smještaju. Kako bi se to postiglo potrebno je uskladiti kapitalne i vlasničke interese s problemima regionalnog

1. INTRODUCTION

Tourism is one of the strategic development guidelines of the Zadar County. Furthermore, it still modestly uses its tourist potential and resources such as: attractive coastal area (beaches, anchorages, etc.), vast areas of protected natural heritage (National Park Velebit, Nature Park Telašćica, etc.), cultural heritage (town of Zadar, Nin, Pag, etc.), medicinal mud (Pag, Nin, Karin, Posedarje, etc.) and a geographic area that is relatively close to one of the most important tourist generating areas.

Nautical tourism has a growing role in the development of tourism in Croatia. However, the selection of the location and the construction of a nautical port is a complex issue that covers the geographical environment and the economy of the area where the port is to be built. It also assumes a significant influence on the life and work of the local inhabitants.

The intention of the authors of this paper is to emphasize the importance to motivate regional and local authorities to cooperate with the research institutions and experts in the process of selecting a location for new nautical tourism ports.

2. PROBLEMS OF REGIONAL DEVELOPMENT AND THE SELECTION OF THE NAUTICAL TOURISM PORTS LOCATION

Nowadays, the economic development influences the socio-economic structure of the community and it depends on numerous factors that determine its efficiency and intensity. That is why the distribution of nautical ports is an important element of development and this must be directed as a part of the general development policy. The development policy is very important to determine guidelines that acknowledge [4, 179]:

- the spatial and economic aspect of the development, and
- the regional aspect.

Both aspects have as their final goal a balanced economic and uniform spatial development. In modern conditions, the distribution of new activities is one of the most significant factors that influence the change regarding the spatial distribution of inhabitants thus making the

razvoja. Bilo je pokušaja da se problemi razvoja nedovoljno razvijenih područja riješe političko-ekonomskim mjerama, no to je značilo diktiranje razmještaja gospodarskih djelatnosti. Tako se javila potreba za određenim kriterijima koji će efikasno usklađivati gospodarske interese s interesima regionalnog razvoja. Ipak, analize koje uzimaju u obzir objektivne kriterije, nisu sasvim pouzdana metoda koja će osigurati ravnotežu između koncentracije luka nautičkog turizma i razvoja nedovoljno razvijenih područja.

Naime, analizom prednosti lokacija na kojima su već smještene luke nautičkog turizma te lokacija u dislociranim područjima, dolazi se do zaključka da je analiza dislociranog lokaliteta često formalnost, jer je jasno da će biti izabrana lokacija koja ima već postojeću infrastrukturu, mogućnost osiguranja radne snage, itd., dok izbor dislociranog lokaliteta često nije gospodarski opravdan. U slučaju kad je izbor ovisan o maritimnim i drugim prostornim uvjetima izabire se već razvijeni prostor [8].

Potreba eliminiranja nedovoljno razvijenih područja, i to smanjenjem nenaseljenosti kroz migraciju, razvojem gospodarskih djelatnosti do potpunog aktiviranja svih potencijala omogućuje postepeno naseljavanje i oživljavanje nenastanjenih područja. Postojanje takvih područja naročito na hrvatskim otocima trajan je čimbenik koji usporava rast i razvoj zajednice te se rješavanju toga problema treba pristupiti na znanstvenim osnovama [7]. Učinci izgradnje luka nautičkog turizma ogleđaju se prvenstveno u regionalnom razvoju, pri čemu novoizgrađene luke djeluje privlačno za privatni kapital, donose zaposlenost na otočna i druga područja, potiču razvoj malih tvrtki, investiranje u infrastrukturu, te omogućuje efikasniju upotrebu resursa razvojem tercijarnih i kvartarnih djelatnosti [2].

3. ANALIZA NAUTIČKOG TURIZMA NA PODRUČJU ZADARSKE ŽUPANIJE

Nautički turizam ima posebno značenje u ekonomskom, ali i svakom drugom smislu, jer je, uz klasičnu "3S" vrstu turizma, zasigurno najviše zasnovan na jedinstvenim resursima obalnog prostora. Nautički turizam vrsta je turizma koja je u ubrzanom porastu na cijelom Jadranu, a s obzirom na razvedenost obale i

advantages in the sense of economic effects possible. Advantages of constructing a nautical tourism port are reflected in the development of the area where they are located. In order to achieve this, it is necessary to balance the capital expenditure and the owner's interests with the problems of the regional development. There were some attempts to solve problems of insufficiently developed areas with political and economic measures, but that dictated the distribution of economic activities. That is why there is a need for specific criteria that will efficiently coordinate economic interests with the ones of the regional development. But, analyses that take into account only an objective criterion are not a completely reliable method that will ensure a balance between the concentration of nautical tourism ports and the development of underdeveloped areas. Namely, by analysing the advantages of the areas where nautical tourism ports are already located and comparing them to sites in dislocated areas, a conclusion has been reached that the analysis of dislocated sites is often only a formality, because it is obvious that a site with an already existing infrastructure and with the possibility to recruit the workforce will be chosen. For this reason the selection of a dislocated site is often economically unjustified. In case the selection depends on maritime and other spatial conditions, a site that is already well equipped is selected [8].

There is a need to eliminate insufficiently developed areas by increasing the population through migration. This can be achieved by developing economic activities until there is a complete activation of all economic potentials thus enabling a gradual influx of settlers and the revival of vacant areas. The existence of such areas, especially on the Croatian islands, is a permanent factor that slows down the growth and development of the community and in solving this problem a scientific approach should be used as the basis for [7]. The effects of constructing nautical tourism ports are primarily reflected in the regional development, but even newly built ports are also attractive for private capital, they bring along employment possibilities to the islands and other areas, induce the development of small-size companies, investments into the infrastructure and make the use of local resources more efficient by developing tertiary and district activities [2].

broj otoka, Zadarska županija predstavlja jedno od perspektivnijih odredišta nautičkog turizma na Mediteranu. Komparativna prednost zadarskog akvatorija za ovu vrstu turističke ponude sve je veća i odražava se u prepoznavanju ove vrste turizma kao perspektive razvoja. Trenutni udio nautičkog turizma u ukupnim prihodima od turizma govori da on još uvijek nema taj značaj.

Sukladno Državnom zavodu za statistiku, ukupni prihod koji je ostvaren u 98 luka nautičkog turizma u 2010. godini je iznosio 574,1 milijun kuna bez poreza na dodanu vrijednost. U usporedbi s 2009. godinom prihod je narastao za 5,7%. U 2011. godini nastavljen je pozitivan trend. U ukupnom prihodu od turizma, prihodi ostvareni od nautičkog turizma čine 10% ostvarenja.

3.1. Prostorna i geografska obilježja Zadarske županije

Glavno obilježje zadarskog akvatorija su brojni otoci i otočići smješteni u nekoliko nizova, koji nisu znatnije udaljeni, a dijelom su i međusobno povezani uskim prolazima (Tablica 1). Obalno područje Zadarske županije razmjerno je niska kopnena obala, ponegdje i pjeskovita. Razvedenost te obale naglašena je u podvelebitskom području ušćem rijeke Zrmanje, Novigradskim i Kornatskim morem te Ljubučkim i Ninskim zaljevom. Zadarski arhipelag najrazvedeniji je jadranski arhipelag s bogatstvom prirodnih ljepota, sa 4 niza otoka: ukupno 24 veća i 300 manjih otoka i hridi, od kojih je samo 17 naseljeno. S 1.300 km obalne crte (uključujući otoke) to je najrazvedenija obala Sredozemlja. Područje mora i podmorja Zadarske županije smatra se posebno osjetljivim resursom te je obuhvaćeno posebnim propisima iz *Strategije i Programa prostornog uređenja RH*. Najvažnija rijeka je Zrmanja i najveće prirodno jezero u Hrvatskoj – Vransko jezero, te Park prirode Telašćica.

Na otocima su naglašeni zaljevi i uvale otoka Paga i Dugog otoka. Za nautičare na Dugom otoku su zanimljivi zaljev Pantera na njegovom sjeveru i posebno luka Telašćica na njegovom jugu. Klifovi uz vanjsku obalu Dugog otoka poznata su geološka i geomorfološka znamenitost. Kornatsko otočje najbrojnije je otočje Jadrana koje obilježavaju uski izduženi manji otoci te otočići i hridi.

3. THE ANALYSIS OF NAUTICAL TOURISM WITHIN THE ZADAR COUNTY

Nautical tourism has a special significance in the field of economy but also in any other field because, besides the traditional type of tourism, it is mostly founded on the unique resource of the coastal area. The nautical tourism industry is increasing rapidly along the whole Adriatic coast and taking into consideration the indented coast and the number of beautiful islands, the Zadar County represents one of the most promising destinations of nautical tourism in the Mediterranean. The comparative advantage of the Zadar water area for this type of tourist offer is considerably increasing and is reflected in recognizing this type of tourism as a perspective of development. The current share of nautical tourism in the total income realised from tourism indicates that tourism still does not have that significance.

In 2009, the income realised from tourism was EUR 6.4 billion, or approximately HRK 48 billion, while the income realised from nautical tourism ports amounted to HRK 543.3 million (out of which HRK 405.6 million was realised through the renting of mooring berths).

According to the Croatian Bureau of Statistics, the total income realised in 98 nautical tourism ports along the Croatian coast in 2010 amounted to HRK 574.1 million (almost EUR 80 million), VAT not included. As compared to the year 2009, the total profit increased by 5.7%. A slight growth continued also in 2011. Incomes realised in this way and increased by incomes realised from cruising and chartering, make more than 10% of the total Croatian income realised from tourism.

3.1. Spatial and Geographic Characteristics of the Zadar County

The main characteristics of the Zadar water area are the numerous strings of islands and islets located not far away from one another and partly connected by narrow passages. The coastal area of the Zadar County is a relatively flat coastline, in some parts even sandy. The coastline is far more indented in the area of the Velebit Channel by the mouth of the river Zrmanja, along the coastline of Novigrad and the Kornati, as well as in the Ljubač and Nin Bay. The Zadar archipelago is the most indented insular group on the Adriatic Sea with rich natu-

Tablica 1. Prostorna obilježja većih otoka Županije
Table 1 Spatial characteristics of larger islands in the Zadar County

Otok <i>Island</i>	Površina, km ² <i>Area, km²</i>	Dužina obale (km) <i>Coast length km</i>	Koeficijent razvedenosti <i>Coefficient of indentedness</i>
Pag	189,71	179,5	4,50
Dugi otok	114,44	170,7	4,50
Ugljan	50,21	68,2	2,67
Pašman	63,34	65,3	2,31

Izvor: Statistički ljetopis 2004. / Source: Statistical Yearbook 2004

Obalno područje Zadarske županije i pripadajući otoci nalaze se, uglavnom, u eumediteranskoj zoni. To je klimatološki posebice temperaturno ugodno područje, jer ljeti pretežito lagani vjetar maestral ublažava vrućine i sparine. U podvelebitskom području zimi znaju biti učestali naleti snažne, koji put i orkanske bure.

Zadarsko zaobalje (Ravni kotari) izuzetno je bogato poljoprivredno područje. Na obali i na većini otoka šume su pretežito četinjače (alepski bor) i autohtoni hrast crnika, a od kultura prevladava maslina.

Svojim prometnim položajem zadarsko područje također postaje značajno odredište za nautičare. Obalni dio Županije postao je novom Jadranskom autocestom kroz Liku i Ravne kotare izuzetno dobro povezan sa središnjom Hrvatskom i preko nje sa susjednim zemljama središnje i jugoistočne Europe. Preko čvora autocesta u Bosiljevu uspostavljena je kvalitetna cestovna povezanost i sa zemljama zapadne Europe. Mreža priobalnih cesta i cesta na većim otocima razmjerno je zadovoljavajuća. Luka Zadar od državnog je značaja i ima veliku ulogu jer povezuje putničkim prugama sve otoke svoga područja. Luka Zadar je i ishodište trajektne povezanosti sa susjednom Anconom (Italija), i s Lošinjem i Pulom. Na prostoru ove Županije, osobito u turističkoj sezoni, pojačan je prijevoz vozila na liniji Prizna (kopno) i Žigljen (otok Pag). Zračni promet je u stalnom porastu, a Zračna luka Zadar (Zemunik) više je kategorije. Zadarskom županijom prolazi željeznička pruga s putničkom postajom u Zadru i teretnom postajom Bibinje (teretna luka Zadar).

ral beauty spots and 4 strings of islands: a total of 24 larger islands and 300 smaller islets and reefs out of which only 17 are inhabited.

With a 1,300 km long coastline (islands included), it is the most indented archipelago in the Mediterranean. The sea and underwater area of the Zadar County is considered as a particularly delicate natural resource and therefore regulated by special regulations in the Strategy and the Programme of Physical Planning in the Republic of Croatia. The most important river is the Zrmanja river and the largest natural lake in Croatia is the lake Vransko jezero. The Zadar County is also known for the Nature Park Telaščica.

There are numerous bays and coves on the islands of Pag and Dugi otok. The Pantera Bay in the north side of Dugi otok and particularly the marina Telaščica in the south side of the island are interesting for boaters. Cliffs along the external coast of Dugi otok are well-known geological and geo-morphological sights. The Kornati archipelago has the largest number of islands on the Adriatic Sea and is characterised by narrow elongated smaller islands, islets and rocks. Some characteristics of the most significant islands in the Zadar County are given in Table 1.

The coastal area of the Zadar County, along with its islands, is mainly situated in the European part of the Mediterranean. Climatologically, especially regarding the temperature, it is a pleasant area, because during the summer a light landward breeze eases the hot and humid weather. In winter and at the foot of the mountain Velebit, there are frequent gusts of a strong north-eastern wind (bora) sometimes reaching gale-force. The hinterland of Zadar (Ravni Kotari) is an exceptionally rich agriculture area. Forests along the coast and on most islands are mainly conifers (Alpine pine) and of the autochthonous holm-oak, while olive trees are among the most cultivated crops.

3.2. Postojeće stanje infrastrukture nautičkog turizma u Zadarskoj županiji

Svrha prikupljanja statističkih podataka je znanstveno istražiti turistički fenomen kako bi se što bolje spoznale zakonitosti razvoja, odnosno mogli rješavati razni problemi (ekonomski, društveni, pravni, politički, ekološki...). Podaci Državnog zavoda za statistiku koji se odnose na nautički turizam i luke nautičkog turizma, za razdoblje od 2005. do 2010. godine su sistematizirani i analizirani kako bi se utvrdio dosegnuti stupanj razvoja nautičkog turizma Zadarske županije, te dala projekcija budućeg razvoja [9].

Temeljem podataka hrvatskog Državnog zavoda za statistiku slijedi prikaz:

1. kategorizacijeluka nautičkog turizma Zadarske županije
2. kapaciteta luka nautičkog turizma, stanje
3. broj plovila na stalnom vezu u lukama nautičkog turizma Zadarske županije i
4. ostvarenih prihoda luka nautičkog turizma Zadarske županije bez PDV-a.

Luke nautičkog turizma svrstane su u luke posebne namjene čiju kategorizacija regulira Zakon o turističkoj djelatnosti [13]. Nadalje, Pravilnikom o razvrstavanju luka nautičkog turizma kao i nizom njegovih dopuna, propisuju se vrste i kategorije luka, te minimalni uvjeti koje moraju ispunjavati kao i način njihove kategorizacije [14]. Prema Zakonu o pružanju usluga u turizmu u 2008. godini [12], objavljen je novi Pravilnik o razvrstavanju i kategorizaciji luka nautičkog turizma [15], s naznakom da luke nautičkog turizma koje već imaju rješenja prema starom Pravilniku nemaju obvezu usklađivanja prema novom.

Temeljem Pravilnika[15], luka nautičkog turizma definira se kao poslovno-funkcionalna cjelina u kojoj pravna ili fizička osoba posluje i pruža turističke usluge u nautičkom turizmu te druge usluge u funkciji turističke potrošnje (trgovačke, ugostiteljske i dr.). Razvrstaj luka nautičkog turizma daje se u članku 5., i to:

1. Sidrište
2. Odlagalište plovnih objekata
3. Suha marina
4. Marina.

Pravilnik, nadalje, definira luke nautičkog turizma kao objekte uređene i opremljene za prihvatanje, čuvanje i održavanje plovila namijenjenih

Due to its traffic connections, the area of Zadar is becoming a significant destination for boaters. There is a new Adriatic highway through Lika and Ravni Kotari and it is exceptionally well connected with central Croatia and the neighbouring countries of central and south-eastern Europe. Through the highway junction Bosiljevo, a quality road connection with west European countries is also made. The littoral road network and the road network on larger islands are quite adequate. The port of Zadar is of state-importance as it offers regular services by passenger ferries and linking all islands within the area. The port of Zadar is a port of departure for ferries, connecting Zadar with the neighbouring Ancona in Italy, and Lošinj and Pula in Croatia. It is within this County, and especially during the high season, that the car/passenger ferry service from Prizna (mainland) to Žigljen (the Island of Pag) and vice versa is increased. Air traffic is constantly increasing, and the Zadar Airport (Zemunik) is considered as belonging to a higher category. A railway line passes through the Zadar County, with the passenger railway station located in the town of Zadar and the cargo one in Bibinje (Zadar cargo port).

3.2. Current Conditions of the Nautical Tourism Infrastructure in the Zadar County

The aim of gathering statistics data is to scientifically explore the phenomenon in order to understand the development legalities and to be able to solve various problems such as the economic, social, legal, political, ecological ones, etc. The data from the Croatian Bureau of Statistics related to nautical tourism and nautical tourism ports for the 2005 to 2010 period are systematized and analysed in order to define the achieved level of development of nautical tourism within the Zadar County and to give a projection of the future development.

Based on the data from the Croatian Bureau of Statistics the presentation follows [9]:

1. Categorisation of nautical tourism ports in the Zadar County,
2. Capacity of nautical tourism ports, and their condition,
3. Number of crafts in the nautical tourism ports within the Zadar County, and
4. Income realized by the nautical tourism ports of the Zadar County, VAT not included.

odmoru, sportu, rekreaciji i zabavi, a luke razvrstava u skupinu osnovnih i komplementarnih objekata. Daljnji razvrstaj u smislu članka 22. Pravilnika definira razvrstavanje luke nautičkog turizma u određenu vrstu, a marine i u odgovarajuću kategoriju. Prema novom Pravilniku vrsta marine označava se sidrima (dva sidra, tri sidra, četiri sidra, pet sidara).

Osim kategoriziranih luka nautičkog turizma u Hrvatskoj, ovim istraživanjem obuhvaćene su nerazvrstane luke nautičkog turizma na području Zadarske županije (Tablica 2).

Nautical tourism ports are classified as special purpose ports, according to the Maritime Domain and Sea Ports Act [11].

The categorization of nautical tourism ports in the Republic of Croatia is carried out on the basis of the Law on Tourist Activities [13]. Furthermore, the port types and categories, minimal conditions that they have to fulfil and categorisation methods are regulated by the Ordinance on the Classification and Categorization of Nautical Tourism Ports as well as by its amendments [14].

Tablica 2. Kategorizacija luka nautičkog turizma Zadarske županije
Table 2 Categorization of nautical tourism ports within the Zadar County

Kategorizacija / <i>Categorization</i>	2005.	2006.	2007.	2008.	2009.	2010.
Ukupno / <i>Total</i>	21	24	23	24	24	24
Sidrište / <i>Anchorage</i>	8	8	7	7	7	8
Privezište / <i>Mooring</i>	5	8	8	8	8	8
Suha marina / <i>Boat places on land</i>	-	-	-	-	-	-
Marina I. Kategorije / <i>The first category marina</i>	-	-	-	-	-	-
Marina II. Kategorije / <i>The second category marina</i>	4	5	5	4	4	4
Marina III. Kategorije / <i>The third category marina</i>	2	2	2	4	4	4
Nerazvrstane luke nautičkog turizma / <i>Uncategorized nautical tourism ports</i>	2	1	1	-	-	-

Izvor: Autori prema podacima DZS-a

Source: the authors, according to the data of the Croatian Bureau of Statistics

Razvidno je kako se broj sidrišta u Zadarskoj županiji nije znatnije mijenjao u razdoblju od 5 godina za razliku od broja privezišta. U kategorizaciji marina nema niti jedne marine koja ima I. kategoriju.

Slijedi prikaz kapaciteta luka nautičkog turizma u Zadarskoj županiji.

In the new Ordinance on the Classification and Categorization of Nautical Tourism Ports [15] issued in 2008 according to the Rendering Tourist Services Act [12], there is a note that nautical tourism ports holding decisions according to the previous Ordinance shall not have to bring it in conformity with the new one.

Tablica 3. Kapaciteti luka nautičkog turizma Zadarske županije
Table 3 Capacities of nautical tourism ports in the Zadar County

Godina / <i>Year</i>	2005.	2006.	2007.	2008.	2009.	2010.
Površina akvatorija, m² <i>Water surface area, m²</i>	1 923 562	1 918 041	1 086 828	1 057 015	955 236	960 224
Broj vezova, ukupno <i>Number of moorings, total</i>	3 403	3666	3 676	3 771	3 771	3 769
Prostor za smještaj plovila na kopnu (broj mjesta) <i>Boat places on land (number of places)</i>	1 035	1030	1030	1 000	1 030	1 010
Ukupna površina prostora na kopnu, m² <i>Total surface area on land, m²</i>	416000	410695	410695	408 395	127938	127938

Izvor: Autori prema podacima DZS-a

Source: the Author according to the data of the Croatian Bureau of Statistics

Iz tablice 3. uočava se kako se u razdoblju od 6 godina ukupna površina akvatorija i prostora za smještaj plovila na kopnu, znatno smanjila u odnosu na prethodne godine, dok se istovremeno broj vezova u moru povećao tijekom istog razdoblja. Razlozi za smanjenje površine su u činjenici da je koncesijska naknada znatno porasla pa su uprave prisiljene smanjivati postojeće površine, a sve u cilju uspješnosti poslovanja.

Based on the new Ordinance [15], a nautical tourism port is defined as a business and functional unity where a legal or physical person works and renders tourist services in nautical tourism as well as other services in tourist demand (trade, catering, etc.). The categorisation of nautical tourism ports is dealt with in Article 5 reading as follows:

1. Anchorage,
2. Mooring

Tablica 4. Broj plovila na stalnom vezu u LNT Zadarske županije za razdoblje 2005. –2010.

Table 4 The number of permanently moored crafts in the nautical tourism ports of the Zadar County in the 2005 to 2010 period

Godina / Year	2005.	2006.	2007.	2008.	2009.	2010.
Plovila za koja je korišten vez u moru / Crafts that used moorings						
Ukupno / Total	2 616	2 563	2 685	2 889	2 904	2 834
Motorne jahte / Motor yachts	1 049	1 075	1 188	1 299	1 256	1 249
Jahte na jedra / Sailing boats	1 496	1 408	1 412	1 500	1 560	1 515
Ostalo / Other	71	80	85	90	88	70
Plovila za koja je korišteno mjesto na kopnu / Crafts that used boat places on land						
Ukupno / Total	100	163	195	240	225	209
Motorne jahte / Motor yachts	48	87	122	139	145	149
Jahte na jedra / Sailing boats	52	75	72	72	76	60
Ostalo / Other	-	1	1	1	4	0

Izvor: Autori prema podacima DZS-a

Source: the Author according to the data of the Croatian Bureau of Statistics

Prema broju plovila iz tablice 4. uočava se kako je broj jahti na jedra uvijek bio veći za razliku od broja motornih jahti čiji se broj povećavao do 2009., dok u 2010. godini, blago pada. Nadalje, mjesta na kopnu su se većinom koristila za motorne jahte u odnosu na jahte na jedra.

Slijedi prikaz ostvarenih prihoda od luka nautičkog turizma Zadarske županije bez PDV-a.

3. Boat places on land, and
4. Marina.

According to the Ordinance, nautical tourism ports are defined as an object arranged and equipped for the accommodation, safe-keeping and maintenance of crafts intended for leisure, sport, recreation and pleasure, and are classified into a group of basic and complementary

Tablica 5. Ostvareni prihodi LNT Zadarske županije bez PDV-a

Table 5 Income realized by nautical tourism ports in the Zadar County, VAT not included

	2005.	2006.	2007.	2008.	2009.	2010.
Iznajmljivanje vezova <i>Renting of moorings (total)</i>	53 020	61 022	69 686	85 030	93 991	97 995
Stalni <i>Stationed</i>	43 856	52 049	58 573	72 725	81 956	85 335
Tranzitni <i>In transit</i>	9 164	8 973	11 113	12 305	12 035	12 660
Servisne usluge <i>Maintenance services</i>	5 821	6 339	6 478	7 400	8 065	8 309
Ostali prihodi <i>Other income</i>	17 577	21 163	26 082	25 100	24 677	24 689

Izvor: Autori prema podacima DZS-a

Source: the authors according to the data of the Croatian Bureau of Statistics

Prema tablici 5. zaključuje se kako se prihodi luka nautičkog turizma povećavaju s godinama posebno kod iznajmljivanja vezova. Znatno porast u odnosu na sve navedene stavke bilježi porast prihoda kod tranzitnih vezova. Evidentno je da dolazak stranih nautičara svake godine raste, što otvara mogućnost za daljnji razvoj luka nautičkog turizma izgradnjom nove infrastrukture.

Zadarska županija danas raspolaže sa 3.769 vezova u moru i 1.010 mjesta na kopnu. Ovaj podatak se razlikuje od podatka dobivenog terenskim istraživanjem luka nautičkog turizma, gdje je iskazani broj vezova u moru veći. Uspoređujući broj vezova i broj luka nautičkog turizma s ukupnim kapacitetom u Hrvatskoj (98 luka nautičkog turizma i 16.848 vezova u 2009. godini), jasno je da Zadarska županija raspolaže s gotovo 25% kapaciteta u odnosu na ukupnu nautičku infrastrukturu Hrvatske. Također nisu precizno iskazana mjesta na kopnu, što povećava broj raspoloživih mjesta za smještaj plovila. Izgrađenost nautičkih kapaciteta prikazom vezova po lukama nautičkog turizma u Zadarskoj županiji daje se u tablici 6.

facilities. In terms of article 22 of the Ordinance [15], nautical tourism ports are classified according to a specific type, and marinas according to a corresponding category. According to the new ordinance, the type that a marina belongs to is marked by anchors: two anchors, three anchors, four anchors, five anchors.

Besides categorised Croatian nautical tourism ports, this research also covers uncategorised nautical tourism ports in the Zadar County (Table 2). According to the Central Bureau of Statistics, Table 2 provides an overview of marinas that are categorized under the Ordinance on the Classification and Categorization of Nautical Tourism Ports [14].

It is visible that, in the period of five years, the number of anchorages in the Zadar County has not significantly changed in comparison to the number of moorings. There is not even one first category marina within the categorization of marinas.

The capacity of nautical tourism ports in the Zadar County is visible from the table 3.

Table 3 shows that, in the six year period, the total surface area ashore and the water surface

Tablica 6. Nautička infrastruktura i postojeći kapaciteti luka nautičkog turizma u Zadarskoj županiji
Table 6 The nautical infrastructure and the existing capacities of the nautical tourism ports in the Zadar County

	Položaj <i>Location</i>	Općina/Grad <i>Municipality/City</i>	Maksimalan mogući broj vezova u moru <i>Maximum number of moorings</i>	Postojeće/Planirano <i>Existing / Planned</i>
1.	Biograd	Biograd, Kornati	1.000	postojeća
2.	Biograd	Šangulin	500	postojeća
3.	Sukošan	Bibinje–Sukošan, Dalmacija	1.000	postojeća
4.	Pag	Šimuni, luka Šimuni	500	postojeća
5.	Zadar	Zadar, Borik	500	postojeća
6.	Zadar	Zadar, Tankerkomerc	500	postojeća
7.	Zadar	Veli Iž	200	postojeća
		UKUPNO / Total	4.200	

Izvor: Zadarska županija: Usklađenje Prostornog plana Zadarske županije s Uredbom, Službeni glasnik Zadarske županije, 2/2005, 13-PPZadar-ZOP uskladjene)

Source: The Zadar County: Adjustment of the Physical Plan of the Zadar County with the Decree, Official Gazette of the Zadar County, 2/2005, 13-PPZadar-ZOP uskladjene)

U prostornim planovima Zadarske županije navode se lokacije planirane za izgradnju luka nautičkog turizma i to do 200 vezova (Tablica 7).

Uvidom u planirane lokacije vidljivo je da se radi o 13 novih lokacija i ukupno oko 2.500 novih vezova u moru. To je značajan broj vezova čija je izgradnja planirana na otocima što bi značilo mnoge socio-ekonomske i ostale koristi za daljnji razvoj tih otoka.

area as well have considerably decreased as compared to the previous years. The number of moorings has increased during the same period. The main reasons for the decrease in the shore-side and water surface area are higher fees (concessions). It should be noted that the craft structure according to their length has not significantly changed, and that crafts up to 12 meters prevail.

In 2011, there was a further decrease in the water surface area onto 887,891 m², so that the

Tablica 7. Planirane lokacije za izgradnju luka nautičkog turizma u Zadarskoj županiji
Table 7 Planned locations for the construction of nautical tourism ports in the Zadar County

	Općina / Grad <i>Municipality / City</i>	Naselje / Settlement	Lokacija / Location
1.	Preko	Sutomišćica	<i>Sutomišćica</i>
2.	Preko	Preko	luka Preko / <i>Preko port/marina</i>
3.	Pag	Košljun	Košljunski zaljev / <i>Košljun Bay</i>
4.	Pag	Pag	<i>Golija</i>
5.	Povljana	Povljana	luka Povljana / <i>Povljana Port/marina</i>
6.	Sali	Zaglav	u. Triluke / <i>Triluke</i>
7.	Sali	Veli Rat	uvala Kanalić / <i>Kanalić lagoon</i>
8.	Tkon	Tkon	<i>Tkon</i>
9.	Vir	Vir	uvala Prezida / <i>Prezida lagoon</i>
10.	Zadar	Veli Iž	<i>Veli Iž</i>
11.	Zadar	Ist	uvala Široka / <i>Široka lagoon</i>
12.	Zadar	Olib	luka Olib / <i>Olib port/marina</i>
13.	Zadar	Silba	<i>Mul</i>

Izvor: Zadarska županija: Usklađenje Prostornog plana Zadarske županije s Uredbom, Službeni glasnik Zadarske županije, 2/2005, 13-PPZadar-ZOP uskladjenje), idokumentacija regionalne samouprave

Source: the Zadar County: Adjustment of the Physical Plan of the Zadar County with the Decree, Official Gazette of the Zadar County, 2/2005, 13-PPZadar-ZOP uskladjenje), and the documentation of the regional self-government.

U međuvremenu je izgrađena Marina Preko, koja nudi 87 vezova za jahte do 20 m, i 3–5 vezova za mega jahte do 60 m.

4. PRIMJENA VIŠEKRITERIJSKE ANALIZE ZA IZBOR LOKACIJE LUKE NAUTIČKOG TURIZMA

Izbor lokacije luke nautičkog turizma sa stajališta sustavnog pristupa rezultira donošenjem odluke. Pitanje cilja sustava pritom predstavlja traženje odgovora na pitanje o značajkama donesene odluke, u odnosu na ostale osnovne značajke izbora lokacije i sadržaja, a to je u prvom redu postizanje postavljenih razvojnih ciljeva, te proces izbora alternativa. Tako postavljeno pitanje ciljeva ujedno omogućuje određivanje kriterija i potkriterija za kvalitetno odlučivanje. Na taj način mogu se izdvojiti dva osnovna cilja odlučivanja o izboru lokacije luke nautičkog turizma koji podrazumijevaju izbor alternative čiji se ishod u najvećoj mogućoj mjeri poklapa s postavljenim ciljevima. Ti ciljevi su, donijeti najbolju moguću odluku, odnosno donijeti zadovoljavajuću odluku [1,5]. Uz donošenje najbolje moguće ili zadovoljavajuće odluke o izboru lokacije luke nautičkog turizma kao dodatni cilj odlučivanja postavlja se i vremenska komponenta. Odlučivanje o izboru lokacije nautičke luke kao kriterij kvalitete odlučivanja utječe na donošenje

number of available moorings also decreased onto the total of 3,640 moorings.

According to the number of crafts from Table 4, it is visible that the number of sailing boats has always been higher than the one of motor yachts, the number of which started to decrease during the years 2009 and 2010. Furthermore, boat places on land have mainly been used for motor yachts rather than for sailing boats.

In table 4, the authors have given an overview of the income realized by nautical tourism ports in the Zadar County, VAT not included.

Based on Table 5, it can be concluded that the income realized by nautical ports increases over the years especially in the renting of moorings. A significant increase, as compared to all other mentioned items, is registered in transit moorings. In 2011, a positive income growth continued.

It is evident (by official statistics) that the number of boaters is increasing every year, thus giving the possibility for a further development of nautical tourism ports by building a new infrastructure.

In the year 2010, the Zadar County had 3,769 moorings and 1,010 boat places on land. The number of moorings decreased for 129 moorings during the year 2011. This data differs from the one obtained by a field survey of nautical tourism ports, where the number of sea moorings is higher. Comparing the number of

najbolje moguće odluke u najkraćem vremenu. Svako odstupanje od toga kriterija kao rezultat ima manje uspješno odlučivanje.

Za ostvarenje postavljenih ciljeva valja primijeniti metode višekriterijske analize, budući omogućavaju dobivanje odgovarajućih rješenja u razumnom roku [5]. Problem izbora lokacije luke nautičkog turizma prepoznat je kao loše strukturirani problem, što proizlazi iz većeg broja kriterija i njihova vrednovanja te većeg broja alternativa. Poradi toga je važno naglasiti da se ostavlja mogućnost da donositelj odluke, npr. država, regionalna i lokalna uprava utječe na vrednovanje kriterija temeljem vlastitih prosudbi, a koje se ne moraju slagati s prosudbama i ocjenama eksperata.

U slučaju svakog konkretnog izbora lokacije, i toodabira najpovoljnije lokacije u višekriterijskom smislu, predlaže se uvažavanje utvrđenih kriterija [6]:

1. Institucionalno-politički (prostorni planovi, regionalni sustav poreza i prireza, stavovi i politika razvoja regije)
2. Smještajni i prirodni (geomorfološke i oceanografske osobine, hidrografska i klimatska obilježja lokacije)
3. Ekološki (ekološka vrijednost lokacije, osjetljivost na ljudske aktivnosti, procjena negativnih utjecaja na okoliš, monitoring, visina ulaganja u zaštitu okoliša (5–30%))
4. Tehničko-tehnološki (fizičko-geografske karakteristike mikrolokacije, prihvatni kapacitet, kategorizacija i minimalni standardi, razvijenost prometne i druge infrastrukture, blizina gradskih središta, sigurnosni uvjeti)
5. Ekonomski (ponuda nautičkih usluga u regiji, ponuda okružja, visina koncesijske naknade, visina investicijskog zahvata, razvijenost komunikacijsko-informacijskog sustava u okružju, raspoloživa odgovarajuća radna snaga, razvojne mogućnosti)
6. Socio-kulturni (direktne i indirektne koristi, stupanj urbanizacije i prepoznatljivosti lokacije, rast kvalitete života u lokalnoj zajednici, socio-kulturni uvjeti regije).

Iako su za investitora pored ostalih ekonomski kriteriji najvažniji, danas zaštita morskog i obalnog okoliša postaje sastavnim dijelom projekata izgradnje novih luka nautičkog turizma.

moorings and the number of nautical tourism ports with the total capacity in Croatia (98 nautical tourism ports and 16,848 moorings in 2009) it is evident that the Zadar County has at its disposal 25% off the total capacities of the Croatian nautical infrastructures.

Below is a table with the locations of the nautical tourism ports in the Zadar County and their sea mooring capacity:

Locations planned for the construction of nautical ports with up to 200 moorings are mentioned in the physical plans of the Zadar County (Table 7).

With an insight into the planned locations, it is visible that these plans include about 13 new locations and approximately 2,500 new moorings. That is a significant number of moorings and together with the construction planned on the islands it would mean numerous socio-economic and other benefits for the further development of these islands. In the meantime the Marina Preko has been built, which now offers 87 berths for yachts up to 20 m, and 3-5 berths for the mega yachts up to 60 m.

4. THE APPLICATION OF THE MULTI-CRITERIA ANALYSIS IN SELECTING THE LOCATION FOR A NAUTICAL TOURISM PORT

The selection of the location for a nautical tourism port from a systematic approach results in bringing a decision. The question as to the system goal represents the search for an answer to the question about the quality of the decision made, as compared to other basic features concerning the choice of the location and the selection of its activities, and that is, in the first place, the achievement of a set of development goals and the process of selecting alternatives.

The issue of goals set in that way enables the process of defining criteria and sub-criteria for a quality decision making. In such a way, two basic goals in deciding on the selection of the nautical tourism port location what implies the selection of the alternative, the result of which coincides mostly with the set goals. These goals are: to make the best possible decision, and to make a good decision [1, 5]. The best possible decision is the one (i.e. the result of an alternative) that completely coincides with the set goals and a satisfying decision is the one that only partly coincides with the set goals. Besides making the best and the most appropriate decision on the selec-

Za promatrane planirane lokacije u Zadarskoj županiji investorimasu pored toga bitni i sljedeći elementi:

- ishodovanje dokumenata u razumnom roku
- učinkovit postupak koncesioniranja s mogućnošću dobivanja koncesije na minimalno 20 godina.

Opravdanost primjene metodologije višekriterijske analize u odabiru lokacije luke nautičkog turizma ogleda se ne samo u sustavnoj analizi postavljenih kriterija već i u njihovom pravilnom vrednovanju. Na taj je način moguće usporediti veći broj alternativa [3], odnosno lokacija te odabrati odgovarajuću. Zbog toga je na regionalnoj upravi da svaku od planiranih lokacija vrednuje, što se postiže definiranjem ciljeva regionalnog razvoja s jasnom projekcijom njihove realizacije te definiranjem kriterija, posebno u svezi zaštite okoliša. Na regionalnoj upravi Zadarske županije je da u svojim razvojnim planovima uz pomoć znanstvenika i stručnjaka koristi suvremene metode u cilju vrednovanja potencijalnih lokacija za izgradnju luka nautičkog turizma kako bi razvoj, regionalni razvoj ove Županije bio uravnotežen.

Lokacije planirane za luke nautičkog turizma (Tablica 7) nisu odabrane primjenom višekriterijske analize. Radi se o lokacijama koje su tijekom vremena imale, pa i danas imaju namjenu sigurnog sidrenja plovila. Od strane nautičara te su lokacije prepoznate kao potencijalne nautičke luke. Planirane lokacije udovoljavaju prije elaboriranim kriterijima, ali s obzirom na sve izraženiju potražnju nautičara za vezovima i investitora za novim lokacijama za smještaj luka nautičkog turizma preporuča se istražiti nove lokacije, koje će biti u funkciji razvoja nautičkog turizma Zadarske županije.

tion of the location for a nautical tourism port, there is also a time component to be considered as an additional goal. The decision making on the selection of the nautical tourism port location, considered as a quality decision making criterion, has an influence on making the best possible decision in a shortest period of time. Every discrepancy from that criterion results in a less successful decision making.

In order to achieve the set goals, it is necessary to use the multi-criteria analysis methods as they enable to obtain relevant results in a reasonable time [5]. The problem of selecting the location for a nautical tourism port is known as a wrongly structured problem that is the result of a larger number of criteria and their evaluation as well as of a larger number of alternatives. Therefore, it is important to emphasise that there is a possibility for the one who is making a decision, for example the state, regional and local authorities, to influence the evaluation of the criteria based on their own opinions, which do not have to be in accordance with the opinions of the experts.

In case when every particular and, at the same time, most favourable selection in the multi-criteria sense is made, the following predetermined criteria are to be acknowledged [6]:

Institutional and political (physical plan of the micro-location, regional system of taxes and surtaxes, views and development policy of the region)

Natural and physical (geomorphologic and oceanographic properties, hydrographic and microclimatic properties of the location)

Ecological (ecological value of the location, susceptibility to human activities, estimated adverse impacts to the environment, monitoring the water area of the location, amount of investments into the environmental protection (5-30%))

Technical and technological (physical and geographical properties of the micro-location, accommodation capacity, categorisation and minimal standards, development of traffic and other infrastructure, vicinity of the city cores, safety and navigational conditions)

Economic (effects of nautical tourism in the region, effects in the surrounding area, the amount of the concession fee, cost of investment, development of the information and communications system in the area, available labour, development possibilities)

5. ZAKLJUČAK

Uporaba metodologije višekriterijske analize u odabiru lokacije luke nautičkog turizma odnosi se na sustavnu analizu kriterija te njihove odgovarajuće evaluacije. Na taj je način moguće usporediti veći broj alternativa i lokacija te odabrati odgovarajuće. Nadalje, to je način na koji regionalna uprava može evaluirati planirane lokacije te utvrditi jesu li u suglasju s ekološkim kriterijima.

Lokacije koje su predmetom plana Zadarske županije su prihvatljive, no autori predlažu novo istraživanje, na način da se koristi metodologija višekriterijske analize kako bi se ponovno analizirale već planirane lokacije te utvrdile mogućnosti novih lokacija za smještaj luka nautičkog turizma.

Social and cultural (direct and indirect benefits, level of urbanization and recognition of the micro-location, increase of the quality of living into the local community, social and cultural aspects of the region).

Although the economic criteria are, among other criteria, the most important for investors, today the marine environment and the environmental protection becomes an integral part in designing new nautical tourism ports. Furthermore, the most common elements that are also important for investors are reading as follows:

- procurement of documents in a reasonable time
- efficient procedure for granting a concession with the possibility of granting a concession to a minimum of 20 years

The local government of the Zadra County, in cooperation with the regional authorities, has to define the priority criteria already in the phase of planning a new location for nautical tourism ports. For this reason it is crucial to delegate scientists and experts in different fields and to use modern methods. If properly conducted, the process of the multi-criteria analysis requires the cooperation of all interested parties with practically an involvement in the decision-making process to eliminate any potential problems [3]. This facilitates the realization of the obtained priorities and eliminates doubts as to a subjective decision-making.

Locations planned for nautical tourism ports (Table 7) have not been selected by a multi-criteria analysis. Even though these locations have had various purposes, during a long period of time they were offering safe moorings to crafts, and boaters have recognised them as potential nautical ports. The planned locations satisfy the defined criteria but, due to the boaters' great demand for berths and the investor's demands for new nautical tourism ports location, it is necessary to use the multi-criteria analysis in order to analyse and determine new location possibilities that will play an important role in the development of nautical tourism within the Zadar County.

5. CONCLUSION

The justifiability of using the methodology of the multi-criteria analysis in selecting the location for a nautical tourism port is reflected not only in the systematic analysis of the set criteria

but in the appropriate evaluation of these criteria as well. In this way, it is possible to compare a greater number of alternatives and locations and choose the appropriate one. That is the way the regional authorities should evaluate each of the planned locations and ascertain if the ecological criteria are met. That is achieved by defining the aims of the regional development with a clear projection of its realization and by defining criteria, especially the ones for the environment protection. The regional authorities of the Zadar County should, together with scientists and experts, use modern methods in its development plans to evaluate potential locations for the construction of nautical tourism ports in order to balance the regional development of this county.

Locations included in the plans of the Zadar County are acceptable, but the authors propose a new research method, using a multi-criteria analysis in order to analyse once more the already planned locations and to determine the possibilities for new nautical tourism ports locations.

LITERATURA / REFERENCES

- [1] Brajdić, I., Modeli odlučivanja, Opatija, Sveučilište u Rijeci, Hotelijerski fakultet, 1998.
- [2] Gračan, D., R. Radnić, M. Uran, Strateška usmjerenja nautičkog turizma u Europskoj uniji, Opatija, Fakultet za menadžment u turizmu i ugostiteljstvu, 2011.
- [3] Farahani, R. Z., M. Steadie Seifi, N. Asgari, Multiple Criteria Facility Location Problems: A Survey, Applied Mathematical Modelling, 34 (2010), str. 1689-1709.
- [4] Favro, S., M. Kovačić, Nautički turizam i luke nautičkog turizma, prostorna obilježja hrvatskog Jadrana i izbor lokacije luke nautičkog turizma, Split, Ogranak Matice hrvatske, 2010.
- [5] Kovačić, M., Optimisation of Selection of the Location and Facilities of a Nautical TourismPort, Doctoral thesis, Rijeka, M. Kovačić.time, 2008.
- [6] Kovačić, M., Č. Dundović, Criteria for Selecting a Location for a Port of Nautical Tourism, Pomorstvo, 23 (2009), 1, str. 41-65.
- [7] Kovačić, M., T. Luković, Spatial Characteristics of Planning and Construction of Nautical Tourism Ports, Geoadria, 12 (2007), 2, str. 131-147.
- [8] Kovačić, M., D. Bošković, S. Favro, Possibilities and Limitations of Spatial, Technical and Technological Development of a Port of Nautical Tourism, Naše more, 53 (2006), 1-2, str. 54-62.
- [9] Državni zavod za statistiku RH, Zagreb, priopćenja iz ranijih godina, 2005., 2006., 2007.,2008., 2009., 2010., 2011.
- [10] Zavod za javno zdravstvo, Studija korištenja i zaštite mora i podmorja na području Zadarske županije: pokretanje procesa Integralnog upravljanja obalnim područjem Zadarske županije, Zadar, 2003.
- [11] Zakon o pomorskom dobru i morskim lukama, Narodne novine, 158/03, 141/06, 38/09.
- [12] Zakon o pružanju usluga u turizmu, Narodne novine, 68/07, 88/10.
- [13] Zakon o turističkoj djelatnosti, Narodne novine 8/96., 19/96. i 76/98.
- [14] Pravilnik o kategorizaciji luka nautičkog turizma, Narodne novine, 142/99, 47/00, 121/00, 45/01, 108/01, 68/07.
- [15] Pravilnik o razvrstavanju i kategorizaciji luka nautičkog turizma, Narodne novine, 72/08.